weygandt
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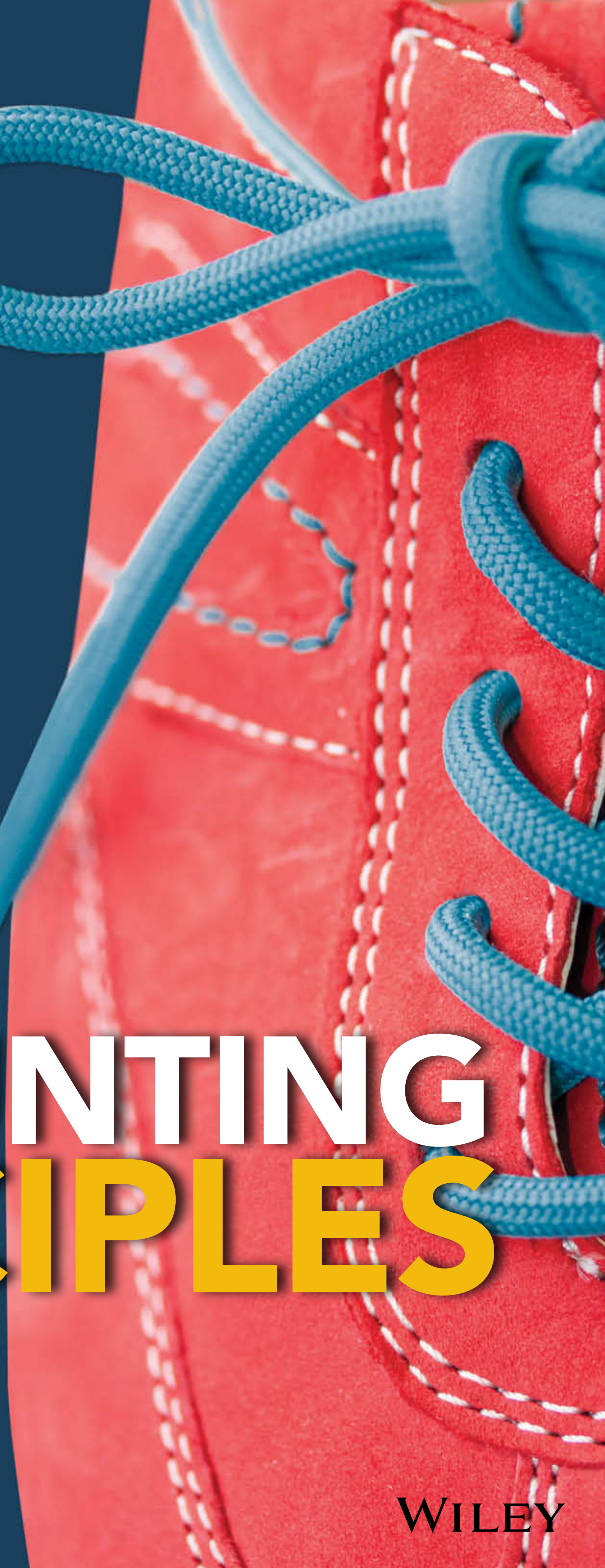


ACCOUNTING PRINCIPLES

TWELFTH EDITION

WILEY

ACCOUNT CLASSIFICATION AND PRESENTATION

Account Title	Classification	Financial Statement	Normal Balance
A			
Accounts Payable	Current Liability	Balance Sheet	Credit
Accounts Receivable	Current Asset	Balance Sheet	Debit
Accumulated Depreciation—Buildings	Plant Asset—Contra	Balance Sheet	Credit
Accumulated Depreciation—Equipment	Plant Asset—Contra	Balance Sheet	Credit
Advertising Expense	Operating Expense	Income Statement	Debit
Allowance for Doubtful Accounts	Current Asset—Contra	Balance Sheet	Credit
Amortization Expense	Operating Expense	Income Statement	Debit
B			
Bad Debt Expense	Operating Expense	Income Statement	Debit
Bonds Payable	Long-Term Liability	Balance Sheet	Credit
Buildings	Plant Asset	Balance Sheet	Debit
C			
Cash	Current Asset	Balance Sheet	Debit
Common Stock	Stockholders' Equity	Balance Sheet	Credit
Copyrights	Intangible Asset	Balance Sheet	Debit
Cost of Goods Sold	Cost of Goods Sold	Income Statement	Debit
D			
Debt Investments	Current Asset/Long-Term Investment	Balance Sheet	Debit
Depreciation Expense	Operating Expense	Income Statement	Debit
Discount on Bonds Payable	Long-Term Liability—Contra	Balance Sheet	Debit
Dividends	Temporary account closed to Retained Earnings	Retained Earnings Statement	Debit
Dividends Payable	Current Liability	Balance Sheet	Credit
E			
Equipment	Plant Asset	Balance Sheet	Debit
F			
Freight-Out	Operating Expense	Income Statement	Debit
G			
Gain on Disposal of Plant Assets	Other Income	Income Statement	Credit
Goodwill	Intangible Asset	Balance Sheet	Debit
I			
Income Summary	Temporary account closed to Retained Earnings	Not Applicable	(1)
Income Tax Expense	Income Tax Expense	Income Statement	Debit
Income Taxes Payable	Current Liability	Balance Sheet	Credit
Insurance Expense	Operating Expense	Income Statement	Debit
Interest Expense	Other Expense	Income Statement	Debit
Interest Payable	Current Liability	Balance Sheet	Credit
Interest Receivable	Current Asset	Balance Sheet	Debit
Interest Revenue	Other Income	Income Statement	Credit
Inventory	Current Asset	Balance Sheet (2)	Debit

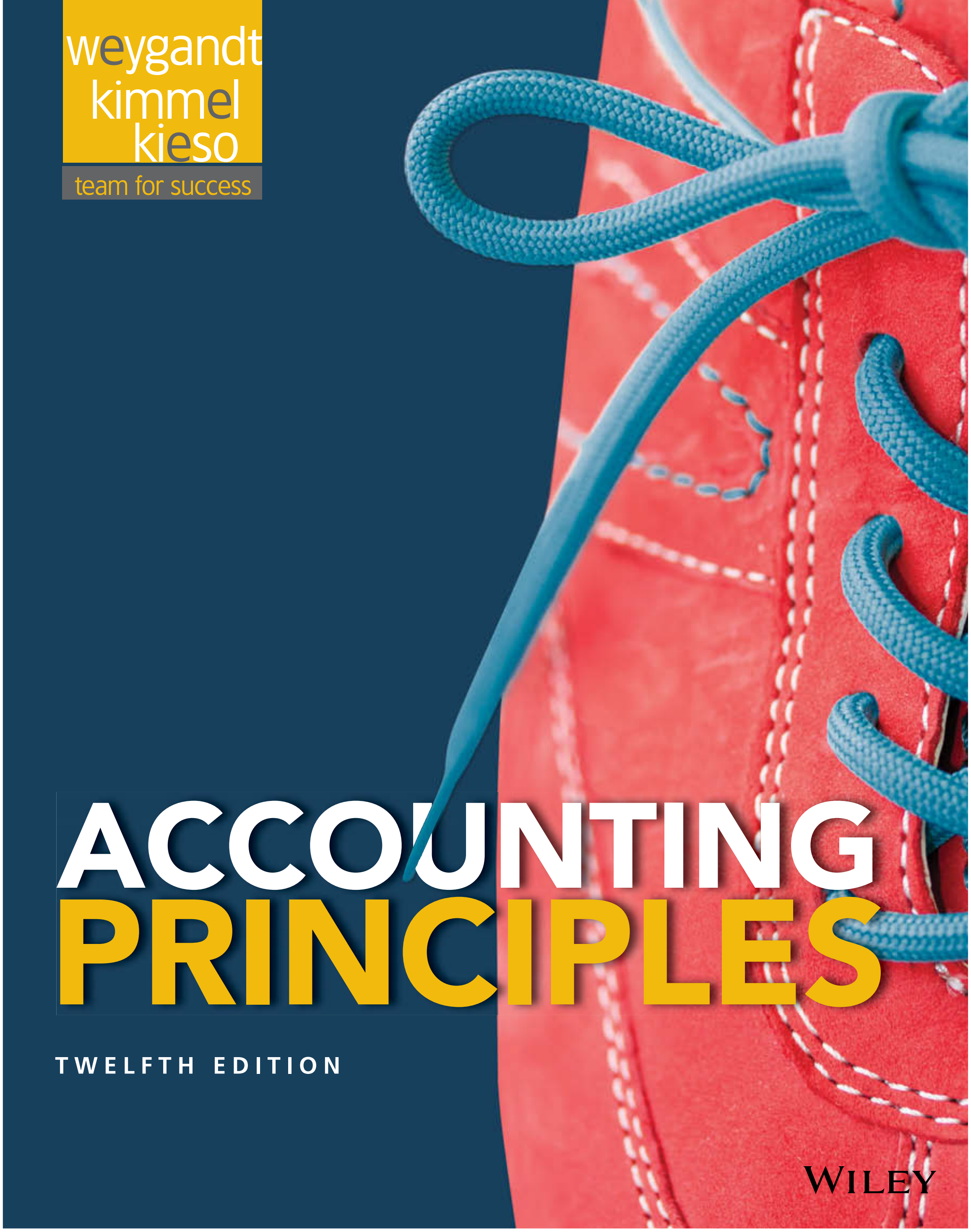
Account Title	Classification	Financial Statement	Normal Balance
		L	
Land	Plant Asset	Balance Sheet	Debit
Loss on Disposal of Plant Assets	Other Expense	Income Statement	Debit
		M	
Maintenance and Repairs Expense	Operating Expense	Income Statement	Debit
Mortgage Payable	Long-Term Liability	Balance Sheet	Credit
		N	
Notes Payable	Current Liability/ Long-Term Liability	Balance Sheet	Credit
		O	
Owner's Capital	Owner's Equity	Owner's Equity and Balance Sheet	Credit
Owner's Drawings	Temporary account closed to Owner's Capital	Owner's Equity	Debit
		P	
Patents	Intangible Asset	Balance Sheet	Debit
Paid-in Capital in Excess of Par—Common Stock	Stockholders' Equity	Balance Sheet	Credit
Paid-in Capital in Excess of Par—Preferred Stock	Stockholders' Equity	Balance Sheet	Credit
Preferred Stock	Stockholders' Equity	Balance Sheet	Credit
Premium on Bonds Payable	Long-Term Liability	Balance Sheet	Credit
Prepaid Insurance	Current Asset	Balance Sheet	Debit
Prepaid Rent	Current Asset	Balance Sheet	Debit
		R	
Rent Expense	Operating Expense	Income Statement	Debit
Retained Earnings	Stockholders' Equity	Balance Sheet and Retained Earnings Statement	Credit
		S	
Salaries and Wages Expense	Operating Expense	Income Statement	Debit
Salaries and Wages Payable	Current Liability	Balance Sheet	Credit
Sales Discounts	Revenue—Contra	Income Statement	Debit
Sales Returns and Allowances	Revenue—Contra	Income Statement	Debit
Sales Revenue	Revenue	Income Statement	Credit
Selling Expenses	Operating Expense	Income Statement	Debit
Service Revenue	Revenue	Income Statement	Credit
Stock Investments	Current Asset/Long-Term Investment	Balance Sheet	Debit
Supplies	Current Asset	Balance Sheet	Debit
Supplies Expense	Operating Expense	Income Statement	Debit
		T	
Treasury Stock	Stockholders' Equity—Contra	Balance Sheet	Debit
		U	
Unearned Service Revenue	Current Liability	Balance Sheet	Credit
Utilities Expense	Operating Expense	Income Statement	Debit

(1) The normal balance for Income Summary will be credit when there is a net income, debit when there is a net loss. The Income Summary account does not appear on any financial statement.
(2) If a periodic system is used, Inventory also appears on the income statement in the calculation of cost of goods sold.

The following is a sample chart of accounts. It does not represent a comprehensive chart of all the accounts used in this textbook but rather those accounts that are commonly used. This sample chart of accounts is for a company that generates both service revenue as well as sales revenue. It uses the perpetual approach to inventory. If a periodic system was used, the following temporary accounts would be needed to record inventory purchases: Purchases, Freight-In, Purchase Returns and Allowances, and Purchase Discounts.

CHART OF ACCOUNTS

Assets	Liabilities	Owner's and Stockholders' Equity	Revenues	Expenses
Cash	Notes Payable	Owner's Capital	Service Revenue	Advertising Expense
Accounts Receivable	Accounts Payable	Owner's Drawings	Sales Revenue	Amortization Expense
Allowance for Doubtful Accounts	Unearned Service Revenue	Common Stock	Sales Discounts	Bad Debt Expense
Interest Receivable	Salaries and Wages Payable	Paid-in Capital in Excess of Par—Common Stock	Sales Returns and Allowances	Cost of Goods Sold
Inventory	Unearned Rent Revenue	Preferred Stock	Interest Revenue	Depreciation Expense
Supplies	Interest Payable	Paid-in Capital in Excess of Par—Preferred Stock	Gain on Disposal of Plant Assets	Freight-Out
Prepaid Insurance	Dividends Payable	Treasury Stock		Income Tax Expense
Prepaid Rent	Income Taxes Payable	Retained Earnings		Insurance Expense
Land	Bonds Payable	Dividends		Interest Expense
Equipment	Discount on Bonds Payable	Income Summary		Loss on Disposal of Plant Assets
Accumulated Depreciation—Equipment	Premium on Bonds Payable			Maintenance and Repairs Expense
Buildings	Mortgage Payable			Rent Expense
Accumulated Depreciation—Buildings				Salaries and Wages Expense
Copyrights				Supplies Expense
Goodwill				Utilities Expense
Patents				



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Brief Contents

*Available at the book's companion website, **www.wiley.com/college/weygandt**.

From the Authors

Dear Student,

Why This Course? *Remember your biology course in high school? Did you have one of those "invisible man" models (or maybe something more high-tech than that) that gave you the opportunity to look "inside" the human body? This accounting course offers something similar. To understand a business, you have to understand the financial insides of a business organization. An accounting course will help you understand the essential financial components of businesses. Whether you are looking at a large multinational company like Apple or Starbucks or a single-owner software consulting business or coffee shop, knowing the fundamentals of accounting will help you understand what is happening. As an employee, a manager, an investor,a business owner, or a director of your own personal finances—any of which roles you will have at some point in your life—you will make better decisions for having taken this course.*

> "Whether you are looking at a large multinational company like Apple or Starbucks or a single-owner software consulting business or coffee shop, knowing the fundamentals of accounting will help you understand what is happening."

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Good luck in this course. We hope you enjoy the experience and that you put to good use throughout a lifetime of success the knowledge you obtain in this course. We are sure you will not be disappointed.

Jerry J. Weygandt
Paul D. Kimmel
Donald E. Kieso

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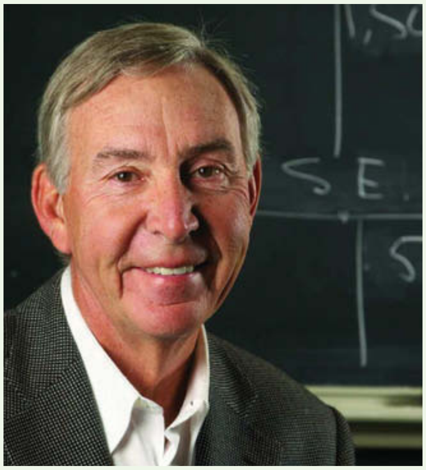

Jerry Weygandt

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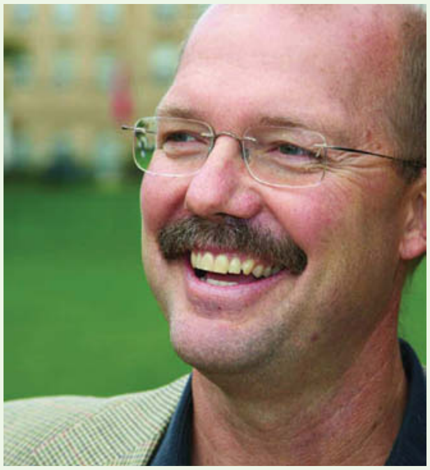

Paul Kimmel

Paul D. Kimmel, PhD, CPA, received his bachelor's degree from the University of Minnesota and his doctorate in accounting from the University of Wisconsin. He is an Associate Professor at the University of Wisconsin—Milwaukee, and has public accounting experience with Deloitte & Touche (Minneapolis). He was the recipient of the UWM School of Business Advisory Council Teaching Award, the Reggie Taite Excellence in Teaching Award and a three-time winner of the Outstanding Teaching Assistant Award at the University of Wisconsin. He is also a recipient of the Elijah Watts Sells Award for Honorary Distinction for his results on the CPA exam. He is a member of the American Accounting Association and the Institute of Management Accountants and has published articles in *Accounting Review, Accounting Horizons, Advances in Management Accounting, Managerial Finance, Issues in Accounting Education, Journal of Accounting Education,* as well as other journals. His research interests include accounting for financial instruments and innovation in accounting education. He has published papers and given numerous talks on incorporating critical thinking into accounting education, and helped prepare a catalog of critical thinking resources for the Federated Schools of Accountancy.

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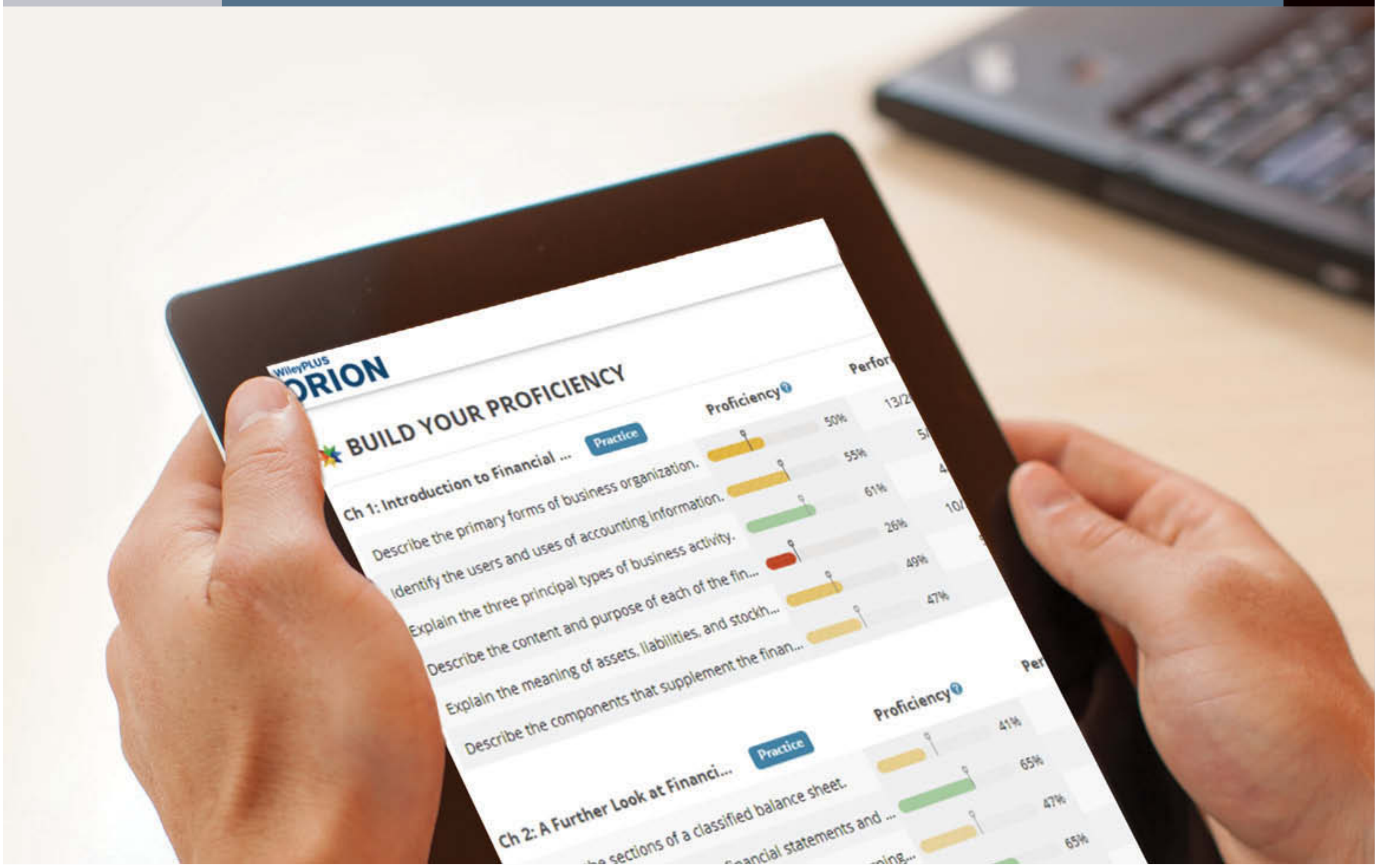
Donald E. Kieso, PhD, CPA, received his bachelor's degree from Aurora University and his doctorate in accounting from the University of Illinois. He has served as chairman of the Department of Accountancy and is currently the KPMG Emeritus Professor of Accountancy at Northern Illinois University. He has public accounting experience with Price Waterhouse & Co. (San Francisco and Chicago) and Arthur Andersen & Co. (Chicago) and research experience with the Research Division of the American Institute of Certified Public Accountants (New York). He has done post doctorate work as a Visiting Scholar at the University of California at Berkeley and is a recipient of NIU's Teaching Excellence Award and four Golden Apple Teaching Awards. Professor Kieso is the author of other accounting and business books and is a member of the American Accounting Association, the American Institute of Certified Public Accountants, and the Illinois CPA Society. He has served as a member of the Board of Directors of the Illinois CPA Society, then AACSB's Accounting Accreditation Committees, the State of Illinois Comptroller's Commission, as Secretary-Treasurer of the Federation of Schools of Accountancy, and as Secretary-Treasurer of the American Accounting Association. Professor Kieso is currently serving on the Board of Trustees and Executive Committee of Aurora University, as a member of the Board of Directors of Kishwaukee Community Hospital, and as Treasurer and Director of Valley West Community Hospital. From 1989 to 1993 he served as a charter member of the national Accounting Education Change Commission. He is the recipient of the Outstanding Accounting Educator Award from the Illinois CPA Society, the FSA's Joseph A. Silvoso Award of Merit, the NIU Foundation's Humanitarian Award for Service to Higher Education, a Distinguished Service Award from the Illinois CPA Society, and in 2003 an honorary doctorate from Aurora University.

Practice Made Simple

The Team for Success is focused on helping students get the most out of their accounting course by **making practice simple**. Both in the printed text and the online environment of *WileyPLUS*, new opportunities for self-guided practice allow students to check their knowledge of accounting concepts, skills, and problem-solving techniques as they receive individual feedback at the question, learning objective, and course level.

Personalized Practice

Based on cognitive science, **WileyPLUS with ORION** is a personalized, adaptive learning experience that gives students the practice they need to build proficiency on topics while using their study time most effectively. The adaptive engine is powered by hundreds of unique questions per chapter, giving students endless opportunities for practice throughout the course.



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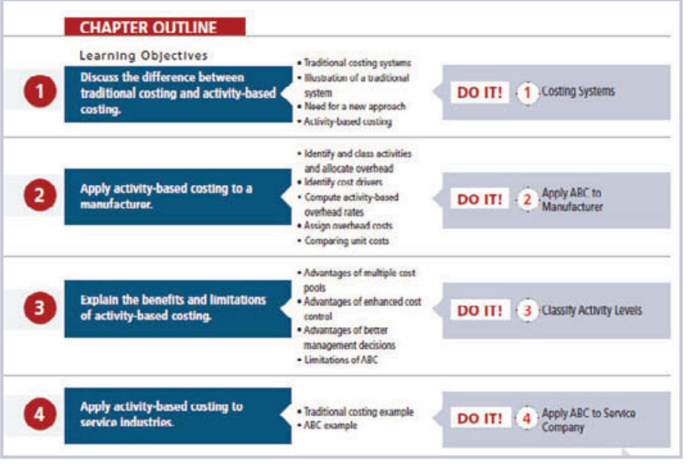
Streamlined Learning Objectives

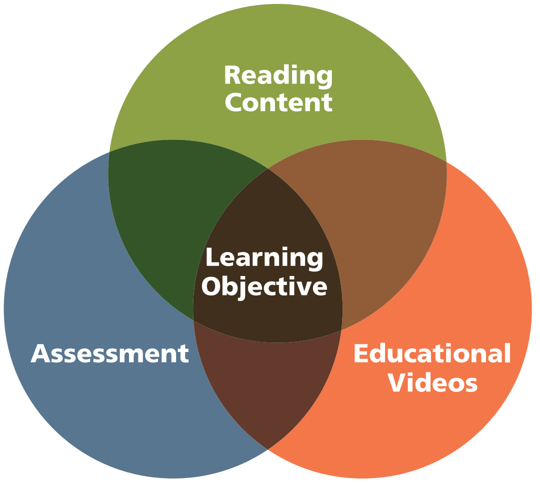
Newly streamlined learning objectives help students make the best use of their time outside of class. Each learning objective is addressed by reading content, answering a variety of practice and assessment questions, and watching educational videos, so that no matter where students begin their work, the relevant resources and practice are readily accessible.



CHAPTER OUTLINE

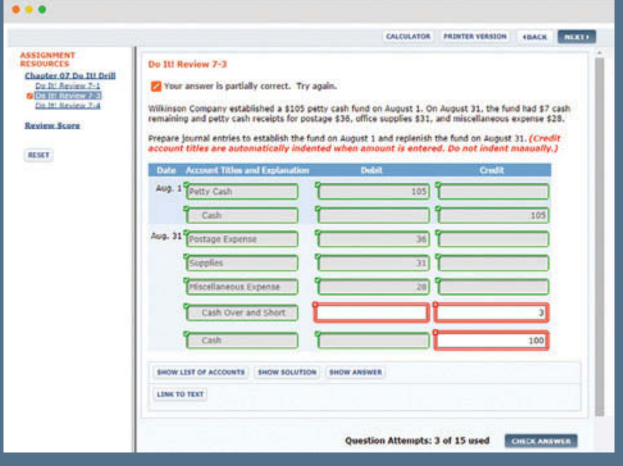
Learning Objectives

1	Discuss the difference between traditional costing and activity-based costing.	• Traditional costing systems • Illustration of a traditional system • Need for a new approach • Activity-based costing	DO IT! 1 Costing Systems
2	Apply activity-based costing to a manufacturer.	• Identify and classify activities and allocate overhead • Identify cost drivers • Compute activity-based overhead rates • Assign overhead costs • Comparing unit costs	DO IT! 2 Apply ABC to Manufacturer
3	Explain the benefits and limitations of activity-based costing.	• Advantages of multiple cost pools • Advantages of enhanced cost control • Advantages of better management decisions • Limitations of ABC	DO IT! 3 Classify Activity Levels
4	Apply activity-based costing to service industries.	• Traditional costing example • ABC example	DO IT! 4 Apply ABC to Service Company



Review and Practice

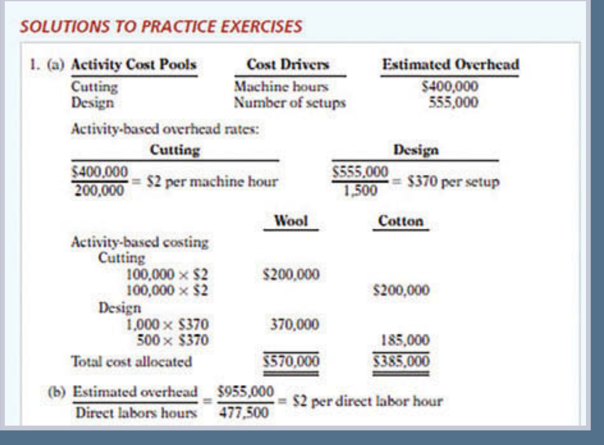
A new section in the text and in **WileyPLUS** offers students more opportunities for self-guided practice.



In **WileyPLUS**, the new practice assignments include several Do ITs, Brief Exercises, Exercises, and Problems, giving students the opportunity to check their work or see the answer and solution after their final attempt.

In the text, the new Review and Practice section includes:

- Learning Objectives Review
- Glossary Review
- Practice Multiple-Choice Questions and Solutions
- Practice Exercises and Solutions
- Practice Problem and Solution



SOLUTIONS TO PRACTICE EXERCISES

1. (a)

Activity Cost Pools	Cost Drivers	Estimated Overhead
Cutting	Machine hours	$400,000
Design	Number of setups	555,000

Activity-based overhead rates:

Cutting: $\frac{\$400,000}{200,000} = \$2$ per machine hour

Design: $\frac{\$555,000}{1,500} = \$370$ per setup

	Wool	Cotton
Activity-based costing		
Cutting		
100,000 × $2	$200,000	
100,000 × $2		$200,000
Design		
1,000 × $370	370,000	
500 × $370		185,000
Total cost allocated	$570,000	$385,000

(b) $\frac{\text{Estimated overhead}}{\text{Direct labors hours}} = \frac{\$955,000}{477,500} = \$2$ per direct labor hour

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What's New?

WileyPLUS with ORION

Over 5,500 new questions are available for practice and review. WileyPLUS with Orion is an adaptive study and practice tool that helps students build proficiency in course topics.

Updated Content and Design

We scrutinized all chapter material to find new ways to engage students and help them learn accounting concepts. Homework problems were updated in all chapters.

A new learning objective structure helps students practice their understanding of concepts with DO IT! exercises before they move on to different topics in other learning objectives. Coupled with a new interior design and revised infographics, the new outcomes-oriented approach motivates students and helps them make the best use of their time.

WileyPLUS Videos

Over 300 videos are available in WileyPLUS. More than 150 of the videos are new to the 12th Edition. The videos walk students through relevant homework problems and solutions, review important concepts, provide overviews of Excel skills, and explore topics in a real-world context.

Student Practice and Solutions

New practice opportunities with solutions are integrated throughout the textbook and WileyPLUS course. Each textbook chapter now provides students with a **Review and Practice** section that includes learning objective summaries, multiple-choice questions with feedback for each answer choice, and both practice exercises and problems with solutions. Also, each learning objective module in the textbook is now followed by a DO IT! exercise with an accompanying solution.

In **WileyPLUS**, two brief exercises, two DO IT! exercises, two exercises, and a new problem are available for practice with each chapter. These practice questions are algorithmic, providing students with multiple opportunities for advanced practice.

Real World Context

We expanded our practice of using numerous examples of real companies throughout the textbook. For example, new feature stories highlight operations of Clif Bar, Groupon, and REI. Also, in WileyPLUS, real-world Insight boxes now have questions that can be assigned as homework.

Excel

New Excel skill videos help students understand Excel features they can apply in their accounting studies. A new continuing Excel tutorial is also available at the end of each managerial accounting chapter.

More information about the 12th Edition is available on the book's website at **www.wiley.com/college/weygandt**.

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*Available online at **www.wiley.com/college/weygandt**.

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1 Accounting in Action

*The **Chapter Preview** describes the purpose of the chapter and highlights major topics.*

CHAPTER PREVIEW The Feature Story below about Clif Bar & Company highlights the importance of having good financial information and knowing how to use it to make effective business decisions. Whatever your pursuits or occupation, the need for financial information is inescapable. You cannot earn a living, spend money, buy on credit, make an investment, or pay taxes without receiving, using, or dispensing financial information. Good decision-making depends on good information.

*The **Feature Story** helps you picture how the chapter topic relates to the real world of accounting and business.*

FEATURE STORY

Knowing the Numbers

Many students who take this course do not plan to be accountants. If you are in that group, you might be thinking, "If I'm not going to be an accountant, why do I need to know accounting?" Well, consider this quote from Harold Geneen, the former chairman of IT&T: "To be good at your business, you have to know the numbers—cold." In business, accounting and financial statements are the means for communicating the numbers. If you don't know how to read financial statements, you can't really know your business.

Many businesses agree with this view. They see the value of their employees being able to read financial statements and understand how their actions affect the company's financial results. For example, consider Clif Bar & Company. The original Clif Bar® energy bar was created in 1990 by Gary Erickson and his mother in her kitchen. Today, the company has almost 300 employees.

Clif Bar is guided by what it calls its Five Aspirations—Sustaining Our Business, Our Brands, Our People, Our Community, and the Planet. Its website documents its efforts and accomplishments in these five areas. Just a few examples include the company's use of organic products to protect soil, water, and biodiversity; the "smart" solar array (the largest in North America), which provides nearly all the electrical needs for its 115,000-square foot building; and the incentives Clif Bar provides to employees to reduce their personal environmental impact, such as $6,500 toward the purchase of an efficient car or $1,000 per year for eco-friendly improvements toward their homes.

One of the company's proudest moments was the creation of an employee stock ownership plan (ESOP) in 2010. This plan gives its employees 20% ownership of the company (Gary and his wife Kit own the other 80%). The ESOP also resulted in Clif Bar enacting an open-book management program, including the commitment to educate all employee-owners about its finances. Armed with this basic financial knowledge, employees are more aware of the financial impact of their actions, which leads to better decisions.

Many other companies have adopted this open-book management approach. Even in companies that do not practice open-book management, employers generally assume that managers in all areas of the company are "financially literate."

Taking this course will go a long way to making you financially literate. In this textbook, you will learn how to read and prepare financial statements, and how to use basic tools to evaluate financial results. Throughout this textbook, we attempt to increase your familiarity with financial reporting by providing numerous references, questions, and exercises that encourage you to explore the financial statements of well-known companies.

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*The **Chapter Outline** presents the chapter's topics and subtopics, as well as practice opportunities.*

CHAPTER OUTLINE

Learning Objectives

Learning Objective	Topics	DO IT!
1 Identify the activities and users associated with accounting.	• Three activities • Accounting data users	DO IT! 1 Basic Concepts
2 Explain the building blocks of accounting: ethics, principles, and assumptions.	• Ethics • GAAP • Measurement principles • Assumptions	DO IT! 2 Building Blocks of Accounting
3 State the accounting equation, and define its components.	• Assets • Liabilities • Owner's equity	DO IT! 3 Owner's Equity Effects
4 Analyze the effects of business transactions on the accounting equation.	• Transaction analysis • Summary of transactions	DO IT! 4 Tabular Analysis
5 Describe the four financial statements and how they are prepared.	• Income statement • Owner's equity statement • Balance sheet • Statement of cash flows	DO IT! 5 Financial Statement Items

Go to the ***REVIEW AND PRACTICE*** section at the end of the chapter for a review of key concepts and practice applications with solutions.

Visit **WileyPLUS with ORION** for additional tutorials and practice opportunities.

LEARNING OBJECTIVE 1

Identify the activities and users associated with accounting.

What consistently ranks as one of the top career opportunities in business? What frequently rates among the most popular majors on campus? What was the undergraduate degree chosen by Nike founder Phil Knight, Home Depot co-founder Arthur Blank, former acting director of the Federal Bureau of Investigation (FBI) Thomas Pickard, and numerous members of Congress? Accounting.[1] Why did these people choose accounting? They wanted to understand what was happening financially to their organizations. Accounting is the financial information system that provides these insights. In short, to understand your organization, you have to know the numbers.

*Essential terms are printed in blue when they first appear, and are defined in the end-of-chapter **Glossary Review**.*

Accounting consists of three basic activities—it **identifies**, **records**, and **communicates** the economic events of an organization to interested users. Let's take a closer look at these three activities.

Three Activities

As a starting point to the accounting process, a company **identifies** the **economic events relevant to its business**. Examples of economic events are the sale of snack chips by PepsiCo, the provision of cell phone services by AT&T, and the payment of wages by Facebook.

Once a company like PepsiCo identifies economic events, it **records** those events in order to provide a history of its financial activities. Recording consists of keeping a **systematic**, **chronological diary of events**, measured in dollars and cents. In recording, PepsiCo also classifies and summarizes economic events.

Finally, PepsiCo **communicates** the collected information to interested users by means of **accounting reports**. The most common of these reports are called **financial statements**. To make the reported financial information meaningful, PepsiCo reports the recorded data in a standardized way. It accumulates information resulting from similar transactions. For example, PepsiCo accumulates all sales transactions over a certain period of time and reports the data as one amount in the company's financial statements. Such data are said to be reported **in the aggregate**. By presenting the recorded data in the aggregate, the accounting process simplifies a multitude of transactions and makes a series of activities understandable and meaningful.

A vital element in communicating economic events is the accountant's ability to **analyze and interpret** the reported information. Analysis involves use of ratios, percentages, graphs, and charts to highlight significant financial trends and relationships. Interpretation involves **explaining the uses**, **meaning**, **and limitations of reported data**. Appendices A–E show the financial statements of Apple Inc., PepsiCo Inc., The Coca-Cola Company, Amazon.com, Inc., and Wal-Mart Stores, Inc., respectively. (In addition, in the *A Look at IFRS* section at the end of each chapter, the French company Louis Vuitton Moët Hennessy is analyzed.) We refer to these statements at various places throughout the textbook. At this point, these financial statements probably strike you as complex and confusing. By the end of this course, you'll be surprised at your ability to understand, analyze, and interpret them.

Illustration 1-1 summarizes the activities of the accounting process.

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[1]The appendix to this chapter describes job opportunities for accounting majors and explains why accounting is such a popular major.

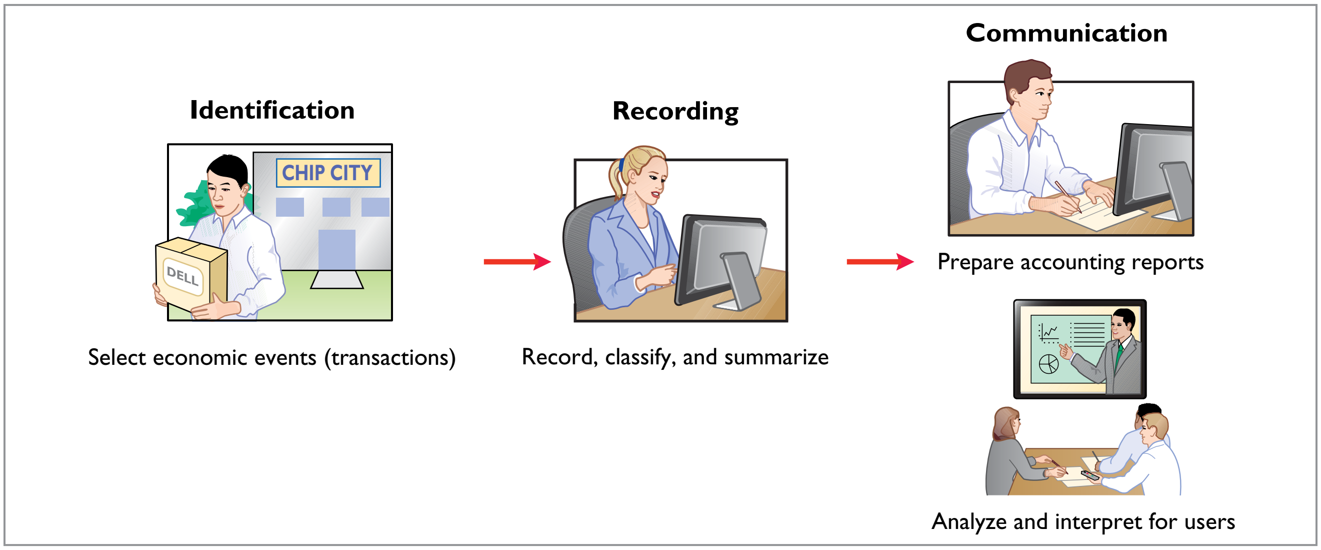

Illustration 1-1
The activities of the accounting process

You should understand that the accounting process **includes** the bookkeeping function. **Bookkeeping** usually involves **only** the recording of economic events. It is therefore just one part of the accounting process. In total, accounting involves **the entire process of identifying, recording, and communicating economic events.**[2]

Who Uses Accounting Data

The financial information that users need depends upon the kinds of decisions they make. There are two broad groups of users of financial information: internal users and external users.

INTERNAL USERS

Internal users of accounting information are managers who plan, organize, and run the business. These include marketing managers, production supervisors, finance directors, and company officers. In running a business, internal users must answer many important questions, as shown in Illustration 1-2.

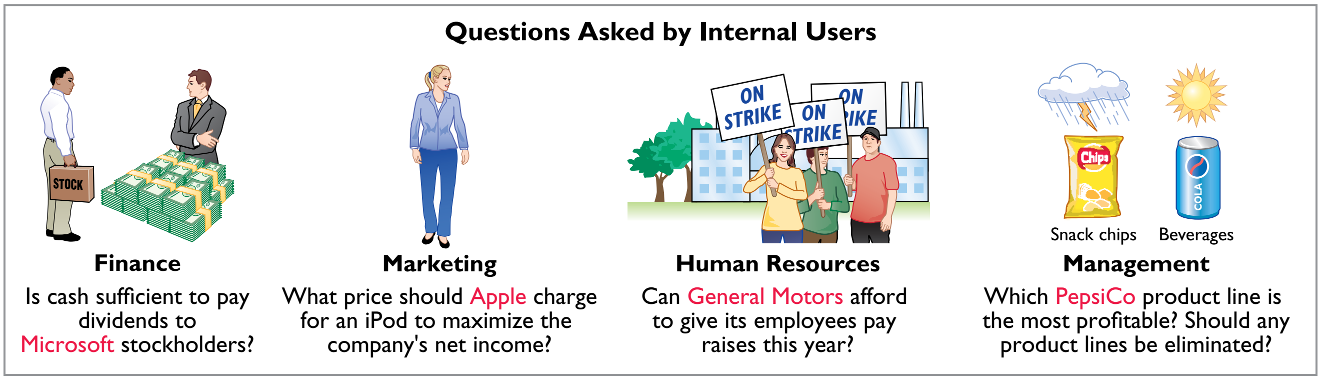

Illustration 1-2
Questions that internal users ask

To answer these and other questions, internal users need detailed information on a timely basis. **Managerial accounting** provides internal reports to help users make decisions about their companies. Examples are financial comparisons of operating alternatives, projections of income from new sales campaigns, and forecasts of cash needs for the next year.

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[2]The origins of accounting are generally attributed to the work of Luca Pacioli, an Italian Renaissance mathematician. Pacioli was a close friend and tutor to Leonardo da Vinci and a contemporary of Christopher Columbus. In his 1494 text *Summa de Arithmetica, Geometria, Proportione et Proportionalite*, Pacioli described a system to ensure that financial information was recorded efficiently and accurately.

Accounting Across the Organization — Rhino Foods

© Agnieszka Pastuszak-Maksim/ iStockphoto

The Scoop on Accounting

Accounting can serve as a useful recruiting tool even for the human resources department. Rhino Foods, located in Burlington, Vermont, is a manufacturer of specialty ice cream. Its corporate website includes the following:

"Wouldn't it be great to work where you were part of a team? Where your input and hard work made a difference? Where you weren't kept in the dark about what management was thinking? . . . Well—it's not a dream! It's the way we do business . . . Rhino Foods believes in family, honesty and open communication—we really care about and appreciate our employees—and it shows. Operating results are posted and monthly group meetings inform all employees about what's happening in the Company. Employees also share in the Company's profits, in addition to having an excellent comprehensive benefits package."

Source: www.rhinofoods.com/workforus/workforus.html.

What are the benefits to the company and its employees of making the financial statements available to all employees? (Go to **WileyPLUS** for this answer and additional questions.)

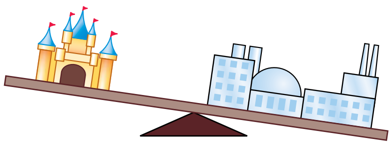
Accounting Across the Organization *boxes demonstrate applications of accounting information in various business functions.*

EXTERNAL USERS

External users are individuals and organizations outside a company who want financial information about the company. The two most common types of external users are investors and creditors. **Investors** (owners) use accounting information to decide whether to buy, hold, or sell ownership shares of a company. **Creditors** (such as suppliers and bankers) use accounting information to evaluate the risks of granting credit or lending money. Illustration 1-3 shows some questions that investors and creditors may ask.

Questions Asked by External Users

Investors
Is General Electric earning satisfactory income?



Investors
How does Disney compare in size and profitability with Time Warner?

Creditors
Will United Airlines be able to pay its debts as they come due?

Illustration 1-3
Questions that external users ask

Financial accounting answers these questions. It provides economic and financial information for investors, creditors, and other external users. The information needs of external users vary considerably. **Taxing authorities**, such as the Internal Revenue Service, want to know whether the company complies with tax laws. **Regulatory agencies**, such as the Securities and Exchange Commission or the Federal Trade Commission, want to know whether the company is operating within prescribed rules. **Customers** are interested in whether a company like Telsa will continue to honor product warranties and support its product lines. **Labor unions** such as the Major League Baseball Players Association want to know whether the owners have the ability to pay increased wages and benefits.

DO IT! 1 Basic Concepts

Indicate whether each of the five statements presented below is true or false.

1. The three steps in the accounting process are identification, recording, and communication.
2. Bookkeeping encompasses all steps in the accounting process.
3. Accountants prepare, but do not interpret, financial reports.
4. The two most common types of external users are investors and company officers.
5. Managerial accounting activities focus on reports for internal users.

*The **DO IT!** exercises ask you to put newly acquired knowledge to work. They outline the **Action Plan** necessary to complete the exercise, and they show a **Solution**.*

Solution

1. True **2.** False. Bookkeeping involves only the recording step. **3.** False. Accountants analyze and interpret information in reports as part of the communication step. **4.** False. The two most common types of external users are investors and creditors. **5.** True.

Related exercise material: **E1-1, E1-2, and DO IT! 1-1.**

Action Plan

- ✔ Review the basic concepts discussed.
- ✔ Develop an understanding of the key terms used.

LEARNING OBJECTIVE 2 Explain the building blocks of accounting: ethics, principles, and assumptions.

A doctor follows certain protocols in treating a patient's illness. An architect follows certain structural guidelines in designing a building. Similarly, an accountant follows certain standards in reporting financial information. These standards are based on specific principles and assumptions. For these standards to work, however, a fundamental business concept must be present—ethical behavior.

Ethics in Financial Reporting

People won't gamble in a casino if they think it is "rigged." Similarly, people won't play the stock market if they think stock prices are rigged. In recent years, the financial press has been full of articles about financial scandals at Enron, WorldCom, HealthSouth, AIG, and other companies. As the scandals came to light, mistrust of financial reporting in general grew. One article in the *Wall Street Journal* noted that "repeated disclosures about questionable accounting practices have bruised investors' faith in the reliability of earnings reports, which in turn has sent stock prices tumbling." Imagine trying to carry on a business or invest money if you could not depend on the financial statements to be honestly prepared. Information would have no credibility. There is no doubt that a sound, well-functioning economy depends on accurate and dependable financial reporting.

United States regulators and lawmakers were very concerned that the economy would suffer if investors lost confidence in corporate accounting because of unethical financial reporting. In response, Congress passed the **Sarbanes-Oxley Act (SOX)**. Its intent is to reduce unethical corporate behavior and decrease the likelihood of future corporate scandals. As a result of SOX, top management must now certify the accuracy of financial information. In addition, penalties for fraudulent financial activity are much more severe. Also, SOX increased the independence requirements of the outside auditors who review the accuracy of corporate financial statements and increased the oversight role of boards of directors.

ETHICS NOTE

Circus-founder P.T. Barnum is alleged to have said, "Trust everyone, but cut the deck." What Sarbanes-Oxley does is to provide measures that (like cutting the deck of playing cards) help ensure that fraud will not occur.

__Ethics Notes__ help sensitize you to some of the ethical issues in accounting.

The standards of conduct by which actions are judged as right or wrong, honest or dishonest, fair or not fair, are **ethics**. Effective financial reporting depends on sound ethical behavior. To sensitize you to ethical situations in business and to give you practice at solving ethical dilemmas, we address ethics in a number of ways in this textbook:

1. A number of the *Feature Stories* and other parts of the textbook discuss the central importance of ethical behavior to financial reporting.
2. *Ethics Insight* boxes and marginal *Ethics Notes* highlight ethics situations and issues in actual business settings.
3. Many of the *People, Planet, and Profit Insight* boxes focus on ethical issues that companies face in measuring and reporting social and environmental issues.
4. At the end of the chapter, an *Ethics Case* simulates a business situation and asks you to put yourself in the position of a decision-maker in that case.

When analyzing these various ethics cases, as well as experiences in your own life, it is useful to apply the three steps outlined in Illustration 1-4.

1. Recognize an ethical situation and the ethical issues involved.
Use your personal ethics to identify ethical situations and issues. Some businesses and professional organizations provide written codes of ethics for guidance in some business situations.

2. Identify and analyze the principal elements in the situation.
Identify the **stakeholders**—persons or groups who may be harmed or benefited. Ask the question: What are the responsibilities and obligations of the parties involved?

3. Identify the alternatives, and weigh the impact of each alternative on various stakeholders.
Select the most ethical alternative, considering all the consequences. Sometimes there will be one right answer. Other situations involve more than one right solution; these situations require an evaluation of each and a selection of the best alternative.

Illustration 1-4
Steps in analyzing ethics cases and situations

***Insight** boxes provide examples of business situations from various perspectives—ethics, investor, international, and corporate social responsibility. Guideline answers to the critical thinking questions are available in **WileyPLUS** and at **www.wiley.com/college/weygandt**. Additional questions are offered in **WileyPLUS**.*

Ethics Insight Dewey & LeBoeuf LLP


© Alliance/Shutterstock

I Felt the Pressure—Would You?

"I felt the pressure." That's what some of the employees of the now-defunct law firm of Dewey & LeBoeuf LLP indicated when they helped to overstate revenue and use accounting tricks to hide losses and cover up cash shortages. These employees worked for the former finance director and former chief financial officer (CFO) of the firm. Here are some of their comments:

- "I was instructed by the CFO to create invoices, knowing they would not be sent to clients. When I created these invoices, I knew that it was inappropriate."
- "I intentionally gave the auditors incorrect information in the course of the audit."

What happened here is that a small group of lower-level employees over a period of years carried out the instructions of their bosses. Their bosses, however, seemed to have no concern as evidenced by various e-mails with one another in which they referred to their financial manipulations as accounting tricks, cooking the books, and fake income.

Source: Ashby Jones, "Guilty Pleas of Dewey Staff Detail the Alleged Fraud," *Wall Street Journal* (March 28, 2014).

Why did these employees lie, and what do you believe should be their penalty for these lies? (Go to **WileyPLUS** for this answer and additional questions.)

Generally Accepted Accounting Principles

The accounting profession has developed standards that are generally accepted and universally practiced. This common set of standards is called **generally accepted accounting principles (GAAP)**. These standards indicate how to report economic events.

The primary accounting standard-setting body in the United States is the **Financial Accounting Standards Board (FASB)**. The **Securities and Exchange Commission (SEC)** is the agency of the U.S. government that oversees U.S. financial markets and accounting standard-setting bodies. The SEC relies on the FASB to develop accounting standards, which public companies must follow. Many countries outside of the United States have adopted the accounting standards issued by the **International Accounting Standards Board (IASB)**. These standards are called **International Financial Reporting Standards (IFRS)**.

As markets become more global, it is often desirable to compare the results of companies from different countries that report using different accounting standards. In order to increase comparability, in recent years the two standard-setting bodies have made efforts to reduce the differences between U.S. GAAP and IFRS. This process is referred to as **convergence**. As a result of these convergence efforts, it is likely that someday there will be a single set of high-quality accounting standards that are used by companies around the world. Because convergence is such an important issue, we highlight any major differences between GAAP and IFRS in *International Notes* (as shown in the margin here) and provide a more in-depth discussion in the *A Look at IRFS* section at the end of each chapter.

International Note

Over 100 countries use International Financial Reporting Standards (called IFRS). For example, all companies in the European Union follow international standards. The differences between U.S. and international standards are not generally significant.

International Notes *highlight differences between U.S. and international accounting standards.*

Measurement Principles

GAAP generally uses one of two measurement principles, the historical cost principle or the fair value principle. Selection of which principle to follow generally relates to trade-offs between relevance and faithful representation. **Relevance** means that financial information is capable of making a difference in a decision. **Faithful representation** means that the numbers and descriptions match what really existed or happened—they are factual.

Helpful Hint
Relevance and *faithful representation* are two primary qualities that make accounting information useful for decision-making.

Helpful Hints *further clarify concepts being discussed.*

HISTORICAL COST PRINCIPLE

The **historical cost principle** (or cost principle) dictates that companies record assets at their cost. This is true not only at the time the asset is purchased, but also over the time the asset is held. For example, if Best Buy purchases land for $300,000, the company initially reports it in its accounting records at $300,000. But what does Best Buy do if, by the end of the next year, the fair value of the land has increased to $400,000? Under the historical cost principle, it continues to report the land at $300,000.

FAIR VALUE PRINCIPLE

The **fair value principle** states that assets and liabilities should be reported at fair value (the price received to sell an asset or settle a liability). Fair value information may be more useful than historical cost for certain types of assets and liabilities. For example, certain investment securities are reported at fair value because market price information is usually readily available for these types of assets. In determining which measurement principle to use, companies weigh the factual nature of cost figures versus the relevance of fair value. In general, most companies choose to use cost. Only in situations where assets are actively traded, such as investment securities, do companies apply the fair value principle extensively.

Assumptions

Assumptions provide a foundation for the accounting process. Two main assumptions are the **monetary unit assumption** and the **economic entity assumption**.

MONETARY UNIT ASSUMPTION

The **monetary unit assumption** requires that companies include in the accounting records only transaction data that can be expressed in money terms. This assumption enables accounting to quantify (measure) economic events. The monetary unit assumption is vital to applying the historical cost principle.

This assumption prevents the inclusion of some relevant information in the accounting records. For example, the health of a company's owner, the quality of service, and the morale of employees are not included. The reason: Companies cannot quantify this information in money terms. Though this information is important, companies record only events that can be measured in money.

ECONOMIC ENTITY ASSUMPTION

ETHICS NOTE

The importance of the economic entity assumption is illustrated by scandals involving Adelphia. In this case, senior company employees entered into transactions that blurred the line between the employees' financial interests and those of the company. For example, Adelphia guaranteed over $2 billion of loans to the founding family.

An economic entity can be any organization or unit in society. It may be a company (such as Crocs, Inc.), a governmental unit (the state of Ohio), a municipality (Seattle), a school district (St. Louis District 48), or a church (Southern Baptist). The **economic entity assumption** requires that the activities of the entity be kept separate and distinct from the activities of its owner and all other economic entities. To illustrate, Sally Rider, owner of Sally's Boutique, must keep her personal living costs separate from the expenses of the business. Similarly, J. Crew and Gap Inc. are segregated into separate economic entities for accounting purposes.

PROPRIETORSHIP A business owned by one person is generally a **proprietorship**. The owner is often the manager/operator of the business. Small service-type businesses (plumbing companies, beauty salons, and auto repair shops), farms, and small retail stores (antique shops, clothing stores, and used-book stores) are often proprietorships. **Usually, only a relatively small amount of money (capital) is necessary to start in business as a proprietorship. The owner (proprietor) receives any profits, suffers any losses, and is personally liable for all debts of the business.** There is no legal distinction between the business as an economic unit and the owner, but the accounting records of the business activities are kept separate from the personal records and activities of the owner.

PARTNERSHIP A business owned by two or more persons associated as partners is a **partnership**. In most respects a partnership is like a proprietorship except that more than one owner is involved. Typically, a partnership agreement (written or oral) sets forth such terms as initial investment, duties of each partner, division of net income (or net loss), and settlement to be made upon death or withdrawal of a partner. Each partner generally has unlimited personal liability for the debts of the partnership. **Like a proprietorship, for accounting purposes the partnership transactions must be kept separate from the personal activities of the partners.** Partnerships are often used to organize retail and service-type businesses, including professional practices (lawyers, doctors, architects, and certified public accountants).

CORPORATION A business organized as a separate legal entity under state corporation law and having ownership divided into transferable shares of stock is a **corporation**. The holders of the shares (stockholders) **enjoy limited liability**; that is, they are not personally liable for the debts of the corporate entity. Stockholders **may transfer all or part of their ownership shares to other investors at any time** (i.e., sell their shares). The ease with which ownership can change adds to the attractiveness of investing in a corporation. Because ownership can be transferred without dissolving the corporation, the corporation **enjoys an unlimited life**.

Although the combined number of proprietorships and partnerships in the United States is more than five times the number of corporations, the revenue produced by corporations is eight times greater. Most of the largest companies in the United States—for example, ExxonMobil, Ford, Wal-Mart Stores, Inc., Citigroup, and Apple—are corporations.

Accounting Across the Organization

Josef Volavka/iStockphoto

Spinning the Career Wheel

How will the study of accounting help you? A working knowledge of accounting is desirable for virtually every field of business. Some examples of how accounting is used in business careers include:

General management: Managers at Ford Motors, Massachusetts General Hospital, California State University—Fullerton, a McDonald's franchise, and a Trek bike shop all need to understand accounting data in order to make wise business decisions.

Marketing: Marketing specialists at Procter & Gamble must be sensitive to costs and benefits, which accounting helps them quantify and understand. Making a sale is meaningless unless it is a profitable sale.

Finance: Do you want to be a banker for Citicorp, an investment analyst for Goldman Sachs, or a stock broker for Merrill Lynch? These fields rely heavily on accounting knowledge to analyze financial statements. In fact, it is difficult to get a good job in a finance function without two or three courses in accounting.

Real estate: Are you interested in being a real estate broker for Prudential Real Estate? Because a third party—the bank—is almost always involved in financing a real estate transaction, brokers must understand the numbers involved: Can the buyer afford to make the payments to the bank? Does the cash flow from an industrial property justify the purchase price? What are the tax benefits of the purchase?

How might accounting help you? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 2 Building Blocks of Accounting

Indicate whether each of the five statements presented below is true or false.

1. Congress passed the Sarbanes-Oxley Act to reduce unethical behavior and decrease the likelihood of future corporate scandals.
2. The primary accounting standard-setting body in the United States is the Financial Accounting Standards Board (FASB).
3. The historical cost principle dictates that companies record assets at their cost. In later periods, however, the fair value of the asset must be used if fair value is higher than its cost.
4. Relevance means that financial information matches what really happened; the information is factual.
5. A business owner's personal expenses must be separated from expenses of the business to comply with accounting's economic entity assumption.

Action Plan

- ✔ Review the discussion of ethics and financial reporting standards.
- ✔ Develop an understanding of the key terms used.

Solution

1. True. **2.** True. **3.** False. The historical cost principle dictates that companies record assets at their cost. Under the historical cost principle, the company must also use cost in later periods. **4.** False. Faithful representation, not relevance, means that financial information matches what really happened; the information is factual. **5.** True.

Related exercise material: **E1-3, E1-4, and DO IT! 1-2.**

LEARNING OBJECTIVE 3

State the accounting equation, and define its components.

The two basic elements of a business are what it owns and what it owes. **Assets** are the resources a business owns. For example, Google has total assets of approximately \$93.8 billion. Liabilities and owner's equity are the rights or claims against these resources. Thus, Google has \$93.8 billion of claims against its \$93.8 billion of assets. Claims of those to whom the company owes money (creditors) are called **liabilities**. Claims of owners are called **owner's equity**. Google has liabilities of \$22.1 billion and owners' equity of \$71.7 billion.

We can express the relationship of assets, liabilities, and owner's equity as an equation, as shown in Illustration 1-5.

Illustration 1-5
The basic accounting equation

Assets	=	Liabilities	+	Owner's Equity

This relationship is the **basic accounting equation**. Assets must equal the sum of liabilities and owner's equity. Liabilities appear before owner's equity in the basic accounting equation because they are paid first if a business is liquidated.

The accounting equation applies to all **economic entities** regardless of size, nature of business, or form of business organization. It applies to a small proprietorship such as a corner grocery store as well as to a giant corporation such as PepsiCo. The equation provides the **underlying framework** for recording and summarizing economic events.

Let's look in more detail at the categories in the basic accounting equation.

Assets

As noted above, **assets** are resources a business owns. The business uses its assets in carrying out such activities as production and sales. The common characteristic possessed by all assets is **the capacity to provide future services or benefits**. In a business, that service potential or future economic benefit eventually results in cash inflows (receipts). For example, consider Campus Pizza, a local restaurant. It owns a delivery truck that provides economic benefits from delivering pizzas. Other assets of Campus Pizza are tables, chairs, jukebox, cash register, oven, tableware, and, of course, cash.

Liabilities

Liabilities are claims against assets—that is, existing debts and obligations. Businesses of all sizes usually borrow money and purchase merchandise on credit. These economic activities result in payables of various sorts:

- Campus Pizza, for instance, purchases cheese, sausage, flour, and beverages on credit from suppliers. These obligations are called **accounts payable**.
- Campus Pizza also has a **note payable** to First National Bank for the money borrowed to purchase the delivery truck.
- Campus Pizza may also have **salaries and wages payable** to employees and **sales and real estate taxes payable** to the local government.

All of these persons or entities to whom Campus Pizza owes money are its **creditors**.

Creditors may legally force the liquidation of a business that does not pay its debts. In that case, the law requires that creditor claims be paid **before** ownership claims.

Owner's Equity

The ownership claim on total assets is **owner's equity**. It is equal to total assets minus total liabilities. Here is why: The assets of a business are claimed by either creditors or owners. To find out what belongs to owners, we subtract the creditors' claims (the liabilities) from assets. The remainder is the owner's claim on the assets—the owner's equity. Since the claims of creditors must be paid **before** ownership claims, owner's equity is often referred to as **residual equity**.

Helpful Hint
In some places, we use the term "owner's equity" and in others we use "owners' equity." *Owner's* (singular, possessive) refers to one owner (the case with a sole proprietorship). *Owners'* (plural, possessive) refers to multiple owners (the case with partnerships or corporations).

INCREASES IN OWNER'S EQUITY

In a proprietorship, owner's investments and revenues increase owner's equity.

INVESTMENTS BY OWNER **Investments by owner** are the assets the owner puts into the business. These investments increase owner's equity. They are recorded in a category called **owner's capital**.

REVENUES **Revenues** are the **gross increase in owner's equity resulting from business activities entered into for the purpose of earning income**. Generally, revenues result from selling merchandise, performing services, renting property, and lending money. Common sources of revenue are sales, fees, services, commissions, interest, dividends, royalties, and rent.

Revenues usually result in an increase in an asset. They may arise from different sources and are called various names depending on the nature of the business. Campus Pizza, for instance, has two categories of sales revenues—pizza sales and beverage sales.

DECREASES IN OWNER'S EQUITY

In a proprietorship, owner's drawings and expenses decrease owner's equity.

DRAWINGS An owner may withdraw cash or other assets for personal use. We use a separate classification called **drawings** to determine the total withdrawals for each accounting period. **Drawings decrease owner's equity.** They are recorded in a category called owner's drawings.

EXPENSES **Expenses** are the cost of assets consumed or services used in the process of earning revenue. They are **decreases in owner's equity that result from operating the business**. For example, Campus Pizza recognizes the following expenses: cost of ingredients (meat, flour, cheese, tomato paste, mushrooms, etc.); cost of beverages; salaries and wages expense; utilities expense (electric, gas, and water expense); delivery expense (gasoline, repairs, licenses, etc.); supplies expense (napkins, detergents, aprons, etc.); rent expense; interest expense; and property tax expense.

In summary, owner's equity is increased by an owner's investments and by revenues from business operations. Owner's equity is decreased by an owner's withdrawals of assets and by expenses. Illustration 1-6 expands the basic accounting equation by showing the items that comprise owner's equity. This format is referred to as the **expanded accounting equation**.

Illustration 1-6
Expanded accounting equation

Basic Equation	Assets	=	Liabilities	+	Owner's Equity							
Expanded Equation	Assets	=	Liabilities	+	Owner's Capital	−	Owner's Drawings	+	Revenues	−	Expenses	

DO IT! 3 Owner's Equity Effects

Action Plan

✔ Understand the sources of revenue.

✔ Understand what causes expenses.

✔ Review the rules for changes in owner's equity.

✔ Recognize that drawings are withdrawals of cash or other assets from the business for personal use.

Classify the following items as investment by owner (I), owner's drawings (D), revenues (R), or expenses (E). Then indicate whether each item increases or decreases owner's equity.

1. Rent Expense.
2. Service Revenue.
3. Drawings.
4. Salaries and Wages Expense.

Solution

1. Rent Expense is an expense (E); it decreases owner's equity. **2.** Service Revenue is revenue (R); it increases owner's equity. **3.** Drawings is owner's drawings (D); it decreases owner's equity. **4.** Salaries and Wages Expense is an expense (E); it decreases owner's equity.

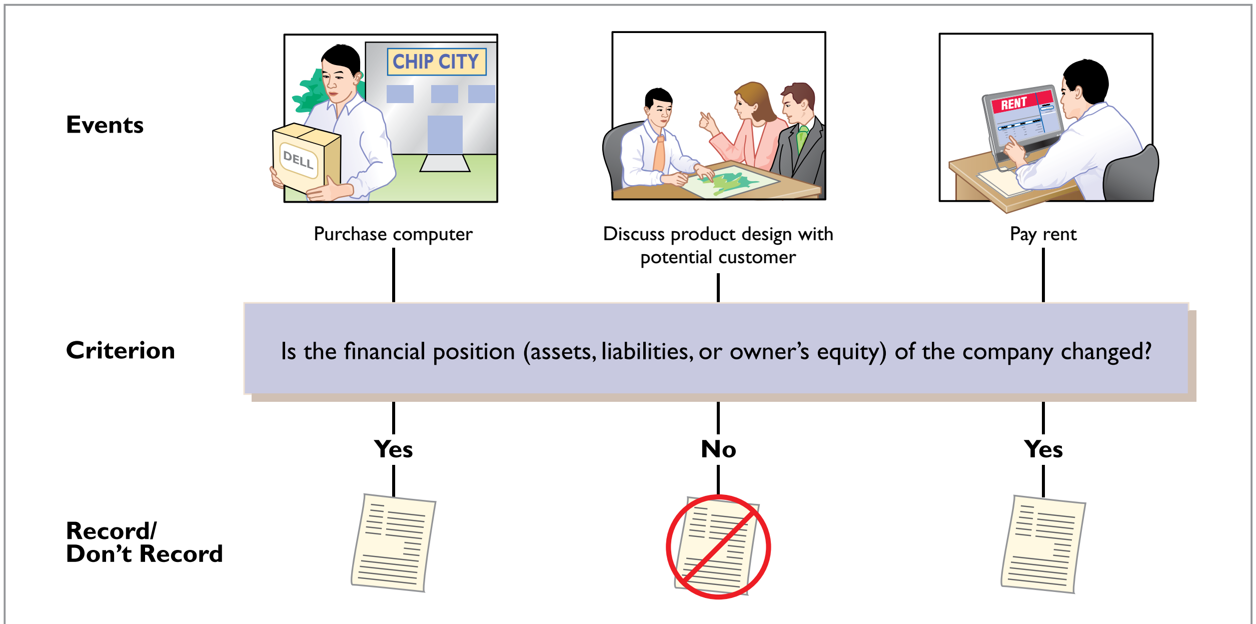
Related exercise material: **BE1-1, BE1-2, BE1-3, BE1-4, BE1-5, BE1-8, E1-5, and DO IT! 1-3.**

LEARNING OBJECTIVE 4 Analyze the effects of business transactions on the accounting equation.

Transactions (**business transactions**) are a business's economic events recorded by accountants. Transactions may be external or internal. **External transactions** involve economic events between the company and some outside enterprise. For example, Campus Pizza's purchase of cooking equipment from a supplier, payment of monthly rent to the landlord, and sale of pizzas to customers are external transactions. **Internal transactions** are economic events that occur entirely within one company. The use of cooking and cleaning supplies are internal transactions for Campus Pizza.

Companies carry on many activities that do not represent business transactions. Examples are hiring employees, responding to e-mails, talking with customers, and placing merchandise orders. Some of these activities may lead to business transactions. Employees will earn wages, and suppliers will deliver ordered merchandise. The company must analyze each event to find out if it affects the components of the accounting equation. If it does, the company will record the transaction. Illustration 1-7 demonstrates the transaction identification process.

Illustration 1-7
Transaction identification process



Each transaction must have a dual effect on the accounting equation. For example, if an asset is increased, there must be a corresponding (1) decrease in another asset, (2) increase in a specific liability, or (3) increase in owner's equity.

Two or more items could be affected. For example, as one asset is increased $10,000, another asset could decrease $6,000 and a liability could increase $4,000. Any change in a liability or ownership claim is subject to similar analysis.

Transaction Analysis

To demonstrate how to analyze transactions in terms of the accounting equation, we will review the business activities of Softbyte, a smartphone app development company. Softbyte is the creation of Ray Neal, an entrepreneur who wants to create focused apps that inspire and engage users of all ages. Ray was encouraged to start his own business after the success of "FoodAlert," a customizable app he developed that tracks the daily location of local food trucks. The following business transactions occur during Softbyte's first month of operations.

Helpful Hint
Study these transactions until you are sure you understand them. They are not difficult, but understanding them is important to your success in this course. The ability to analyze transactions in terms of the basic accounting equation is essential in accounting.

TRANSACTION (1). INVESTMENT BY OWNER Ray Neal starts a smartphone app development company which he names Softbyte. On September 1, 2017, he invests $15,000 cash in the business. This transaction results in an equal increase in assets and owner's equity.

Basic Analysis: The asset Cash increases $15,000, and owner's equity (identified as Owner's Capital) increases $15,000.

Equation Analysis:

	Assets	=	Liabilities	+	Owner's Equity	
	Cash	=			Owner's Capital	
(1)	+$15,000	=			+$15,000	Initial investment

Observe that the equality of the accounting equation has been maintained. Note that the investments by the owner do not represent revenues, and they are excluded in determining net income. Therefore, it is necessary to make clear that the increase is an investment (increasing Owner's Capital) rather than revenue.

TRANSACTION (2). PURCHASE OF EQUIPMENT FOR CASH Softbyte purchases computer equipment for $7,000 cash. This transaction results in an equal increase and decrease in total assets, though the composition of assets changes.

Basic Analysis: The asset Cash decreases $7,000, and the asset Equipment increases $7,000.

Equation Analysis:

	Assets			=	Liabilities	+	Owner's Equity
	Cash	+	Equipment	=			Owner's Capital
	$15,000						$15,000
(2)	−7,000		+$7,000				
	$ 8,000	+	$7,000	=			$15,000
	$15,000						

Observe that total assets are still $15,000. Owner's equity also remains at $15,000, the amount of Ray Neal's original investment.

TRANSACTION (3). PURCHASE OF SUPPLIES ON CREDIT Softbyte purchases for $1,600 from Mobile Solutions headsets and other computer accessories expected to last several months. Mobile Solutions agrees to allow Softbyte to pay this bill in October. This transaction is a purchase on account (a credit purchase). Assets increase because of the expected future benefits of using the headsets and computer accessories, and liabilities increase by the amount due to Mobile Solutions.

Basic Analysis	The asset Supplies increases $1,600, and the liability Accounts Payable increases $1,600.

Equation Analysis

	Assets					=	Liabilities	+	Owner's Equity
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Owner's Capital
	$8,000				$7,000				$15,000
(3)			**+$1,600**				**+$1,600**		
	$8,000	+	$1,600	+	$7,000	=	$1,600	+	$15,000
			$16,600					$16,600	

Total assets are now $16,600. This total is matched by a $1,600 creditor's claim and a $15,000 ownership claim.

TRANSACTION (4). SERVICES PERFORMED FOR CASH Softbyte receives $1,200 cash from customers for app development services it has performed. This transaction represents Softbyte's principal revenue-producing activity. Recall that **revenue increases owner's equity**.

Basic Analysis	The asset Cash increases $1,200, and owner's equity increases $1,200 due to Service Revenue.

Equation Analysis

	Assets					=	Liabilities	+	Owner's Equity			
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Owner's Capital	+	Revenues	
	$8,000		$1,600		$7,000		$1,600		$15,000			
(4)	**+1,200**										**+$1,200**	**Service Revenue**
	$9,200	+	$1,600	+	$7,000	=	$1,600	+	$15,000	+	$1,200	
			$17,800						$17,800			

The two sides of the equation balance at $17,800. Service Revenue is included in determining Softbyte's net income.

Note that we do not have room to give details for each individual revenue and expense account in this illustration. Thus, revenues (and expenses when we get to them) are summarized under one column heading for Revenues and one for Expenses. However, it is important to keep track of the category (account) titles affected (e.g., Service Revenue) as they will be needed when we prepare financial statements later in the chapter.

TRANSACTION (5). PURCHASE OF ADVERTISING ON CREDIT Softbyte receives a bill for $250 from the *Daily News* for advertising on its online website but postpones payment until a later date. This transaction results in an increase in liabilities and a decrease in owner's equity.

Basic Analysis	The liability Accounts Payable increases $250, and owner's equity decreases $250 due to Advertising Expense.

Equation Analysis

	Assets					= Liabilities +		Owner's Equity					
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Owner's Capital	+	Revenues	−	Expenses
	$9,200		$1,600		$7,000		$1,600		$15,000		$1,200		
(5)							**+250**						**−$250** Advertising Expense
	$9,200	+	$1,600	+	$7,000	=	$1,850	+	$15,000	+	$1,200	−	$ 250
	$17,800						$17,800						

The two sides of the equation still balance at $17,800. Owner's equity decreases when Softbyte incurs the expense. Expenses are not always paid in cash at the time they are incurred. When Softbyte pays at a later date, the liability Accounts Payable will decrease, and the asset Cash will decrease [see Transaction (8)]. The cost of advertising is an expense (rather than an asset) because the company has **used** the benefits. Advertising Expense is included in determining net income.

TRANSACTION (6). SERVICES PERFORMED FOR CASH AND CREDIT Softbyte performs $3,500 of app development services for customers. The company receives cash of $1,500 from customers, and it bills the balance of $2,000 on account. This transaction results in an equal increase in assets and owner's equity.

Basic Analysis	Three specific items are affected: The asset Cash increases $1,500, the asset Accounts Receivable increases $2,000, and owner's equity increases $3,500 due to Service Revenue.

Equation Analysis

	Assets							= Liabilities +		Owner's Equity					
	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Accounts Payable	+	Owner's Capital	+	Revenues	−	Expenses
	$9,200				$1,600		$7,000		$1,850		$15,000		$1,200		$250
(6)	**+1,500**		**+$2,000**										**+3,500**		Service Revenue
	$10,700	+	$ 2,000	+	$1,600	+	$7,000	=	$1,850	+	$15,000	+	$4,700	−	$250
	$21,300								$21,300						

Softbyte recognizes $3,500 in revenue when it performs the service. In exchange for this service, it received $1,500 in Cash and Accounts Receivable of $2,000. This Accounts Receivable represents customers' promises to pay $2,000 to Softbyte in the future. When it later receives collections on account, Softbyte will increase Cash and will decrease Accounts Receivable [see Transaction (9)].

TRANSACTION (7). PAYMENT OF EXPENSES Softbyte pays the following expenses in cash for September: office rent $600, salaries and wages of employees $900, and utilities $200. These payments result in an equal decrease in assets and owner's equity.

Basic Analysis	The asset Cash decreases $1,700, and owner's equity decreases $1,700 due to the specific expense categories (Rent Expense, Salaries and Wages Expense, and Utilities Expense).

Equation Analysis

	Assets				=	Liabilities	+	Owner's Equity		
	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	=	Accounts Payable	+	Owner's Capital	+ Revenues	− Expenses
	$10,700	$2,000	$1,600	$7,000		$1,850		$15,000	$4,700	$ 250
(7)	−1,700									−600 Rent Expense −900 Sal. and Wages Exp. −200 Utilities Exp.
	$9,000	+ $2,000	+ $1,600	+ $7,000	=	$1,850	+	$15,000	+ $4,700	− $1,950
	$19,600					$19,600				

The two sides of the equation now balance at $19,600. Three lines in the analysis indicate the different types of expenses that have been incurred.

TRANSACTION (8). PAYMENT OF ACCOUNTS PAYABLE Softbyte pays its $250 *Daily News* bill in cash. The company previously [in Transaction (5)] recorded the bill as an increase in Accounts Payable and a decrease in owner's equity.

Basic Analysis	This cash payment "on account" decreases the asset Cash by $250 and also decreases the liability Accounts Payable by $250.

Equation Analysis

	Assets				=	Liabilities	+	Owner's Equity		
	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	=	Accounts Payable	+	Owner's Capital	+ Revenues	− Expenses
	$9,000	$2,000	$1,600	$7,000		$1,850		$15,000	$4,700	$1,950
(8)	−250					−250				
	$8,750	+ $2,000	+ $1,600	+ $7,000	=	$1,600	+	$15,000	+ $4,700	− $1,950
	$19,350					$19,350				

Observe that the payment of a liability related to an expense that has previously been recorded does not affect owner's equity. The company recorded this expense in Transaction (5) and should not record it again.

TRANSACTION (9). RECEIPT OF CASH ON ACCOUNT Softbyte receives $600 in cash from customers who had been billed for services [in Transaction (6)]. Transaction (9) does not change total assets, but it changes the composition of those assets.

Basic Analysis	The asset Cash increases $600, and the asset Accounts Receivable decreases $600.

Equation Analysis

	Assets							=	**Liabilities**	+	**Owner's Equity**				
	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Accounts Payable	+	Owner's Capital	+	Revenues	−	Expenses
	$8,750		$2,000		$1,600		$7,000		$1,600		$15,000		$4,700		$1,950
(9)	+600		−600												
	$9,350	+	$1,400	+	$1,600	+	$7,000	=	$1,600	+	$15,000	+	$4,700	−	$1,950
	$19,350								$19,350						

Note that the collection of an account receivable for services previously billed and recorded does not affect owner's equity. Softbyte already recorded this revenue in Transaction (6) and should not record it again.

TRANSACTION (10). WITHDRAWAL OF CASH BY OWNER Ray Neal withdraws $1,300 in cash from the business for his personal use. This transaction results in an equal decrease in assets and owner's equity.

Basic Analysis	The asset Cash decreases $1,300, and owner's equity decreases $1,300 due to owner's withdrawal (Owner's Drawings).

Equation Analysis

	Assets							=	**Liabilities**	+	**Owner's Equity**							
	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Accounts Payable	+	Owner's Capital	−	Owner's Drawings	+	Revenues	−	Expenses	
	$9,350		$1,400		$1,600		$7,000		$1,600		$15,000				$4,700		$1,950	
(10)	−1,300												−$1,300					Drawings
	$8,050	+	$1,400	+	$1,600	+	$7,000	=	$1,600	+	$15,000	−	$1,300	+	$4,700	−	$1,950	
	$18,050								$18,050									

Observe that the effect of a cash withdrawal by the owner is the opposite of the effect of an investment by the owner. **Owner's drawings are not expenses.** Expenses are incurred for the purpose of earning revenue. Drawings do not generate revenue. They are a **disinvestment**. Like owner's investment, the company excludes owner's drawings in determining net income.

Summary of Transactions

Illustration 1-8 (page 20) summarizes the September transactions of Softbyte to show their cumulative effect on the basic accounting equation. It also indicates the transaction number and the specific effects of each transaction.

Illustration 1-8 demonstrates some significant facts:

1. Each transaction is analyzed in terms of its effect on:
   (a) The three components of the basic accounting equation.
   (b) Specific items within each component.
2. The two sides of the equation must always be equal.

Trans-action	Assets: Cash	+ Accounts Receivable	+ Supplies	+ Equipment	= Liabilities: Accounts Payable	+ Owner's Equity: Owner's Capital	− Owner's Drawings	+ Rev.	− Exp.	
(1)	+$15,000					+$15,000				**Initial invest.**
(2)	−7,000			+$7,000						
(3)			+$1,600		+$1,600					
(4)	+1,200							+$1,200		**Service Revenue**
(5)					+250				−$250	**Adver. Expense**
(6)	+1,500	+$2,000						+3,500		**Service Revenue**
(7)	−600								−600	**Rent Expense**
	−900								−900	**Sal./Wages Exp.**
	−200								−200	**Utilities Expense**
(8)	−250				−250					
(9)	+600	−600								
(10)	−1,300						−$1,300			**Drawings**
	$ 8,050 +	$1,400 +	$1,600 +	$7,000 =	$1,600 +	$15,000 −	$1,300 +	$4,700 −	$1,950	
	$18,050				**$18,050**					

Illustration 1-8
Tabular summary of Softbyte transactions

There! You made it through your first transaction analysis. If you feel a bit shaky on any of the transactions, it might be a good idea at this point to get up, take a short break, and come back again for a 10- to 15-minute review of the transactions, to make sure you understand them before you go on to the next section.

DO IT! 4 Tabular Analysis

Action Plan

- ✔ Analyze the effects of each transaction on the accounting equation.
- ✔ Use appropriate category names (not descriptions).
- ✔ Keep the accounting equation in balance.

Transactions made by Virmari & Co., a public accounting firm, for the month of August are shown below. Prepare a tabular analysis which shows the effects of these transactions on the expanded accounting equation, similar to that shown in Illustration 1-8.

1. The owner invested $25,000 cash in the business.
2. The company purchased $7,000 of office equipment on credit.
3. The company received $8,000 cash in exchange for services performed.
4. The company paid $850 for this month's rent.
5. The owner withdrew $1,000 cash for personal use.

Solution

Trans-action	Assets: Cash	+ Equipment	= Liabilities: Accounts Payable	+ Owner's Equity: Owner's Capital	− Owner's Drawings	+ Revenues	− Expenses	
(1)	+$25,000			+$25,000				
(2)		+$7,000	+$7,000					
(3)	+8,000					+$8,000		**Service Revenue**
(4)	−850						−$850	**Rent Expense**
(5)	−1,000				−$1,000			**Drawings**
	$31,150 +	$7,000 =	$7,000 +	$25,000 −	$1,000 +	$8,000 −	$850	
	$38,150		$38,150					

Related exercise material: **BE1-6, BE1-7, BE1-9, E1-6, E1-7, E1-8, and DO IT! 1-4.**

LEARNING OBJECTIVE 5

Describe the four financial statements and how they are prepared.

Companies prepare four financial statements from the summarized accounting data:

1. An **income statement** presents the revenues and expenses and resulting net income or net loss for a specific period of time.
2. An **owner's equity statement** summarizes the changes in owner's equity for a specific period of time.
3. A **balance sheet** reports the assets, liabilities, and owner's equity at a specific date.
4. A **statement of cash flows** summarizes information about the cash inflows (receipts) and outflows (payments) for a specific period of time.

International Note

The primary types of financial statements required by GAAP and IFRS are the same. In practice, some format differences do exist in presentations commonly employed by GAAP companies compared to IFRS companies.

These statements provide relevant financial data for internal and external users. Illustration 1-9 (page 22) shows the financial statements of Softbyte.

Note that the statements shown in Illustration 1-9 are interrelated:

1. Net income of $2,750 on the **income statement** is added to the beginning balance of owner's capital in the **owner's equity statement**.
2. Owner's capital of $16,450 at the end of the reporting period shown in the **owner's equity statement** is reported on the **balance sheet**.
3. Cash of $8,050 on the **balance sheet** is reported on the **statement of cash flows**.

Helpful Hint
The income statement, owner's equity statement, and statement of cash flows are all for a *period* of time, whereas the balance sheet is for a *point* in time.

Also, explanatory notes and supporting schedules are an integral part of every set of financial statements. We illustrate these notes and schedules in later chapters of this textbook.

Be sure to carefully examine the format and content of each statement in Illustration 1-9. We describe the essential features of each in the following sections.

Income Statement

The income statement reports the revenues and expenses for a specific period of time. (In Softbyte's case, this is "For the Month Ended September 30, 2017.") Softbyte's income statement is prepared from the data appearing in the owner's equity columns of Illustration 1-8 (page 20).

Alternative Terminology
The income statement is sometimes referred to as the *statement of operations, earnings statement,* or *profit and loss statement.*

Alternative Terminology *notes introduce other terms you might hear or read.*

The income statement lists revenues first, followed by expenses. Finally the statement shows net income (or net loss). **Net income** results when revenues exceed expenses. A **net loss** occurs when expenses exceed revenues.

Although practice varies, we have chosen in our illustrations and homework solutions to list expenses in order of magnitude. (We will consider alternative formats for the income statement in later chapters.)

Note that the income statement does **not** include investment and withdrawal transactions between the owner and the business in measuring net income. For example, as explained earlier, Ray Neal's withdrawal of cash from Softbyte was not regarded as a business expense.

Owner's Equity Statement

The owner's equity statement reports the changes in owner's equity for a specific period of time. The time period is the same as that covered by the income statement. Data for the preparation of the owner's equity statement come from the owner's equity columns of the tabular summary (Illustration 1-8) and from the income statement. The first line of the statement shows the beginning owner's equity amount (which was zero at the start of the business). Then come the owner's investments, net income (or loss), and the owner's drawings. This statement indicates **why** owner's equity has increased or decreased during the period.

Illustration 1-9
Financial statements and their interrelationships

Helpful Hint
The heading of each statement identifies the company, the type of statement, and the specific date or time period covered by the statement.

SOFTBYTE
Income Statement
For the Month Ended September 30, 2017

Revenues		
Service revenue		$ 4,700
Expenses		
Salaries and wages expense	$900	
Rent expense	600	
Advertising expense	250	
Utilities expense	200	
Total expenses		1,950
Net income		$ 2,750

SOFTBYTE
Owner's Equity Statement
For the Month Ended September 30, 2017

Owner's capital, September 1		$ –0–
Add: Investments	$15,000	
Net income	2,750	17,750
		17,750
Less: Drawings		1,300
Owner's capital, September 30		$16,450

Helpful Hint
Note that final sums are double-underlined, and negative amounts (in the statement of cash flows) are presented in parentheses.

SOFTBYTE
Balance Sheet
September 30, 2017

Assets	
Cash	$ 8,050
Accounts receivable	1,400
Supplies	1,600
Equipment	7,000
Total assets	$ 18,050
Liabilities and Owner's Equity	
Liabilities	
Accounts payable	$ 1,600
Owner's equity	
Owner's capital	16,450
Total liabilities and owner's equity	$ 18,050

SOFTBYTE
Statement of Cash Flows
For the Month Ended September 30, 2017

Cash flows from operating activities		
Cash receipts from revenues		$ 3,300
Cash payments for expenses		(1,950)
Net cash provided by operating activities		1,350
Cash flows from investing activities		
Purchase of equipment		(7,000)
Cash flows from financing activities		
Investments by owner	$15,000	
Drawings by owner	(1,300)	13,700
Net increase in cash		8,050
Cash at the beginning of the period		0
Cash at the end of the period		$ 8,050

Helpful Hint
The arrows in this illustration show the interrelationships of the four financial statements.

1. Net income is computed first and is needed to determine the ending balance in owner's equity.
2. The ending balance in owner's equity is needed in preparing the balance sheet.
3. The cash shown on the balance sheet is needed in preparing the statement of cash flows.

What if Softbyte had reported a net loss in its first month? Let's assume that during the month of September 2017, Softbyte lost $10,000. Illustration 1-10 shows the presentation of a net loss in the owner's equity statement.

Illustration 1-10
Presentation of net loss

SOFTBYTE Owner's Equity Statement For the Month Ended September 30, 2017		
Owner's capital, September 1		$ –0–
Add: Investments		15,000
		15,000
Less: Drawings	$ 1,300	
Net loss	**10,000**	11,300
Owner's capital, September 30		$ 3,700

If the owner makes any additional investments, the company reports them in the owner's equity statement as investments.

Balance Sheet

Softbyte's balance sheet reports the assets, liabilities, and owner's equity at a specific date (in Softbyte's case, September 30, 2017). The company prepares the balance sheet from the column headings of the tabular summary (Illustration 1-8) and the month-end data shown in its last line.

Observe that the balance sheet lists assets at the top, followed by liabilities and owner's equity. Total assets must equal total liabilities and owner's equity. Softbyte reports only one liability—accounts payable—in its balance sheet. In most cases, there will be more than one liability. When two or more liabilities are involved, a customary way of listing is as follows.

Illustration 1-11
Presentation of liabilities

Liabilities	
Notes payable	$ 10,000
Accounts payable	63,000
Salaries and wages payable	18,000
Total liabilities	**$91,000**

The balance sheet is a snapshot of the company's financial condition at a specific moment in time (usually the month-end or year-end).

Statement of Cash Flows

The statement of cash flows provides information on the cash receipts and payments for a specific period of time. The statement of cash flows reports (1) the cash effects of a company's operations during a period, (2) its investing activities, (3) its financing activities, (4) the net increase or decrease in cash during the period, and (5) the cash amount at the end of the period.

Reporting the sources, uses, and change in cash is useful because investors, creditors, and others want to know what is happening to a company's most liquid resource. The statement of cash flows provides answers to the following simple but important questions.

1. Where did cash come from during the period?
2. What was cash used for during the period?
3. What was the change in the cash balance during the period?

As shown in Softbyte's statement of cash flows, cash increased $8,050 during the period. Net cash provided by operating activities increased cash $1,350. Cash flow from investing activities decreased cash $7,000. And cash flow from financing activities increased cash $13,700. At this time, you need not be concerned with how these amounts are determined. Chapter 17 will examine the statement of cash flows in detail.

People, Planet, and Profit Insight

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Beyond Financial Statements

Should we expand our financial statements beyond the income statement, owner's equity statement, balance sheet, and statement of cash flows? Some believe we should take into account ecological and social performance, in addition to financial results, in evaluating a company. The argument is that a company's responsibility lies with anyone who is influenced by its actions. In other words, a company should be interested in benefiting many different parties, instead of only maximizing stockholders' interests.

A socially responsible business does not exploit or endanger any group of individuals. It follows fair trade practices, provides safe environments for workers, and bears responsibility for environmental damage. Granted, measurement of these factors is difficult. How to report this information is also controversial. But many interesting and useful efforts are underway. Throughout this textbook, we provide additional insights into how companies are attempting to meet the challenge of measuring and reporting their contributions to society, as well as their financial results, to stockholders.

Why might a company's stockholders be interested in its environmental and social performance? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 5 Financial Statement Items

Presented below is selected information related to Flanagan Company at December 31, 2017. Flanagan reports financial information monthly.

Equipment	$10,000	Utilities Expense	$ 4,000
Cash	8,000	Accounts Receivable	9,000
Service Revenue	36,000	Salaries and Wages Expense	7,000
Rent Expense	11,000	Notes Payable	16,500
Accounts Payable	2,000	Owner's Drawings	5,000

(a) Determine the total assets of Flanagan Company at December 31, 2017.

(b) Determine the net income that Flanagan Company reported for December 2017.

(c) Determine the owner's equity of Flanagan Company at December 31, 2017.

Action Plan

✔ Remember the basic accounting equation: assets must equal liabilities plus owner's equity.

✔ Review previous financial statements to determine how total assets, net income, and owner's equity are computed.

Solution

(a) The total assets are $27,000, comprised of Cash $8,000, Accounts Receivable $9,000, and Equipment $10,000.

(b) Net income is $14,000, computed as follows.

Revenues		
Service revenue		$36,000
Expenses		
Rent expense	$11,000	
Salaries and wages expense	7,000	
Utilities expense	4,000	
Total expenses		22,000
Net income		$14,000

(c) The ending owner's equity of Flanagan Company is $8,500. By rewriting the accounting equation, we can compute owner's equity as assets minus liabilities, as follows.

Total assets [as computed in (a)]		$27,000
Less: Liabilities		
Notes payable	$16,500	
Accounts payable	2,000	18,500
Owner's equity		$ 8,500

Note that it is not possible to determine the company's owner's equity in any other way because the beginning total for owner's equity is not provided.

Related exercise material: **BE1-10, BE1-11, E1-9, E1-10, E1-11, E1-12, E1-13, E1-14, E1-15, E1-16, and DO IT! 1-5.**

LEARNING OBJECTIVE * 6

APPENDIX 1A: Explain the career opportunities in accounting.

Why is accounting such a popular major and career choice? First, there are a lot of jobs. In many cities in recent years, the demand for accountants exceeded the supply. Not only are there a lot of jobs, but there are a wide array of opportunities. As one accounting organization observed, "accounting is one degree with 360 degrees of opportunity."

Accounting is also hot because it is obvious that accounting matters. Interest in accounting has increased, ironically, because of the attention caused by the accounting failures of companies such as Enron and WorldCom. These widely publicized scandals revealed the important role that accounting plays in society. Most people want to make a difference, and an accounting career provides many opportunities to contribute to society. Finally, the Sarbanes-Oxley Act (SOX) (see page 7) significantly increased the accounting and internal control requirements for corporations. This dramatically increased demand for professionals with accounting training.

Accountants are in such demand that it is not uncommon for accounting students to have accepted a job offer a year before graduation. As the following discussion reveals, the job options of people with accounting degrees are virtually unlimited.

Public Accounting

Individuals in **public accounting** offer expert service to the general public, in much the same way that doctors serve patients and lawyers serve clients. A major portion of public accounting involves **auditing**. In auditing, a certified public accountant (CPA) examines company financial statements and provides an opinion as to how accurately the financial statements present the company's results and financial position. Analysts, investors, and creditors rely heavily on these "audit opinions," which CPAs have the exclusive authority to issue.

Taxation is another major area of public accounting. The work that tax specialists perform includes tax advice and planning, preparing tax returns, and representing clients before governmental agencies such as the Internal Revenue Service.

A third area in public accounting is **management consulting**. It ranges from installing basic accounting software or highly complex enterprise resource planning systems, to performing support services for major marketing projects and merger and acquisition activities.

Many CPAs are entrepreneurs. They form small- or medium-sized practices that frequently specialize in tax or consulting services.

Private Accounting

Instead of working in public accounting, you might choose to be an employee of a for-profit company such as **Starbucks**, **Google**, or **PepsiCo**. In **private** (or **managerial**) **accounting**, you would be involved in activities such as cost accounting (finding the cost of producing specific products), budgeting, accounting information system design and support, and tax planning and preparation. You might also be a member of your company's internal audit team. In response to SOX, the internal auditors' job of reviewing the company's operations to ensure compliance with company policies and to increase efficiency has taken on increased importance.

Alternatively, many accountants work for not-for-profit organizations such as the **Red Cross** or the **Bill and Melinda Gates Foundation**, or for museums, libraries, or performing arts organizations.

Governmental Accounting

Another option is to pursue one of the many accounting opportunities in governmental agencies. For example, the Internal Revenue Service (IRS), Federal Bureau of Investigation (FBI), and the Securities and Exchange Commission (SEC) all employ accountants. The FBI has a stated goal that at least 15 percent of its new agents should be CPAs. There is also a very high demand for accounting educators at public colleges and universities and in state and local governments.

Forensic Accounting

Forensic accounting uses accounting, auditing, and investigative skills to conduct investigations into theft and fraud. It is listed among the top 20 career paths of the future. The job of forensic accountants is to catch the perpetrators of the estimated $600 billion per year of theft and fraud occurring at U.S. companies. This includes tracing money-laundering and identity-theft activities as well as tax evasion. Insurance companies hire forensic accountants to detect frauds such as arson, and law offices employ forensic accountants to identify marital assets in divorces. Forensic accountants often have FBI, IRS, or similar government experience.

"Show Me the Money"

How much can a new accountant make? Take a look at the average salaries for college graduates in public and private accounting. Keep in mind if you also have a CPA license, you'll make 10–15% more when you start out.

Illustration 1A-1
Salary estimates for jobs in public and corporate accounting

Employer	Jr. Level (0–3 yrs.)	Sr. Level (4–6 yrs.)
Public accounting (large firm)	$51,500–$74,250	$71,000–$92,250
Public accounting (small firm)	$42,500–$60,500	$57,000–$74,000
Corporate accounting (large company)	$41,750–$68,500	$67,000–$86,500
Corporate accounting (small company)	$37,000–$56,750	$52,750–$68,500

Helpful Hint
For up-to-date salary estimates, check out **www.startheregoplaces.com**.

Serious earning potential over time gives CPAs great job security. Here are some examples of upper-level salaries for managers in corporate accounting. Note that geographic region, experience, education, CPA certification, and company size each play a role in determining salary.

Illustration 1A-2
Upper-level management salaries in corporate accounting

Position	Large Company	Small to Medium Company
Chief financial officer	$189,750–$411,000	$96,750–$190,500
Corporate controller	$128,000–$199,000	$82,750–$144,750
Tax manager	$100,250–$142,500	$79,500–$110,750

The Review and Practice section provides opportunities for students to review key concepts and terms as well as complete multiple-choice questions, exercises, and a comprehensive problem. Detailed solutions are also included.

REVIEW AND PRACTICE

LEARNING OBJECTIVES REVIEW

1 **Identify the activities and users associated with accounting.** Accounting is an information system that identifies, records, and communicates the economic events of an organization to interested users. The major users and uses of accounting are as follows. (a) Management uses accounting information to plan, organize, and run the business. (b) Investors (owners) decide whether to buy, hold, or sell their financial interests on the basis of accounting data. (c) Creditors (suppliers and bankers) evaluate the risks of granting credit or lending money on the basis of accounting information. Other groups that use accounting information are taxing authorities, regulatory agencies, customers, and labor unions.

2 **Explain the building blocks of accounting: ethics, principles, and assumptions.** Ethics are the standards of conduct by which actions are judged as right or wrong. Effective financial reporting depends on sound ethical behavior.

Generally accepted accounting principles are a common set of standards used by accountants. The primary accounting standard-setting body in the United States is the Financial Accounting Standards Board. The monetary unit assumption requires that companies include in the accounting records only transaction data that can be expressed in terms of money. The economic entity assumption requires that the activities of each economic entity be kept separate from the activities of its owner(s) and other economic entities.

3 **State the accounting equation, and define its components.** The basic accounting equation is:

Assets = Liabilities + Owner's Equity

Assets are resources a business owns. Liabilities are creditorship claims on total assets. Owner's equity is the ownership claim on total assets.

The expanded accounting equation is:

Assets = Liabilities + Owner's Capital − Owner's Drawings + Revenues − Expenses

Owner's capital is assets the owner puts into the business. Owner's drawings are the assets the owner withdraws for personal use. Revenues are increases in assets resulting from income-earning activities. Expenses are the costs of assets consumed or services used in the process of earning revenue.

4 **Analyze the effects of business transactions on the accounting equation.** Each business transaction must have a dual effect on the accounting equation. For example, if an individual asset increases, there must be a corresponding (1) decrease in another asset, (2) increase in a specific liability, or (3) increase in owner's equity.

5 **Describe the four financial statements and how they are prepared.** An income statement presents the revenues and expenses, and resulting net income or net loss, for a specific period of time. An owner's equity statement summarizes the changes in owner's equity for a specific period of time. A balance sheet reports the assets, liabilities, and owner's equity at a specific date. A statement of cash flows summarizes information about the cash inflows (receipts) and outflows (payments) for a specific period of time.

*6 **Explain the career opportunities in accounting.** Accounting offers many different jobs in fields such as public and private accounting, governmental, and forensic accounting. Accounting is a popular major because there are many different types of jobs, with unlimited potential for career advancement.

GLOSSARY REVIEW

Accounting The information system that identifies, records, and communicates the economic events of an organization to interested users. (p. 4).

Assets Resources a business owns. (p. 12).

***Auditing** The examination of financial statements by a certified public accountant in order to express an opinion as to the fairness of presentation. (p. 25).

Balance sheet A financial statement that reports the assets, liabilities, and owner's equity at a specific date. (p. 2).

Basic accounting equation Assets = Liabilities + Owner's equity. (p. 21).

Bookkeeping A part of the accounting process that involves only the recording of economic events. (p. 5).

Convergence The process of reducing the differences between U.S. GAAP and IFRS. (p. 9).

Corporation A business organized as a separate legal entity under state corporation law, having ownership divided into transferable shares of stock. (p. 10).

Drawings Withdrawal of cash or other assets from an unincorporated business for the personal use of the owner(s). (p. 13).

Economic entity assumption An assumption that requires that the activities of the entity be kept separate and distinct from the activities of its owner and all other economic entities. (p. 10).

Ethics The standards of conduct by which actions are judged as right or wrong, honest or dishonest, fair or not fair. (p. 7).

Expanded accounting equation Assets = Liabilities + Owner's capital − Owner's drawings + Revenues − Expenses. (p. 13).

Expenses The cost of assets consumed or services used in the process of earning revenue. (p. 13).

Fair value principle An accounting principle stating that assets and liabilities should be reported at fair value (the price received to sell an asset or settle a liability). (p. 9).

Faithful representation Numbers and descriptions match what really existed or happened—they are factual. (p. 9).

Financial accounting The field of accounting that provides economic and financial information for investors, creditors, and other external users. (p. 6).

Financial Accounting Standards Board (FASB) A private organization that establishes generally accepted accounting principles in the United States (GAAP). (p. 9).

***Forensic accounting** An area of accounting that uses accounting, auditing, and investigative skills to conduct investigations into theft and fraud. (p. 26).

Generally accepted accounting principles (GAAP) Common standards that indicate how to report economic events. (p. 8).

Historical cost principle An accounting principle that states that companies should record assets at their cost. (p. 9).

Income statement A financial statement that presents the revenues and expenses and resulting net income or net loss of a company for a specific period of time. (p. 21).

International Accounting Standards Board (IASB) An accounting standard-setting body that issues standards adopted by many countries outside of the United States. (p. 9).

International Financial Reporting Standards (IFRS) International accounting standards set by the International Accounting Standards Board (IASB). (p. 9).

Investments by owner The assets an owner puts into the business. (p. 13).

Liabilities Creditor claims against total assets. (p. 12).

***Management consulting** An area of public accounting ranging from development of accounting and computer systems to support services for marketing projects and merger and acquisition activities. (p. 25).

Managerial accounting The field of accounting that provides internal reports to help users make decisions about their companies. (p. 5).

Monetary unit assumption An assumption stating that companies include in the accounting records only transaction data that can be expressed in terms of money. (p. 9).

Net income The amount by which revenues exceed expenses. (p. 21).

Net loss The amount by which expenses exceed revenues. (p. 21).

Owner's equity The ownership claim on total assets. (p. 13).

Owner's equity statement A financial statement that summarizes the changes in owner's equity for a specific period of time. (p. 21).

Partnership A business owned by two or more persons associated as partners. (p. 10).

***Private (or managerial) accounting** An area of accounting within a company that involves such activities as cost accounting, budgeting, design and support of accounting information systems, and tax planning and preparation. (p. 26).

Proprietorship A business owned by one person. (p. 10).

***Public accounting** An area of accounting in which the accountant offers expert service to the general public. (p. 25).

Relevance Financial information that is capable of making a difference in a decision. (p. 9).

Revenues The gross increase in owner's equity resulting from business activities entered into for the purpose of earning income. (p. 13).

Sarbanes-Oxley Act (SOX) Law passed by Congress intended to reduce unethical corporate behavior. (p. 7).

Securities and Exchange Commission (SEC) A governmental agency that oversees U.S. financial markets and accounting standard-setting bodies. (p. 9).

Statement of cash flows A financial statement that summarizes information about the cash inflows (receipts) and cash outflows (payments) for a specific period of time. (p. 21).

***Taxation** An area of public accounting involving tax advice, tax planning, preparing tax returns, and representing clients before governmental agencies. (p. 25).

Transactions The economic events of a business that are recorded by accountants. (p. 14).

PRACTICE MULTIPLE-CHOICE QUESTIONS

(LO 1) **1.** Which of the following is **not** a step in the accounting process?
(a) Identification.
(b) Economic entity.
(c) Recording.
(d) Communication.

2. Which of the following statements about users of accounting information is **incorrect**? (LO 1)
(a) Management is an internal user.
(b) Taxing authorities are external users.

(c) Present creditors are external users.
(d) Regulatory authorities are internal users.

(LO 2) **3.** The historical cost principle states that:
(a) assets should be initially recorded at cost and adjusted when the fair value changes.
(b) activities of an entity are to be kept separate and distinct from its owner.
(c) assets should be recorded at their cost.
(d) only transaction data capable of being expressed in terms of money be included in the accounting records.

(LO 2) **4.** Which of the following statements about basic assumptions is **correct**?
(a) Basic assumptions are the same as accounting principles.
(b) The economic entity assumption states that there should be a particular unit of accountability.
(c) The monetary unit assumption enables accounting to measure employee morale.
(d) Partnerships are not economic entities.

(LO 2) **5.** The three types of business entities are:
(a) proprietorships, small businesses, and partnerships.
(b) proprietorships, partnerships, and corporations.
(c) proprietorships, partnerships, and large businesses.
(d) financial, manufacturing, and service companies.

(LO 3) **6.** Net income will result during a time period when:
(a) assets exceed liabilities.
(b) assets exceed revenues.
(c) expenses exceed revenues.
(d) revenues exceed expenses.

(LO 3) **7.** As of December 31, 2017, Kent Company has assets of $3,500 and owner's equity of $2,000. What are the liabilities for Kent Company as of December 31, 2017?
(a) $1,500. (c) $2,500.
(b) $1,000. (d) $2,000.

(LO 4) **8.** Performing services on account will have the following effects on the components of the basic accounting equation:
(a) increase assets and decrease owner's equity.
(b) increase assets and increase owner's equity.
(c) increase assets and increase liabilities.
(d) increase liabilities and increase owner's equity.

(LO 4) **9.** Which of the following events is **not** recorded in the accounting records?
(a) Equipment is purchased on account.
(b) An employee is terminated.
(c) A cash investment is made into the business.
(d) The owner withdraws cash for personal use.

10. During 2017, Bruske Company's assets decreased $50,000 and its liabilities decreased $50,000. Its owner's equity therefore: (LO 4)
(a) increased $50,000. (c) decreased $100,000.
(b) decreased $50,000. (d) did not change.

11. Payment of an account payable affects the components of the accounting equation in the following way. (LO 4)
(a) Decreases owner's equity and decreases liabilities.
(b) Increases assets and decreases liabilities.
(c) Decreases assets and increases owner's equity.
(d) Decreases assets and decreases liabilities.

12. Which of the following statements is **false**? (LO 5)
(a) A statement of cash flows summarizes information about the cash inflows (receipts) and outflows (payments) for a specific period of time.
(b) A balance sheet reports the assets, liabilities, and owner's equity at a specific date.
(c) An income statement presents the revenues, expenses, changes in owner's equity, and resulting net income or net loss for a specific period of time.
(d) An owner's equity statement summarizes the changes in owner's equity for a specific period of time.

13. On the last day of the period, Alan Cesska Company buys a $900 machine on credit. This transaction will affect the: (LO 5)
(a) income statement only.
(b) balance sheet only.
(c) income statement and owner's equity statement only.
(d) income statement, owner's equity statement, and balance sheet.

14. The financial statement that reports assets, liabilities, and owner's equity is the: (LO 5)
(a) income statement.
(b) owner's equity statement.
(c) balance sheet.
(d) statement of cash flows.

***15.** Services performed by a public accountant include: (LO 6)
(a) auditing, taxation, and management consulting.
(b) auditing, budgeting, and management consulting.
(c) auditing, budgeting, and cost accounting.
(d) auditing, budgeting, and management consulting.

Solutions

1. (b) Economic entity is not one of the steps in the accounting process. The other choices are true because (a) identification is the first step in the accounting process, (c) recording is the second step in the accounting process, and (d) communication is the third and final step in the accounting process.

2. (d) Regulatory authorities are external, not internal, users of accounting information. The other choices are true statements.

3. (c) The historical cost principle states that assets should be recorded at their cost. The other choices are incorrect because (a) the historical cost principle does not say that assets should be adjusted for changes in fair value, (b) describes the economic entity assumption, and (d) describes the monetary unit assumption.

4. (b) The economic entity assumption states that there should be a particular unit of accountability. The other choices are incorrect because (a) basic assumptions are not the same as accounting principles, (c) the monetary unit assumption allows accounting to measure economic events, and (d) partnerships are economic entities.

5. (b) Proprietorships, partnerships, and corporations are the three types of business entities. Choices (a) and (c) are incorrect because small and large businesses only denote the sizes of businesses. Choice (d) is incorrect because financial, manufacturing, and service companies are types of businesses, not business entities.

6. (d) Net income results when revenues exceed expenses. The other choices are incorrect because (a) assets and liabilities are not used in the computation of net income; (b) revenues, not assets, are included in the computation of net income; and (c) when expenses exceed revenues, a net loss results.

7. (a) Using a variation of the basic accounting equation, Assets − Owner's equity = Liabilities, $3,500 − $2,000 = $1,500. Therefore, choices (b) $1,000, (c) $2,500, and (d) $2,000 are incorrect.

8. (b) When services are performed on account, assets are increased and owner's equity is increased. The other choices are incorrect because when services are performed on account (a) owner's equity is increased, not decreased; (c) liabilities are not affected; and (d) owner's equity is increased and liabilities are not affected.

9. (b) If an employee is terminated, this represents an activity of a company, not a business transaction. Assets, liabilities, and owner's equity are not affected. Thus, there is no effect on the accounting equation. The other choices are incorrect because they are all recorded: (a) when equipment is purchased on account, both assets and liabilities increase; (c) when a cash investment is made into a business, both assets and owner's equity increase; and (d) when an owner withdraws cash for personal use, both assets and owner's equity decrease.

10. (d) In this situation, owner's equity does not change because only assets and liabilities decreased $50,000. Therefore, the other choices are incorrect.

11. (d) Payment of an account payable results in an equal decrease of assets (cash) and liabilities (accounts payable). The other choices are incorrect because payment of an account payable (a) does not affect owner's equity, (b) does not increase assets, and (c) does not affect owner's equity.

12. (c) An income statement represents the revenues, expenses, and the resulting net income or net loss for a specific period of time but not the changes in owner's equity. The other choices are true statements.

13. (b) This transaction will cause assets to increase by $900 and liabilities to increase by $900. The other choices are incorrect because this transaction (a) will have no effect on the income statement, (c) will have no effect on the income statement or the owner's equity statement, and (d) will affect the balance sheet but not the income statement or the owner's equity statement.

14. (c) The balance sheet is the statement that reports assets, liabilities and owner's equity. The other choices are incorrect because (a) the income statement reports revenues and expenses, (b) the owner's equity statement reports details about owner's equity, and (d) the statement of cash flows reports inflows and outflows of cash.

***15. (a)** Auditing, taxation, and management consulting are all services performed by public accountants. The other choices are incorrect because public accountants do not perform budgeting or cost accounting.

PRACTICE EXERCISES

Analyze the effect of transactions.
(LO 3, 4)

1. Selected transactions for Fabulous Flora Company are listed below.

1. Made cash investment to start business.
2. Purchased equipment on account.
3. Paid salaries.
4. Billed customers for services performed.
5. Received cash from customers billed in (4).
6. Withdrew cash for owner's personal use.
7. Incurred advertising expense on account.
8. Purchased additional equipment for cash.
9. Received cash from customers when service was performed.

Instructions

List the numbers of the above transactions and describe the effect of each transaction on assets, liabilities, and owner's equity. For example, the first answer is: (1) Increase in assets and increase in owner's equity.

Solution

1. 1. Increase in assets and increase in owner's equity.
   2. Increase in assets and increase in liabilities.
   3. Decrease in assets and decrease in owner's equity.
   4. Increase in assets and increase in owner's equity.

5. Increase in assets and decrease in assets.
6. Decrease in assets and decrease in owner's equity.
7. Increase in liabilities and decrease in owner's equity.
8. Increase in assets and decrease in assets.
9. Increase in assets and increase in owner's equity.

Analyze the effect of transactions on assets, liabilities, and owner's equity.

(LO 3, 4)

2. Alma's Payroll Services Company entered into the following transactions during May 2017.

1. Purchased computers for $15,000 from Bytes of Data on account.
2. Paid $3,000 cash for May rent on storage space.
3. Received $12,000 cash from customers for contracts billed in April.
4. Performed payroll services for Magic Construction Company for $2,500 cash.
5. Paid Northern Ohio Power Co. $7,000 cash for energy usage in May.
6. Alma invested an additional $25,000 in the business.
7. Paid Bytes of Data for the computers purchased in (1) above.
8. Incurred advertising expense for May of $900 on account.

Instructions

Indicate with the appropriate letter whether each of the transactions above results in:

(a) an increase in assets and a decrease in assets.
(b) an increase in assets and an increase in owner's equity.
(c) an increase in assets and an increase in liabilities.
(d) a decrease in assets and a decrease in owner's equity.
(e) a decrease in assets and a decrease in liabilities.
(f) an increase in liabilities and a decrease in owner's equity.
(g) an increase in owner's equity and a decrease in liabilities.

Solution

2.	1. (c)	3. (a)	5. (d)	7. (e)
	2. (d)	4. (b)	6. (b)	8. (f)

PRACTICE PROBLEM

Prepare a tabular presentation and financial statements.

(LO 4, 5)

Joan Robinson opens her own law office on July 1, 2017. During the first month of operations, the following transactions occurred.

1. Joan invested $11,000 in cash in the law practice.
2. Paid $800 for July rent on office space.
3. Purchased equipment on account $3,000.
4. Performed legal services to clients for cash $1,500.
5. Borrowed $700 cash from a bank on a note payable.
6. Performed legal services for client on account $2,000.
7. Paid monthly expenses: salaries and wages $500, utilities $300, and advertising $100.
8. Joan withdrew $1,000 cash for personal use.

Instructions

(a) Prepare a tabular summary of the transactions.
(b) Prepare the income statement, owner's equity statement, and balance sheet at July 31, 2017, for Joan Robinson, Attorney.

Solution

(a)

Transaction	Assets: Cash	+	Accounts Receivable	+	Equipment	=	Liabilities: Notes Payable	+	Accounts Payable	+	Owner's Equity: Owner's Capital	−	Owner's Drawings	+	Revenues	−	Expenses
(1)	+$11,000					=					+$11,000						
(2)	−800																−$800
(3)					+$3,000	=			+$3,000								
(4)	+1,500														+$1,500		
(5)	+700						+$700										
(6)			+$2,000												+2,000		
(7)	−500																−500
	−300																−300
	−100																−100
(8)	−1,000												−$1,000				
	$10,500	+	$2,000	+	$3,000	=	$700	+	$3,000	+	$11,000	−	$1,000	+	$3,500	−	$1,700

$\underbrace{\$10{,}500 + \$2{,}000 + \$3{,}000}_{\$15{,}500} = \underbrace{\$700 + \$3{,}000 + \$11{,}000 - \$1{,}000 + \$3{,}500 - \$1{,}700}_{\$15{,}500}$

(b)

JOAN ROBINSON, ATTORNEY
Income Statement
For the Month Ended July 31, 2017

Revenues		
Service revenue		$3,500
Expenses		
Rent expense	$800	
Salaries and wages expense	500	
Utilities expense	300	
Advertising expense	100	
Total expenses		1,700
Net income		$1,800

JOAN ROBINSON, ATTORNEY
Owner's Equity Statement
For the Month Ended July 31, 2017

Owner's capital, July 1		$ 0
Add: Investments	$11,000	
Net income	1,800	12,800
		12,800
Less: Drawings		1,000
Owner's capital, July 31		$11,800

JOAN ROBINSON, ATTORNEY
Balance Sheet
July 31, 2017

Assets	
Cash	$10,500
Accounts receivable	2,000
Equipment	3,000
Total assets	$15,500
Liabilities and Owner's Equity	
Liabilities	
Notes payable	$ 700
Accounts payable	3,000
Total liabilities	3,700
Owner's equity	
Owner's capital	11,800
Total liabilities and owner's equity	$15,500

WileyPLUS Brief Exercises, Exercises, DO IT! Exercises, and Problems and many additional resources are available for practice in WileyPLUS

NOTE: All asterisked Questions, Exercises, and Problems relate to material in the appendix to the chapter.

QUESTIONS

1. "Accounting is ingrained in our society and it is vital to our economic system." Do you agree? Explain.
2. Identify and describe the steps in the accounting process.
3. (a) Who are internal users of accounting data? (b) How does accounting provide relevant data to these users?
4. What uses of financial accounting information are made by (a) investors and (b) creditors?
5. "Bookkeeping and accounting are the same." Do you agree? Explain.
6. Trenton Travel Agency purchased land for $90,000 cash on December 10, 2017. At December 31, 2017, the land's value has increased to $93,000. What amount should be reported for land on Trenton's balance sheet at December 31, 2017? Explain.
7. What is the monetary unit assumption?
8. What is the economic entity assumption?
9. What are the three basic forms of business organizations for profit-oriented enterprises?
10. Rachel Hipp is the owner of a successful printing shop. Recently, her business has been increasing, and Rachel has been thinking about changing the organization of her business from a proprietorship to a corporation. Discuss some of the advantages Rachel would enjoy if she were to incorporate her business.
11. What is the basic accounting equation?
12. (a) Define the terms assets, liabilities, and owner's equity.
    (b) What items affect owner's equity?
13. Which of the following items are liabilities of Siebers Jewelry Stores?
    (a) Cash.
    (b) Accounts payable.
    (c) Owner's drawings.
    (d) Accounts receivable.
    (e) Supplies.
    (f) Equipment.
    (g) Salaries and wages payable.
    (h) Service revenue.
    (i) Rent expense.
14. Can a business enter into a transaction in which only the left side of the basic accounting equation is affected? If so, give an example.
15. Are the following events recorded in the accounting records? Explain your answer in each case.
    (a) The owner of the company dies.
    (b) Supplies are purchased on account.
    (c) An employee is fired.
    (d) The owner of the business withdraws cash from the business for personal use.
16. Indicate how the following business transactions affect the basic accounting equation.
    (a) Paid cash for janitorial services.
    (b) Purchased equipment for cash.
    (c) Invested cash in the business.
    (d) Paid accounts payable in full.
17. Listed below are some items found in the financial statements of Tony Gruber Co. Indicate in which financial statement(s) the following items would appear.
    (a) Service revenue.
    (b) Equipment.
    (c) Advertising expense.
    (d) Accounts receivable.
    (e) Owner's capital.
    (f) Salaries and wages payable.
18. In February 2017, Maria Osgood invested an additional $10,000 in her business, Osgood's Pharmacy, which is organized as a proprietorship. Osgood's accountant, Carl Sota, recorded this receipt as an increase in cash and revenues. Is this treatment appropriate? Why or why not?
19. "A company's net income appears directly on the income statement and the owner's equity statement, and it is included indirectly in the company's balance sheet." Do you agree? Explain.
20. Saylor Enterprises had a capital balance of $168,000 at the beginning of the period. At the end of the accounting period, the capital balance was $198,000.
    (a) Assuming no additional investment or withdrawals during the period, what is the net income for the period?
    (b) Assuming an additional investment of $13,000 but no withdrawals during the period, what is the net income for the period?
21. Summarized operations for Bayles Co. for the month of July are as follows.

    Revenues recognized: for cash $20,000; on account $70,000.

    Expenses incurred: for cash $26,000; on account $40,000.

    Indicate for Bayles Co. (a) the total revenues, (b) the total expenses, and (c) net income for the month of July.
22. The basic accounting equation is Assets = Liabilities + Owner's equity. Replacing the words in that equation with dollar amounts, what is Apple's accounting equation at September 24, 2013? (*Hint:* Owner's equity is equivalent to shareholders' equity.)

BRIEF EXERCISES

Use basic accounting equation.
(LO 3)

BE1-1 Presented below is the basic accounting equation. Determine the missing amounts.

	Assets	=	Liabilities	+	Owner's Equity
(a)	$90,000		$50,000		?
(b)	?		$44,000		$70,000
(c)	$94,000		?		$53,000

Use basic accounting equation.
(LO 3)

BE1-2 Given the accounting equation, answer each of the following questions.

(a) The liabilities of Weber Company are $120,000 and the owner's equity is $232,000. What is the amount of Weber Company's total assets?
(b) The total assets of Weber Company are $190,000 and its owner's equity is $91,000. What is the amount of its total liabilities?
(c) The total assets of Weber Company are $800,000 and its liabilities are equal to one-half of its total assets. What is the amount of Weber Company's owner's equity?

Use basic accounting equation.
(LO 3)

BE1-3 At the beginning of the year, Gilles Company had total assets of $800,000 and total liabilities of $300,000. Answer the following questions.

(a) If total assets increased $150,000 during the year and total liabilities decreased $60,000, what is the amount of owner's equity at the end of the year?
(b) During the year, total liabilities increased $100,000 and owner's equity decreased $70,000. What is the amount of total assets at the end of the year?
(c) If total assets decreased $80,000 and owner's equity increased $120,000 during the year, what is the amount of total liabilities at the end of the year?

Solve expanded accounting equation.
(LO 3)

BE1-4 Use the expanded accounting equation to answer each of the following questions.

(a) The liabilities of Kafka Company are $90,000. Owner's capital is $150,000; drawings are $40,000; revenues, $450,000; and expenses, $320,000. What is the amount of Kafka Company's total assets?
(b) The total assets of Rivera Company are $57,000. Owner's capital is $25,000; drawings are $7,000; revenues, $52,000; and expenses, $35,000. What is the amount of the company's total liabilities?
(c) The total assets of Alcorn Co. are $600,000 and its liabilities are equal to two-thirds of its total assets. What is the amount of Alcorn Co.'s owner's equity?

Identify assets, liabilities, and owner's equity.
(LO 3)

BE1-5 Indicate whether each of the following items is an asset (A), liability (L), or part of owner's equity (OE).

________	(a) Accounts receivable	________	(d) Supplies
________	(b) Salaries and wages payable	________	(e) Owner's capital
________	(c) Equipment	________	(f) Notes payable

Determine effect of transactions on basic accounting equation.
(LO 4)

BE1-6 Presented below are three business transactions. On a sheet of paper, list the letters (a), (b), and (c) with columns for assets, liabilities, and owner's equity. For each column, indicate whether the transactions increased (+), decreased (−), or had no effect (NE) on assets, liabilities, and owner's equity.

(a) Purchased supplies on account.
(b) Received cash for performing a service.
(c) Paid expenses in cash.

Determine effect of transactions on basic accounting equation.
(LO 4)

BE1-7 Follow the same format as in BE1-6. Determine the effect on assets, liabilities, and owner's equity of the following three transactions.

(a) Invested cash in the business.
(b) Withdrawal of cash by owner.
(c) Received cash from a customer who had previously been billed for services performed.

Classify items affecting owner's equity.
(LO 3)

BE1-8 Classify each of the following items as owner's drawings (D), revenue (R), or expense (E).

________ (a) Advertising expense
________ (b) Service revenue
________ (c) Insurance expense
________ (d) Salaries and wages expense
________ (e) Owner's drawings
________ (f) Rent revenue
________ (g) Utilities expense

BE1-9 Presented below are three transactions. Mark each transaction as affecting owner's investment (I), owner's drawings (D), revenue (R), expense (E), or not affecting owner's equity (NOE).

Determine effect of transactions on basic owner's equity.
(LO 4)

________ (a) Received cash for services performed
________ (b) Paid cash to purchase equipment
________ (c) Paid employee salaries

BE1-10 In alphabetical order below are balance sheet items for Mendoza Company at December 31, 2017. Kathy Mendoza is the owner of Mendoza Company. Prepare a balance sheet, following the format of Illustration 1-9.

Prepare a balance sheet.
(LO 5)

Accounts payable	$90,000
Accounts receivable	72,500
Cash	49,000
Owner's capital	31,500

BE1-11 Indicate whether the following items would appear on the income statement (IS), balance sheet (BS), or owner's equity statement (OE).

Determine where items appear on financial statements.
(LO 5)

________ (a) Notes payable
________ (b) Advertising expense
________ (c) Owner's capital
________ (d) Cash
________ (e) Service revenue

DO IT! Exercises

DO IT! 1-1 Indicate whether each of the five statements presented below is true or false.

Review basic concepts.
(LO 1)

1. The three steps in the accounting process are identification, recording, and examination.
2. The accounting process includes the bookkeeping function.
3. Managerial accounting provides reports to help investors and creditors evaluate a company.
4. The two most common types of external users are investors and creditors.
5. Internal users include human resources managers.

DO IT! 1-2 Indicate whether each of the five statements presented below is true or false.

Identify building blocks of accounting.
(LO 2)

1. Congress passed the Sarbanes-Oxley Act to ensure that investors invest only in companies that will be profitable.
2. The standards of conduct by which actions are judged as loyal or disloyal are ethics.
3. The primary accounting standard-setting body in the United States is the Securities and Exchange Commission (SEC).
4. The historical cost principle dictates that companies record assets at their cost and continue to report them at their cost over the time the assets are held.
5. The monetary unit assumption requires that companies record only transactions that can be measured in money.

DO IT! 1-3 Classify the following items as investment by owner (I), owner's drawings (D), revenues (R), or expenses (E). Then indicate whether each item increases or decreases owner's equity.

Evaluate effects of transactions on owner's equity.
(LO 3)

(1) Drawings.
(2) Rent revenue.
(3) Advertising expense.
(4) Owner puts personal assets into the business.

DO IT! 1-4 Transactions made by M. Alberti and Co., a law firm, for the month of March are shown below and on the next page. Prepare a tabular analysis which shows the effects of these transactions on the expanded accounting equation, similar to that shown in Illustration 1-8.

Prepare tabular analysis.
(LO 4)

1. The company performed $20,000 of services for customers, on credit.
2. The company received $20,000 in cash from customers who had been billed for services (in transaction 1).

3. The company received a bill for $2,300 of advertising but will not pay it until a later date.
4. M. Alberti withdrew $3,600 cash from the business for personal use.

Determine specific amounts on the financial statements.
(LO 5)

DO IT! 1-5 Presented below is selected information related to Kirby Company at December 31, 2017. Kirby reports financial information monthly.

Accounts Payable	$ 3,000	Salaries and Wages Expense	$16,500
Cash	6,500	Notes Payable	25,000
Advertising Expense	6,000	Rent Expense	10,500
Service Revenue	53,500	Accounts Receivable	13,500
Equipment	29,000	Owner's Drawings	7,500

(a) Determine the total assets of Kirby Company at December 31, 2017.
(b) Determine the net income that Kirby Company reported for December 2017.
(c) Determine the owner's equity of Kirby Company at December 31, 2017.

EXERCISES

Classify the three activities of accounting.
(LO 1)

E1-1 Genesis Company performs the following accounting tasks during the year.

________Analyzing and interpreting information.
________Classifying economic events.
________Explaining uses, meaning, and limitations of data.
________Keeping a systematic chronological diary of events.
________Measuring events in dollars and cents.
________Preparing accounting reports.
________Reporting information in a standard format.
________Selecting economic activities relevant to the company.
________Summarizing economic events.

Accounting is "an information system that **identifies**, **records**, and **communicates** the economic events of an organization to interested users."

Instructions
Categorize the accounting tasks performed by Genesis as relating to either the identification (I), recording (R), or communication (C) aspects of accounting.

Identify users of accounting information.
(LO 1)

E1-2 (a) The following are users of financial statements.

________Customers
________Internal Revenue Service
________Labor unions
________Marketing manager
________Production supervisor
________Securities and Exchange Commission
________Store manager
________Suppliers
________Vice president of finance

Instructions
Identify the users as being either **external users** or **internal users**.

(b) The following questions could be asked by an internal user or an external user.

________Can we afford to give our employees a pay raise?
________Did the company earn a satisfactory income?
________Do we need to borrow in the near future?
________How does the company's profitability compare to other companies?
________What does it cost us to manufacture each unit produced?
________Which product should we emphasize?
________Will the company be able to pay its short-term debts?

Instructions
Identify each of the questions as being more likely asked by an **internal user** or an **external user**.

Discuss ethics and the historical cost principle.
(LO 2)

E1-3 Angela Duffy, president of Duffy Company, has instructed Jana Barth, the head of the accounting department for Duffy Company, to report the company's land in the company's accounting reports at its fair value of $170,000 instead of its cost of $100,000. Duffy says, "Showing the land at $170,000 will make our company look like a better investment when we try to attract new investors next month."

Instructions
Explain the ethical situation involved for Jana Barth, identifying the stakeholders and the alternatives.

E1-4 The following situations involve accounting principles and assumptions.

Use accounting concepts.
(LO 2)

1. Tisinai Company owns buildings that are worth substantially more than they originally cost. In an effort to provide more relevant information, Tisinai reports the buildings at fair value in its accounting reports.
2. Kingston Company includes in its accounting records only transaction data that can be expressed in terms of money.
3. Roger Holloway, owner of Roger's Photography, records his personal living costs as expenses of the business.

Instructions
For each of the three situations, say if the accounting method used is correct or incorrect. If correct, identify which principle or assumption supports the method used. If incorrect, identify which principle or assumption has been violated.

E1-5 Diehl Cleaners has the following balance sheet items.

Classify accounts as assets, liabilities, and owner's equity.
(LO 3)

Accounts payable	Accounts receivable
Cash	Notes payable
Equipment	Salaries and wages payable
Supplies	Owner's capital

Instructions
Classify each item as an asset, liability, or owner's equity.

E1-6 Selected transactions for Green Valley Lawn Care Company are listed below.

Analyze the effect of transactions.
(LO 4)

1. Made cash investment to start business.
2. Paid monthly rent.
3. Purchased equipment on account.
4. Billed customers for services performed.
5. Withdrew cash for owner's personal use.
6. Received cash from customers billed in (4).
7. Incurred advertising expense on account.
8. Purchased additional equipment for cash.
9. Received cash from customers when service was performed.

Instructions
List the numbers of the above transactions and describe the effect of each transaction on assets, liabilities, and owner's equity. For example, the first answer is: (1) Increase in assets and increase in owner's equity.

E1-7 Falske Computer Timeshare Company entered into the following transactions during May 2017.

Analyze the effect of transactions on assets, liabilities, and owner's equity.
(LO 4)

1. Purchased computers for $20,000 from Digital Equipment on account.
2. Paid $4,000 cash for May rent on storage space.
3. Received $17,000 cash from customers for contracts billed in April.
4. Performed computer services for Viking Construction Company for $4,000 cash.
5. Paid Tri-State Power Co. $11,000 cash for energy usage in May.
6. Falske invested an additional $29,000 in the business.
7. Paid Digital Equipment for the computers purchased in (1) above.
8. Incurred advertising expense for May of $1,200 on account.

Instructions
Indicate with the appropriate letter whether each of the transactions above results in:

(a) An increase in assets and a decrease in assets.
(b) An increase in assets and an increase in owner's equity.
(c) An increase in assets and an increase in liabilities.

(d) A decrease in assets and a decrease in owner's equity.
(e) A decrease in assets and a decrease in liabilities.
(f) An increase in liabilities and a decrease in owner's equity.
(g) An increase in owner's equity and a decrease in liabilities.

Analyze transactions and compute net income.
(LO 4)

E1-8 An analysis of the transactions made by Arthur Cooper & Co., a certified public accounting firm, for the month of August is shown below. The expenses were $650 for rent, $4,800 for salaries and wages, and $400 for utilities.

	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	= Accounts Payable	+ Owner's Capital	− Owner's Drawings	+ Revenues	− Expenses
1.	+$15,000					+$15,000			
2.	−2,000			+$5,000	+$3,000				
3.	−750		+$750						
4.	+4,600	+$3,900						+$8,500	
5.	−1,500				−1,500				
6.	−2,000						−$2,000		
7.	−650								−$650
8.	+450	−450							
9.	−4,800								−4,800
10.					+400				−400

Instructions
(a) Describe each transaction that occurred for the month.
(b) Determine how much owner's equity increased for the month.
(c) Compute the amount of net income for the month.

Prepare financial statements.
(LO 5)

E1-9 An analysis of transactions for Arthur Cooper & Co. was presented in E1–8.

Instructions
Prepare an income statement and an owner's equity statement for August and a balance sheet at August 31, 2017. Assume that August is the company's first month of business.

Determine net income (or loss).
(LO 5)

E1-10 Finch Company had the following assets and liabilities on the dates indicated.

December 31	Total Assets	Total Liabilities
2016	$400,000	$250,000
2017	$460,000	$300,000
2018	$590,000	$400,000

Finch began business on January 1, 2016, with an investment of $100,000.

Instructions
From an analysis of the change in owner's equity during the year, compute the net income (or loss) for:
(a) 2016, assuming Finch's drawings were $15,000 for the year.
(b) 2017, assuming Finch made an additional investment of $45,000 and had no drawings in 2017.
(c) 2018, assuming Finch made an additional investment of $15,000 and had drawings of $25,000 in 2018.

Analyze financial statements items.
(LO 5)

E1-11 Two items are omitted from each of the following summaries of balance sheet and income statement data for two proprietorships for the year 2017, Greene's Goods and Solar Enterprises.

	Greene's Goods	Solar Enterprises
Beginning of year:		
Total assets	$110,000	$129,000
Total liabilities	85,000	(c)
Total owner's equity	(a)	80,000

End of year:		
Total assets	160,000	180,000
Total liabilities	120,000	50,000
Total owner's equity	40,000	130,000
Changes during year in owner's equity:		
Additional investment	(b)	25,000
Drawings	37,000	(d)
Total revenues	220,000	100,000
Total expenses	175,000	60,000

Instructions

Determine the missing amounts.

E1-12 The following information relates to Armanda Co. for the year 2017.

Prepare income statement and owner's equity statement.

(LO 5)

Owner's capital, January 1, 2017	$48,000	Advertising expense	$ 1,800
Owner's drawings during 2017	6,000	Rent expense	10,400
Service revenue	63,600	Utilities expense	3,100
Salaries and wages expense	29,500		

Instructions

After analyzing the data, prepare an income statement and an owner's equity statement for the year ending December 31, 2017.

E1-13 Abby Roland is the bookkeeper for Cheng Company. Abby has been trying to determine the correct balance sheet for Cheng Company. Cheng's balance sheet is shown below.

Correct an incorrectly prepared balance sheet.

(LO 5)

CHENG COMPANY
Balance Sheet
December 31, 2017

Assets		Liabilities	
Cash	$15,000	Accounts payable	$21,000
Supplies	8,000	Accounts receivable	(6,500)
Equipment	46,000	Owner's capital	67,500
Owner's drawings	13,000	Total liabilities and owner's equity	$82,000
Total assets	$82,000		

Instructions

Prepare a correct balance sheet.

E1-14 Loren Satina is the sole owner of Clear View Park, a public camping ground near the Lake Mead National Recreation Area. Loren has compiled the following financial information as of December 31, 2017.

Compute net income and prepare a balance sheet.

(LO 5)

Revenues during 2017—camping fees	$140,000	Fair value of equipment	$140,000
Revenues during 2017—general store	65,000	Notes payable	60,000
Accounts payable	11,000	Expenses during 2017	150,000
Cash on hand	23,000	Accounts receivable	17,500
Original cost of equipment	105,500		

Instructions

(a) Determine Loren Satina's net income from Clear View Park for 2017.
(b) Prepare a balance sheet for Clear View Park as of December 31, 2017.

E1-15 Presented below is financial information related to the 2017 operations of Sea Legs Cruise Company.

Prepare an income statement.

(LO 5)

Maintenance and repairs expense	$ 95,000
Utilities expense	13,000
Salaries and wages expense	142,000
Advertising expense	24,500
Ticket revenue	410,000

Instructions

Prepare the 2017 income statement for Sea Legs Cruise Company.

Prepare an owner's equity statement.

(LO 5)

E1-16 Presented below is information related to the sole proprietorship of Alice Henning, attorney.

Legal service revenue—2017	$335,000
Total expenses—2017	211,000
Assets, January 1, 2017	96,000
Liabilities, January 1, 2017	62,000
Assets, December 31, 2017	168,000
Liabilities, December 31, 2017	100,000
Drawings—2017	?

Instructions

Prepare the 2017 owner's equity statement for Alice Henning's legal practice.

EXERCISES: SET B AND CHALLENGE EXERCISES

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Exercises: Set B and Challenge Exercises.

PROBLEMS: SET A

Analyze transactions and compute net income.

(LO 3, 4)

P1-1A On April 1, Julie Spengel established Spengel's Travel Agency. The following transactions were completed during the month.

1. Invested $15,000 cash to start the agency.
2. Paid $600 cash for April office rent.
3. Purchased equipment for $3,000 cash.
4. Incurred $700 of advertising costs in the *Chicago Tribune,* on account.
5. Paid $900 cash for office supplies.
6. Performed services worth $10,000: $3,000 cash is received from customers, and the balance of $7,000 is billed to customers on account.
7. Withdrew $600 cash for personal use.
8. Paid *Chicago Tribune* $500 of the amount due in transaction (4).
9. Paid employees' salaries $2,500.
10. Received $4,000 in cash from customers who have previously been billed in transaction (6).

Instructions

(a) Prepare a tabular analysis of the transactions using the following column headings: Cash, Accounts Receivable, Supplies, Equipment, Accounts Payable, Owner's Capital, Owner's Drawings, Revenues, and Expenses.

(b) From an analysis of the owner's equity columns, compute the net income or net loss for April.

Check figures *provide a key number to let you know you are on the right track.*

(a) Total assets $20,800

(b) Net income $6,200

Analyze transactions and prepare income statement, owner's equity statement, and balance sheet.

(LO 3, 4, 5)

P1-2A Judi Salem opened a law office on July 1, 2017. On July 31, the balance sheet showed Cash $5,000, Accounts Receivable $1,500, Supplies $500, Equipment $6,000, Accounts Payable $4,200, and Owner's Capital $8,800. During August, the following transactions occurred.

1. Collected $1,200 of accounts receivable.
2. Paid $2,800 cash on accounts payable.
3. Recognized revenue of $7,500 of which $3,000 is collected in cash and the balance is due in September.
4. Purchased additional equipment for $2,000, paying $400 in cash and the balance on account.
5. Paid salaries $2,500, rent for August $900, and advertising expenses $400.

6. Withdrew $700 in cash for personal use.
7. Received $2,000 from Standard Federal Bank—money borrowed on a note payable.
8. Incurred utility expenses for month on account $270.

Instructions

(a) Prepare a tabular analysis of the August transactions beginning with July 31 balances. The column headings should be as follows: Cash + Accounts Receivable + Supplies + Equipment = Notes Payable + Accounts Payable + Owner's Capital − Owner's Drawings + Revenues − Expenses.

(a) Total assets $16,800

(b) Prepare an income statement for August, an owner's equity statement for August, and a balance sheet at August 31.

(b) Net income $3,430
Ending capital $11,530

Prepare income statement, owner's equity statement, and balance sheet.

(LO 5)

P1-3A On June 1, Cindy Godfrey started Divine Designs Co., a company that provides craft opportunities, by investing $12,000 cash in the business. Following are the assets and liabilities of the company at June 30 and the revenues and expenses for the month of June.

Cash	$10,150	Service Revenue	$6,500
Accounts Receivable	2,800	Advertising Expense	500
Supplies	2,000	Rent Expense	1,600
Equipment	10,000	Gasoline Expense	200
Notes Payable	9,000	Utilities Expense	150
Accounts Payable	1,200		

Cindy made no additional investment in June but withdrew $1,300 in cash for personal use during the month.

Instructions

(a) Prepare an income statement and owner's equity statement for the month of June and a balance sheet at June 30, 2017.

(a) Net income $4,050
Owner's equity $14,750
Total assets $24,950

(b) Prepare an income statement and owner's equity statement for June assuming the following data are not included above: (1) $900 of services were performed and billed but not collected at June 30, and (2) $150 of gasoline expense was incurred but not paid.

(b) Owner's equity $15,500

Analyze transactions and prepare financial statements.

(LO 3, 4, 5)

P1-4A Trixie Maye started her own consulting firm, Matrix Consulting, on May 1, 2017. The following transactions occurred during the month of May.

May	1	Trixie invested $7,000 cash in the business.
	2	Paid $900 for office rent for the month.
	3	Purchased $600 of supplies on account.
	5	Paid $125 to advertise in the *County News*.
	9	Received $4,000 cash for services performed.
	12	Withdrew $1,000 cash for personal use.
	15	Performed $5,400 of services on account.
	17	Paid $2,500 for employee salaries.
	20	Paid for the supplies purchased on account on May 3.
	23	Received a cash payment of $4,000 for services performed on account on May 15.
	26	Borrowed $5,000 from the bank on a note payable.
	29	Purchased equipment for $4,200 on account.
	30	Paid $275 for utilities.

Instructions

(a) Show the effects of the previous transactions on the accounting equation using the following format.

(a) Total assets $20,800

	Assets					Liabilities		Owner's Equity			
Date	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	=	Notes Payable	+ Accounts Payable	+ Owner's Capital	− Owner's Drawings	+ Revenues	− Expenses

(b) Prepare an income statement for the month of May.

(b) Net income $5,600

(c) Prepare a balance sheet at May 31, 2017.

(c) Cash $14,600

Determine financial statement amounts and prepare owner's equity statement.

(LO 4, 5)

P1-5A Financial statement information about four different companies is as follows.

	Alpha Company	Beta Company	Psi Company	Omega Company
January 1, 2017				
Assets	$ 80,000	$ 90,000	(g)	$150,000
Liabilities	41,000	(d)	80,000	(j)
Owner's equity	(a)	40,000	49,000	90,000
December 31, 2017				
Assets	(b)	112,000	170,000	(k)
Liabilities	60,000	72,000	(h)	100,000
Owner's equity	50,000	(e)	82,000	151,000
Owner's equity changes in year				
Additional investment	(c)	8,000	10,000	15,000
Drawings	15,000	(f)	12,000	10,000
Total revenues	350,000	410,000	(i)	500,000
Total expenses	333,000	385,000	350,000	(l)

Instructions

(a) Determine the missing amounts. (*Hint:* For example, to solve for (a), Assets − Liabilities = Owner's equity = $39,000.)

(b) Prepare the owner's equity statement for Alpha Company.

(c) Write a memorandum explaining the sequence for preparing financial statements and the interrelationship of the owner's equity statement to the income statement and balance sheet.

PROBLEMS: SET B AND SET C

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Problems: Set B and Set C.

CONTINUING PROBLEM

*The **Cookie Creations** problem starts in this chapter and continues through Chapter 18. The business begins as a sole proprietorship and then evolves into a partnership and finally a corporation. You also can find this problem at the book's companion website.*

COOKIE CREATIONS: AN ENTREPRENEURIAL JOURNEY

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CC1 Natalie Koebel spent much of her childhood learning the art of cookie-making from her grandmother. They passed many happy hours mastering every type of cookie imaginable and later creating new recipes that were both healthy and delicious. Now at the start of her second year in college, Natalie is investigating various possibilities for starting her own business as part of the requirements of the entrepreneurship program in which she is enrolled.

A long-time friend insists that Natalie has to somehow include cookies in her business plan. After a series of brainstorming sessions, Natalie settles on the idea of operating a cookie-making school. She will start on a part-time basis and offer her services in people's homes. Now that she has started thinking about it, the possibilities seem endless. During the fall, she will concentrate on holiday cookies. She will offer individual lessons and group sessions (which will probably be more entertainment than education for the participants). Natalie also decides to include children in her target market.

The first difficult decision is coming up with the perfect name for her business. In the end, she settles on "Cookie Creations" and then moves on to more important issues.

Instructions

(a) What form of business organization—proprietorship, partnership, or corporation—do you recommend that Natalie use for her business? Discuss the benefits and weaknesses of each form and give the reasons for your choice.

(b) Will Natalie need accounting information? If yes, what information will she need and why? How often will she need this information?

(c) Identify specific asset, liability, and owner's equity accounts that Cookie Creations will likely use to record its business transactions.

(d) Should Natalie open a separate bank account for the business? Why or why not?

BROADENING YOUR PERSPECTIVE

FINANCIAL REPORTING AND ANALYSIS

Financial Reporting Problem: Apple Inc.

BYP1-1 The financial statements of Apple Inc. for 2013 are presented in Appendix A. Instructions for accessing and using the company's complete annual report, including the notes to the financial statements, are also provided in Appendix A.

Instructions
Refer to Apple's financial statements and answer the following questions.

(a) What were Apple's total assets at September 28, 2013? At September 29, 2012?
(b) How much cash (and cash equivalents) did Apple have on September 28, 2013?
(c) What amount of accounts payable did Apple report on September 28, 2013? On September 29, 2012?
(d) What were Apple's net sales in 2011? In 2012? In 2013?
(e) What is the amount of the change in Apple's net income from 2012 to 2013?

Comparative Analysis Problem: PepsiCo, Inc. vs. The Coca-Cola Company

BYP1-2 PepsiCo, Inc.'s financial statements are presented in Appendix B. Financial statements of The Coca-Cola Company are presented in Appendix C. Instructions for accessing and using the complete annual reports of PepsiCo and Coca-Cola, including the notes to the financial statements, are also provided in Appendices B and C, respectively.

Instructions
(a) Based on the information contained in these financial statements, determine the following for each company.
  (1) Total assets at December 28, 2013, for PepsiCo and for Coca-Cola at December 31, 2013.
  (2) Accounts (notes) receivable, net at December 28, 2013, for PepsiCo and at December 31, 2013, for Coca-Cola.
  (3) Net revenues for year ended in 2013.
  (4) Net income for year ended in 2013.
(b) What conclusions concerning the two companies can be drawn from these data?

Comparative Analysis Problem: Amazon.com, Inc. vs. Wal-Mart Stores, Inc.

BYP1-3 Amazon.com, Inc.'s financial statements are presented in Appendix D. Financial statements of Wal-Mart Stores, Inc. are presented in Appendix E. Instructions for accessing and using the complete annual reports of Amazon and Wal-Mart, including the notes to the financial statements, are also provided in Appendices D and E, respectively.

Instructions
(a) Based on the information contained in these financial statements, determine the following for each company.
  (1) Total assets at December 31, 2013, for Amazon and for Wal-Mart at January 31, 2014.
  (2) Receivables (net) at December 31, 2013, for Amazon and for Wal-Mart at January 31, 2014.
  (3) Net sales (product only) for year ended in 2013 (2014 for Wal-Mart).
  (4) Net income for the year ended in 2013 (2014 for Wal-Mart).
(b) What conclusions concerning these two companies can be drawn from these data?

Real-World Focus

BYP1-4 This exercise will familiarize you with skill requirements, job descriptions, and salaries for accounting careers.

Address: **www.careers-in-accounting.com**, or go to **www.wiley.com/college/weygandt**

Instructions

Go to the site shown above. Answer the following questions.

(a) What are the three broad areas of accounting (from "Skills and Talents")?
(b) List eight skills required in accounting.
(c) How do the three accounting areas differ in terms of these eight required skills?
(d) Explain one of the key job options in accounting.
(e) What is the overall salary range for a junior staff accountant?

CRITICAL THINKING

Decision-Making Across the Organization

BYP1-5 Anya and Nick Ramon, local golf stars, opened the Chip-Shot Driving Range on March 1, 2017, by investing $25,000 of their cash savings in the business. A caddy shack was constructed for cash at a cost of $8,000, and $800 was spent on golf balls and golf clubs. The Ramons leased five acres of land at a cost of $1,000 per month and paid the first month's rent. During the first month, advertising costs totaled $750, of which $100 was unpaid at March 31, and $500 was paid to members of the high-school golf team for retrieving golf balls. All revenues from customers were deposited in the company's bank account. On March 15, Anya and Nick withdrew a total of $1,000 in cash for personal living expenses. A $120 utility bill was received on March 31 but was not paid. On March 31, the balance in the company's bank account was $18,900.

Anya and Nick thought they had a pretty good first month of operations. But, their estimates of profitability ranged from a loss of $6,100 to net income of $2,480.

Instructions

With the class divided into groups, answer the following.

(a) How could the Ramons have concluded that the business operated at a loss of $6,100? Was this a valid basis on which to determine net income?
(b) How could the Ramons have concluded that the business operated at a net income of $2,480? (*Hint:* Prepare a balance sheet at March 31.) Was this a valid basis on which to determine net income?
(c) Without preparing an income statement, determine the actual net income for March.
(d) What was the revenue recognized in March?

Communication Activity

BYP1-6 Sandi Alcon, the bookkeeper for New York Company, has been trying to determine the correct balance sheet for the company. The company's balance sheet is shown below.

NEW YORK COMPANY
Balance Sheet
For the Month Ended December 31, 2017

Assets		Liabilities	
Equipment	$25,500	Owner's capital	$26,000
Cash	9,000	Accounts receivable	(6,000)
Supplies	2,000	Owner's drawings	(2,000)
Accounts payable	(8,000)	Notes payable	10,500
	$28,500		$28,500

Instructions

Explain to Sandi Alcon in a memo why the original balance sheet is incorrect, and what should be done to correct it.

Ethics Case

BYP1-7 After numerous campus interviews, Travis Chase, a senior at Great Northern College, received two office interview invitations from the Baltimore offices of two large firms. Both firms offered to cover his out-of-pocket expenses (travel, hotel, and meals). He scheduled the interviews for both firms on the same day, one in the morning and one in the afternoon. At the conclusion of each interview, he submitted to both firms his total out-of-pocket expenses for the trip to Baltimore: mileage $112 (280 miles at $0.40), hotel $130, meals $36, and parking and tolls $18, for a total of $296. He believes this approach is appropriate. If he had made two trips, his cost would have been two times $296. He is also certain that neither firm knew he had visited the other on that same trip. Within 10 days, Travis received two checks in the mail, each in the amount of $296.

Instructions

(a) Who are the stakeholders (affected parties) in this situation?
(b) What are the ethical issues in this case?
(c) What would you do in this situation?

All About You

BYP1-8 Some people are tempted to make their finances look worse to get financial aid. Companies sometimes also manage their financial numbers in order to accomplish certain goals. Earnings management is the planned timing of revenues, expenses, gains, and losses to smooth out bumps in net income. In managing earnings, companies' actions vary from being within the range of ethical activity to being both unethical and illegal attempts to mislead investors and creditors.

Instructions

Provide responses for each of the following questions.

(a) Discuss whether you think each of the following actions (adapted from **www.finaid.org/fafsa/maximize.phtml**) to increase the chances of receiving financial aid is ethical.
  (1) Spend the student's assets and income first, before spending parents' assets and income.
  (2) Accelerate necessary expenses to reduce available cash. For example, if you need a new car, buy it before applying for financial aid.
  (3) State that a truly financially dependent child is independent.
  (4) Have a parent take an unpaid leave of absence for long enough to get below the "threshold" level of income.
(b) What are some reasons why a **company** might want to overstate its earnings?
(c) What are some reasons why a **company** might want to understate its earnings?
(d) Under what circumstances might an otherwise ethical person decide to illegally overstate or understate earnings?

FASB Codification Activity

BYP1-9 The FASB has developed the Financial Accounting Standards Board Accounting Standards Codification (or more simply "the Codification"). The FASB's primary goal in developing the Codification is to provide in one place all the authoritative literature related to a particular topic. To provide easy access to the Codification, the FASB also developed the Financial Accounting Standards Board Codification Research System (CRS). CRS is an online, real-time database that provides easy access to the Codification. The Codification and the related CRS provide a topically organized structure, subdivided into topic, subtopics, sections, and paragraphs, using a numerical index system.

You may find this system useful in your present and future studies, and so we have provided an opportunity to use this online system as part of the *Broadening Your Perspective* section.

Instructions

Academic access to the FASB Codification is available through university subscriptions, obtained from the American Accounting Association (at **http://aaahq.org/FASB/Access.cfm**), for an annual fee of $150. This subscription covers an unlimited number of students within a single institution. Once this access has been obtained by your school, you should log in (at **http://aaahq.org/ascLogin.cfm**) and familiarize yourself with the resources that are accessible at the FASB Codification site.

Considering People, Planet, and Profit

BYP1-10 This chapter's Feature Story discusses the fact that although Clif Bar & Company is not a public company, it does share its financial information with its employees as part of its open-book management approach. Further, although it does not publicly share its financial information, it does provide a different form of an annual report to external users. In this report, the company provides information regarding its sustainability efforts.

Address: **www.issuu.com/clifbar/docs/clif_all_aspirations_2012**

Instructions

Access the 2010 annual report of Clif Bar & Company at the site shown above and then answer the following questions.

(a) What are the Five Aspirations?

(b) What was the company 10-year compounded annual growth rate? What is the amount of 10-year organic purchases made by the company?

A Look at IFRS

LEARNING OBJECTIVE 7

Describe the impact of international accounting standards on U.S. financial reporting.

Most agree that there is a need for one set of international accounting standards. Here is why:

Multinational corporations. Today's companies view the entire world as their market. For example, Coca-Cola, Intel, and McDonald's generate more than 50% of their sales outside the United States. Many foreign companies, such as Toyota, Nestlé, and Sony, find their largest market to be the United States.

Mergers and acquisitions. The mergers between Fiat/Chrysler and Vodafone/Mannesmann suggest that we will see even more such business combinations of companies from different countries in the future.

Information technology. As communication barriers continue to topple through advances in technology, companies and individuals in different countries and markets are becoming more comfortable buying and selling goods and services from one another.

Financial markets. Financial markets are of international significance today. Whether it is currency, equity securities (stocks), bonds, or derivatives, there are active markets throughout the world trading these types of instruments.

Key Points

Following are the key similarities and differences between GAAP and IFRS as related to accounting fundamentals.

Similarities

- The basic techniques for recording business transactions are the same for U.S. and international companies.
- Both international and U. S. accounting standards emphasize transparency in financial reporting. Both sets of standards are primarily driven by meeting the needs of investors and creditors.
- The three most common forms of business organizations, proprietorships, partnerships, and corporations, are also found in countries that use international accounting standards

Differences

- International standards are referred to as International Financial Reporting Standards (IFRS), developed by the International Accounting Standards Board. Accounting standards in the United States are referred to as generally accepted accounting principles (GAAP) and are developed by the Financial Accounting Standards Board.
- IFRS tends to be simpler in its accounting and disclosure requirements; some people say it is more "principles-based." GAAP is more detailed; some people say it is more "rules-based."
- The internal control standards applicable to Sarbanes-Oxley (SOX) apply only to large public companies listed on U.S. exchanges. There is continuing debate as to whether non-U.S. companies should have to comply with this extra layer of regulation.

Looking to the Future

Both the IASB and the FASB are hard at work developing standards that will lead to the elimination of major differences in the way certain transactions are accounted for and reported.

IFRS Practice

IFRS Self-Test Questions

1. Which of the following is **not** a reason why a single set of high-quality international accounting standards would be beneficial?
   (a) Mergers and acquisition activity.
   (b) Financial markets.
   (c) Multinational corporations.
   (d) GAAP is widely considered to be a superior reporting system.
2. The Sarbanes-Oxley Act determines:
   (a) international tax regulations.
   (b) internal control standards as enforced by the IASB.
   (c) internal control standards of U.S. publicly traded companies.
   (d) U.S. tax regulations.
3. IFRS is considered to be more:
   (a) principles-based and less rules-based than GAAP.
   (b) rules-based and less principles-based than GAAP.
   (c) detailed than GAAP.
   (d) None of the above.

IFRS Exercises

IFRS1-1 Who are the two key international players in the development of international accounting standards? Explain their role.

IFRS1-2 What is the benefit of a single set of high-quality accounting standards?

International Financial Reporting Problem: Louis Vuitton

IFRS1-3 The financial statements of Louis Vuitton are presented in Appendix F. Instructions for accessing and using the company's complete annual report, including the notes to its financial statements, are also provided in Appendix F.

Instructions
Visit Louis Vuitton's corporate website and answer the following questions from the company's 2013 annual report.

(a) What accounting firm performed the audit of Louis Vuitton's financial statements?
(b) What is the address of the company's corporate headquarters?
(c) What is the company's reporting currency?

Answers to IFRS Self-Test Questions

1. d **2.** c **3.** a

2 The Recording Process

CHAPTER PREVIEW In Chapter 1, we analyzed business transactions in terms of the accounting equation, and we presented the cumulative effects of these transactions in tabular form. Imagine a company like MF Global (as in the Feature Story below) using the same tabular format as Softbyte to keep track of its transactions. In a single day, MF Global engaged in thousands of business transactions. To record each transaction this way would be impractical, expensive, and unnecessary. Instead, companies use a set of procedures and records to keep track of transaction data more easily. This chapter introduces and illustrates these basic procedures and records.

FEATURE STORY

Accidents Happen

How organized are you financially? Take a short quiz. Answer yes or no to each question:

- Does your wallet contain so many cash machine receipts that you've been declared a walking fire hazard?
- Do you wait until your debit card is denied before checking the status of your funds?
- Was Aaron Rodgers (the quarterback for the Green Bay Packers) playing high school football the last time you verified the accuracy of your bank account?

If you think it is hard to keep track of the many transactions that make up your life, imagine how difficult it is for a big corporation to do so. Not only that, but now consider how important it is for a large company to have good accounting records, especially if it has control of your life savings. MF Global Holdings Ltd is such a company. As a big investment broker, it held billions of dollars of investments for clients. If you had your life savings invested at MF Global, you might be slightly displeased if you heard this from one of its representatives: "You know, I kind of remember an account for someone with a name like yours—now what did we do with that?"

Unfortunately, that is almost exactly what happened to MF Global's clients shortly before it filed for bankruptcy. During the days immediately following the bankruptcy filing, regulators and auditors struggled to piece things together. In the words of one regulator, "Their books are a disaster . . . we're trying to figure out what numbers are real numbers." One company that considered buying an interest in MF Global walked away from the deal because it "couldn't get a sense of what was on the balance sheet." That company said the information that should have been instantly available instead took days to produce.

It now appears that MF Global did not properly segregate customer accounts from company accounts. And, because of its sloppy recordkeeping, customers were not protected when the company had financial troubles. Total customer losses were approximately $1 billion. As you can see, accounting matters!

Source: S. Patterson and A. Lucchetti, "Inside the Hunt for MF Global Cash," *Wall Street Journal Online* (November 11, 2011).

Nick Laham/Getty Images, Inc.

CHAPTER OUTLINE

Learning Objectives

Learning Objective	Topics	DO IT!
1 Describe how accounts, debits, and credits are used to record business transactions.	• The account • Debits and credits • Summary of debit/credit rules	**DO IT! 1** Normal Account Balances
2 Indicate how a journal is used in the recording process.	• Steps in the recording process • The journal	**DO IT! 2** Recording Business Activities
3 Explain how a ledger and posting help in the recording process.	• The ledger • Posting • The recording process illustrated • Summary illustration of journalizing and posting	**DO IT! 3** Posting
4 Prepare a trial balance.	• Limitations of a trial balance • Locating errors • Dollar signs and underlining	**DO IT! 4** Trial Balance

Go to the ***REVIEW AND PRACTICE*** section at the end of the chapter for a review of key concepts and practice applications with solutions.

Visit **WileyPLUS with ORION** for additional tutorials and practice opportunities.

LEARNING OBJECTIVE 1

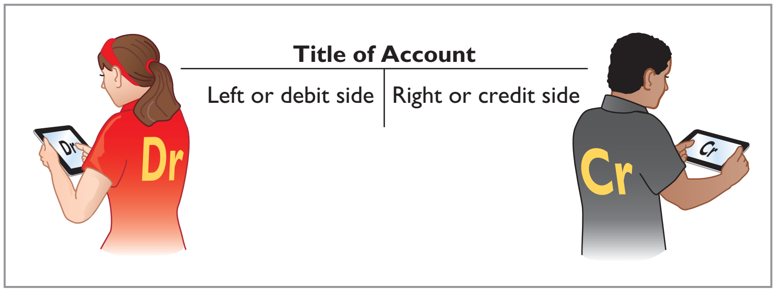
Describe how accounts, debits, and credits are used to record business transactions.

The Account

An **account** is an individual accounting record of increases and decreases in a specific asset, liability, or owner's equity item. For example, Softbyte (the company discussed in Chapter 1) would have separate accounts for Cash, Accounts Receivable, Accounts Payable, Service Revenue, Salaries and Wages Expense, and so on. (Note that whenever we are referring to a specific account, we capitalize the name.)

In its simplest form, an account consists of three parts: (1) a title, (2) a left or debit side, and (3) a right or credit side. Because the format of an account resembles the letter T, we refer to it as a **T-account**. Illustration 2-1 shows the basic form of an account.

Illustration 2-1
Basic form of account



We use this form often throughout this book to explain basic accounting relationships.

Debits and Credits

The term **debit** indicates the left side of an account, and **credit** indicates the right side. They are commonly abbreviated as **Dr.** for debit and **Cr.** for credit. They **do not** mean increase or decrease, as is commonly thought. We use the terms **debit** and **credit** repeatedly in the recording process to describe **where** entries are made in accounts. For example, the act of entering an amount on the left side of an account is called **debiting** the account. Making an entry on the right side is **crediting** the account.

When comparing the totals of the two sides, an account shows a **debit balance** if the total of the debit amounts exceeds the credits. An account shows a **credit balance** if the credit amounts exceed the debits. Note the position of the debit side and credit side in Illustration 2-1.

The procedure of recording debits and credits in an account is shown in Illustration 2-2 for the transactions affecting the Cash account of Softbyte. The data are taken from the Cash column of the tabular summary in Illustration 1-8 (page 20).

Illustration 2-2
Tabular summary and account form for Softbyte's Cash account

Tabular Summary

Cash
$15,000
−7,000
1,200
1,500
−1,700
−250
600
−1,300
$ 8,050

Account Form

Cash			
(Debits)	15,000	**(Credits)**	7,000
	1,200		1,700
	1,500		250
	600		1,300
Balance	8,050		
(Debit)			

Every positive item in the tabular summary represents a receipt of cash. Every negative amount represents a payment of cash. **Notice that in the account form, we record the increases in cash as debits and the decreases in cash as credits.** For example, the $15,000 receipt of cash (in red) is debited to Cash, and the −$7,000 payment of cash (in blue) is credited to Cash.

Having increases on one side and decreases on the other reduces recording errors and helps in determining the totals of each side of the account as well as the account balance. The balance is determined by netting the two sides (subtracting one amount from the other). The account balance, a debit of $8,050, indicates that Softbyte had $8,050 more increases than decreases in cash. In other words, Softbyte started with a balance of zero and now has $8,050 in its Cash account.

DEBIT AND CREDIT PROCEDURE

In Chapter 1, you learned the effect of a transaction on the basic accounting equation. Remember that each transaction must affect two or more accounts to keep the basic accounting equation in balance. In other words, for each transaction, debits must equal credits. The equality of debits and credits provides the basis for the **double-entry system** of recording transactions.

Under the double-entry system, the dual (two-sided) effect of each transaction is recorded in appropriate accounts. This system provides a logical method for recording transactions and also helps ensure the accuracy of the recorded amounts as well as the detection of errors. If every transaction is recorded with equal debits and credits, the sum of all the debits to the accounts must equal the sum of all the credits.

International Note

Rules for accounting for specific events sometimes differ across countries. Despite the differences, the double-entry accounting system is the basis of accounting systems worldwide.

The double-entry system for determining the equality of the accounting equation is much more efficient than the plus/minus procedure used in Chapter 1. The following discussion illustrates debit and credit procedures in the double-entry system.

DR./CR. PROCEDURES FOR ASSETS AND LIABILITIES

In Illustration 2-2 for Softbyte, increases in Cash—an asset—were entered on the left side, and decreases in Cash were entered on the right side. We know that both sides of the basic equation (Assets = Liabilities + Owner's Equity) must be equal. It therefore follows that increases and decreases in liabilities will have to be recorded **opposite from** increases and decreases in assets. Thus, increases in liabilities must be entered on the right or credit side, and decreases in liabilities must be entered on the left or debit side. The effects that debits and credits have on assets and liabilities are summarized in Illustration 2-3.

Debits	Credits
Increase assets	Decrease assets
Decrease liabilities	Increase liabilities

Illustration 2-3
Debit and credit effects—assets and liabilities

Asset accounts normally show debit balances. That is, debits to a specific asset account should exceed credits to that account. Likewise, **liability accounts normally show credit balances**. That is, credits to a liability account should exceed debits to that account. The **normal balance** of an account is on the side where an increase in the account is recorded. Illustration 2-4 shows the normal balances for assets and liabilities.

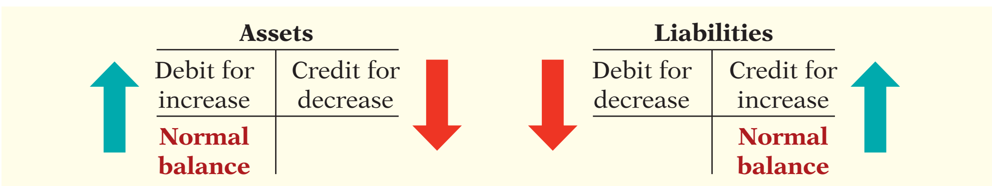


Illustration 2-4
Normal balances—assets and liabilities

Knowing the normal balance in an account may help you trace errors. For example, a credit balance in an asset account such as Land or a debit balance in a liability account such as Salaries and Wages Payable usually indicates an error. Occasionally, though, an abnormal balance may be correct. The Cash account, for example, will have a credit balance when a company has overdrawn its bank balance (i.e., written a check that "bounced").

DR./CR. PROCEDURES FOR OWNER'S EQUITY

As Chapter 1 indicated, owner's investments and revenues increase owner's equity. Owner's drawings and expenses decrease owner's equity. Companies keep accounts for each of these types of transactions.

OWNER'S CAPITAL Investments by owners are credited to the Owner's Capital account. Credits increase this account, and debits decrease it. When an owner invests cash in the business, the company debits (increases) Cash and credits (increases) Owner's Capital. When the owner's investment in the business is reduced, Owner's Capital is debited (decreased).

Illustration 2-5 shows the rules of debit and credit for the Owner's Capital account.

Illustration 2-5
Debit and credit effects—Owner's Capital

Debits	Credits
Decrease Owner's Capital	Increase Owner's Capital

We can diagram the normal balance in Owner's Capital as follows.

Illustration 2-6
Normal balance—Owner's Capital

Owner's Capital	
Debit for decrease	Credit for increase
	Normal balance

OWNER'S DRAWINGS An owner may withdraw cash or other assets for personal use. Withdrawals could be debited directly to Owner's Capital to indicate a decrease in owner's equity. However, it is preferable to use a separate account, called Owner's Drawings. This separate account makes it easier to determine total withdrawals for each accounting period. Owner's Drawings is increased by debits and decreased by credits. Normally, the drawings account will have a debit balance.

Illustration 2-7 shows the rules of debit and credit for the Owner's Drawings account.

Illustration 2-7
Debit and credit effects—Owner's Drawings

Debits	Credits
Increase Owner's Drawings	Decrease Owner's Drawings

We can diagram the normal balance as follows.

Illustration 2-8
Normal balance—Owner's Drawings

Owner's Drawings	
Debit for increase	Credit for decrease
Normal balance	

The Owner's Drawings account decreases owner's equity. It is not an income statement account like revenues and expenses.

Investor Insight Chicago Cubs

Jonathan Daniel/Getty Images, Inc.

Keeping Score

The Chicago Cubs baseball team probably has these major revenue and expense accounts:

Revenues	Expenses
Admissions (ticket sales)	Players' salaries
Concessions	Administrative salaries
Television and radio	Travel
Advertising	Ballpark maintenance

Do you think that the Chicago Bears football team would be likely to have the same major revenue and expense accounts as the Cubs? (Go to **WileyPLUS** for this answer and additional questions.)

REVENUES AND EXPENSES The purpose of earning revenues is to benefit the owner(s) of the business. When a company recognizes revenues, owner's equity increases. Therefore, **the effect of debits and credits on revenue accounts is the same as their effect on Owner's Capital**. That is, revenue accounts are increased by credits and decreased by debits.

Expenses have the opposite effect. Expenses decrease owner's equity. Since expenses decrease net income and revenues increase it, it is logical that the increase and decrease sides of expense accounts should be the opposite of revenue accounts. Thus, expense accounts are increased by debits and decreased by credits. Illustration 2-9 shows the rules of debits and credits for revenues and expenses.

Helpful Hint
Because revenues increase owner's equity, a revenue account has the same debit/credit rules as the Owner's Capital account. Expenses have the opposite effect.

Illustration 2-9
Debit and credit effects—revenues and expenses

Debits	Credits
Decrease revenues	Increase revenues
Increase expenses	Decrease expenses

Credits to revenue accounts should exceed debits. Debits to expense accounts should exceed credits. Thus, revenue accounts normally show credit balances, and expense accounts normally show debit balances. Illustration 2-10 shows the normal balances for revenues and expenses.

Illustration 2-10
Normal balances—revenues and expenses

Revenues		Expenses	
Debit for decrease	Credit for increase	Debit for increase	Credit for decrease
	Normal balance	**Normal balance**	

Helpful Hint
You may want to bookmark Illustration 2-11. You probably will refer to it often.

Summary of Debit/Credit Rules

Illustration 2-11 shows a summary of the debit/credit rules and effects on each type of account. Study this diagram carefully. It will help you understand the fundamentals of the double-entry system.

Illustration 2-11
Summary of debit/credit rules

Basic Equation Assets = Liabilities + Owner's Equity

Expanded Equation Assets = Liabilities + Owner's Capital − Owner's Drawings + Revenues − Expenses

Debit / Credit Effects

Assets		Liabilities		Owner's Capital		Owner's Drawings		Revenues		Expenses	
Dr. +	Cr. −	Dr. −	Cr. +	Dr. −	Cr. +	Dr. +	Cr. −	Dr. −	Cr. +	Dr. +	Cr. −

DO IT! 1 Normal Account Balances

Action Plan

✔ Determine the types of accounts needed. Kate will need asset accounts for each different type of asset she invests in the business and liability accounts for any debts she incurs.

✔ Understand the types of owner's equity accounts. Only Owner's Capital will be needed when Kate begins the business. Other owner's equity accounts will be needed later.

Kate Browne has just rented space in a shopping mall. In this space, she will open a hair salon to be called "Hair It Is." A friend has advised Kate to set up a double-entry set of accounting records in which to record all of her business transactions.

Identify the balance sheet accounts that Kate will likely need to record the transactions needed to open her business. Indicate whether the normal balance of each account is a debit or a credit.

Solution

Kate would likely need the following accounts in which to record the transactions necessary to ready her hair salon for opening day:

Cash (debit balance)	If she borrows money: Notes Payable (credit balance)
Equipment (debit balance)	
Supplies (debit balance)	Owner's Capital (credit balance)
Accounts Payable (credit balance)	

Related exercise material: **BE2-1, BE2-2, E2-1, E2-2, E2-4, and DO IT! 2-1.**

LEARNING OBJECTIVE 2 Indicate how a journal is used in the recording process.

ETHICS NOTE

International Outsourcing Services, LLC was accused of submitting fraudulent store coupons to companies for reimbursement of as much as $250 million. Use of proper business documents reduces the likelihood of fraudulent activity.

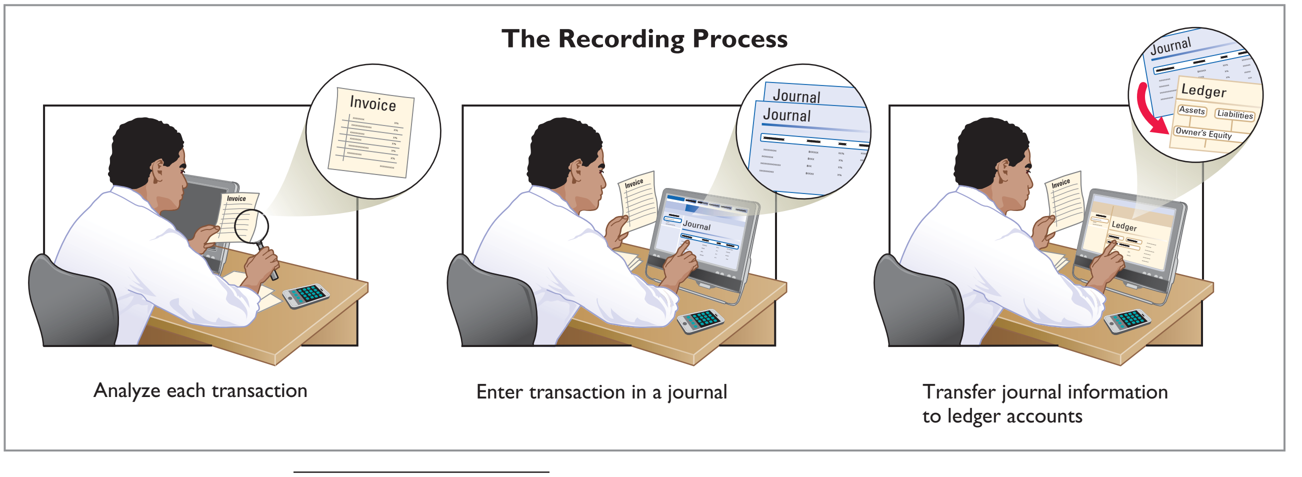
Steps in the Recording Process

Although it is possible to enter transaction information directly into the accounts without using a journal, few businesses do so. Practically every business uses three basic steps in the recording process:

1. Analyze each transaction for its effects on the accounts.
2. Enter the transaction information in a **journal**.
3. Transfer the journal information to the appropriate accounts in the **ledger**.[1]

The recording process begins with the transaction. **Business documents**, such as a sales receipt, a check, or a bill, provide evidence of the transaction. The company analyzes this evidence to determine the transaction's effects on specific accounts. The company then enters the transaction in the journal. Finally, it transfers the journal entry to the designated accounts in the ledger. Illustration 2-12 shows the recording process.

Illustration 2-12
The recording process



[1]We discuss here the manual recording process as we believe students should understand it first before learning and using a computerized system.

The steps in the recording process occur repeatedly. In Chapter 1, we illustrated the first step, the analysis of transactions, and will give further examples in this and later chapters. The other two steps in the recording process are explained in the next sections.

The Journal

Companies initially record transactions in chronological order (the order in which they occur). Thus, the **journal** is referred to as the book of original entry. For each transaction, the journal shows the debit and credit effects on specific accounts.

Companies may use various kinds of journals, but every company has the most basic form of journal, a **general journal**. Typically, a general journal has spaces for dates, account titles and explanations, references, and two amount columns. See the format of the journal in Illustration 2-13 (below). *Whenever we use the term "journal" in this textbook, we mean the general journal unless we specify otherwise.*

The journal makes several significant contributions to the recording process:

1. It discloses in one place the **complete effects of a transaction**.
2. It provides a **chronological record** of transactions.
3. It helps to **prevent or locate errors** because the debit and credit amounts for each entry can be easily compared.

JOURNALIZING

Entering transaction data in the journal is known as **journalizing**. Companies make separate journal entries for each transaction. A complete entry consists of (1) the date of the transaction, (2) the accounts and amounts to be debited and credited, and (3) a brief explanation of the transaction.

Illustration 2-13 shows the technique of journalizing, using the first two transactions of Softbyte. Recall that on September 1, Ray Neal invested $15,000 cash in the business, and Softbyte purchased computer equipment for $7,000 cash. The number J1 indicates that these two entries are recorded on the first page of the journal. Illustration 2-13 shows the standard form of journal entries for these two transactions. (The boxed numbers correspond to explanations in the list below the illustration.)

Illustration 2-13
Technique of journalizing

GENERAL JOURNAL — J1

Date	Account Titles and Explanation	Ref.	Debit	Credit
2017		5		
Sept. 1 2	Cash		15,000	
1 3	Owner's Capital			15,000
4	(Owner's investment of cash in business)			
1	Equipment		7,000	
	Cash			7,000
	(Purchase of equipment for cash)			

1 The date of the transaction is entered in the Date column.

2 The debit account title (that is, the account to be debited) is entered first at the extreme left margin of the column headed "Account Titles and Explanation," and the amount of the debit is recorded in the Debit column.

3 The credit account title (that is, the account to be credited) is indented and entered on the next line in the column headed "Account Titles and Explanation," and the amount of the credit is recorded in the Credit column.

4 A brief explanation of the transaction appears on the line below the credit account title. A space is left between journal entries. The blank space separates individual journal entries and makes the entire journal easier to read.

5 The column titled Ref. (which stands for Reference) is left blank when the journal entry is made. This column is used later when the journal entries are transferred to the ledger accounts.

It is important to use correct and specific account titles in journalizing. Erroneous account titles lead to incorrect financial statements. However, some flexibility exists initially in selecting account titles. The main criterion is that each title must appropriately describe the content of the account. Once a company chooses the specific title to use, it should record under that account title all later transactions involving the account.[2]

SIMPLE AND COMPOUND ENTRIES

Some entries involve only two accounts, one debit and one credit. (See, for example, the entries in Illustration 2-13.) This type of entry is called a **simple entry**. Some transactions, however, require more than two accounts in journalizing. An entry that requires three or more accounts is a **compound entry**. To illustrate, assume that on July 1, Butler Company purchases a delivery truck costing $14,000. It pays $8,000 cash now and agrees to pay the remaining $6,000 on account (to be paid later). The compound entry is as follows.

Illustration 2-14
Compound journal entry

GENERAL JOURNAL — J1

Date	Account Titles and Explanation	Ref.	Debit	Credit
2017				
July 1	Equipment		14,000	
	Cash			8,000
	Accounts Payable			6,000
	(Purchased truck for cash with balance on account)			

In a compound entry, the standard format requires that all debits be listed before the credits.

Accounting Across the Organization — Microsoft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Boosting Microsoft's Profits

Microsoft originally designed the Xbox 360 to have 256 megabytes of memory. But the design department said that amount of memory wouldn't support the best special effects. The purchasing department said that adding more memory would cost $30—which was 10% of the estimated selling price of $300. The marketing department, however, "determined that adding the memory would let Microsoft reduce marketing costs and attract more game developers, boosting royalty revenue. It would also extend the life of the console, generating more sales."

As a result of these changes, Xbox enjoyed great success. But, it does have competitors. Its newest video game console, Xbox One, is now in a battle with Sony's Playstation4 for market share. How to compete? First, Microsoft bundled the critically acclaimed *Titanfall* with its Xbox One. By including the game most Xbox One buyers were going to purchase anyway, Microsoft was making its console more attractive. In addition, retailers are also discounting the Xbox, which should get the momentum going for increased sales. What Microsoft is doing is making sure that Xbox One is the center of the home entertainment system in the long run, even if it suffers a bit of a hardware loss today.

Sources: Robert A. Guth, "New Xbox Aim for Microsoft: Profitability," *Wall Street Journal* (May 24, 2005), p. C1; and David Thier, "Will Microsoft Give the Xbox One a $50 Price Cut?," *www.Forbes.com* (March 26, 2014).

In what ways is this Microsoft division using accounting to assist in its effort to become more profitable? (Go to **WileyPLUS** for this answer and additional questions.)

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[2]*In homework problems, you should use specific account titles when they are given.* When account titles are not given, you may select account titles that identify the nature and content of each account. The account titles used in journalizing should not contain explanations such as Cash Paid or Cash Received.

DO IT! 2 Recording Business Activities

Kate Browne engaged in the following activities in establishing her salon, Hair It Is:

1. Opened a bank account in the name of Hair It Is and deposited $20,000 of her own money in this account as her initial investment.
2. Purchased equipment on account (to be paid in 30 days) for a total cost of $4,800.
3. Interviewed three people for the position of hair stylist.

Prepare the entries to record the transactions.

Solution

The three activities would be recorded as follows.

1. Cash	20,000	
Owner's Capital		20,000
(Owner's investment of cash in business)		
2. Equipment	4,800	
Accounts Payable		4,800
(Purchase of equipment on account)		
3. No entry because no transaction has occurred.		

Related exercise material: **BE2-3, BE2-4, BE2-5, BE2-6, E2-3, E2-5, E2-6, E2-7, and DO IT! 2-2.**

Action Plan

✔ Understand which activities need to be recorded and which do not. Any that affect assets, liabilities, or owner's equity should be recorded in a journal.

✔ Analyze the effects of transactions on asset, liability, and owner's equity accounts.

LEARNING OBJECTIVE 3

Explain how a ledger and posting help in the recording process.

The Ledger

The entire group of accounts maintained by a company is the **ledger**. The ledger provides the balance in each of the accounts as well as keeps track of changes in these balances.

Companies may use various kinds of ledgers, but every company has a general ledger. A **general ledger** contains all the asset, liability, and owner's equity accounts, as shown in Illustration 2-15 for J. Lind Company. *Whenever we use the term "ledger" in this textbook, we are referring to the general ledger unless we specify otherwise.*

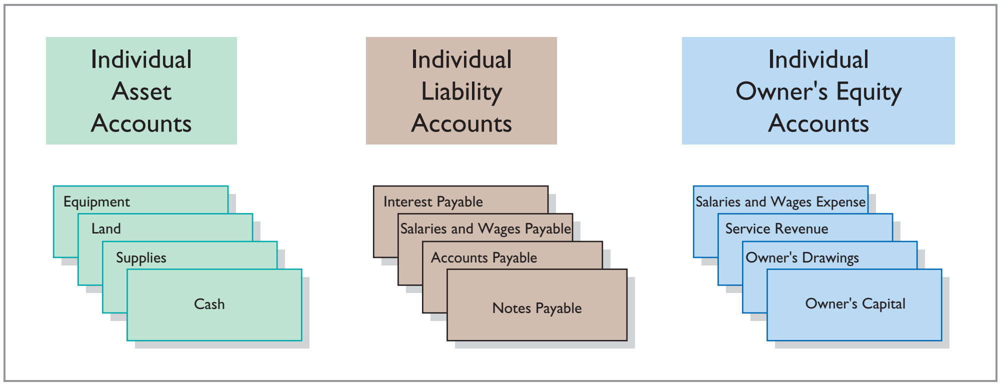


Illustration 2-15
The general ledger, which contains all of a company's accounts

Companies arrange the ledger in the sequence in which they present the accounts in the financial statements, beginning with the balance sheet accounts. First in order are the asset accounts, followed by liability accounts, owner's capital, owner's drawings, revenues, and expenses. Each account is numbered for easier identification.

The ledger provides the balance in each of the accounts. For example, the Cash account shows the amount of cash available to meet current obligations. The Accounts Receivable account shows amounts due from customers. Accounts Payable shows amounts owed to creditors.

Ethics Insight Credit Suisse Group

© Nuno Silva/iStockphoto

A Convenient Overstatement

Sometimes a company's investment securities suffer a permanent decline in value below their original cost. When this occurs, the company is supposed to reduce the recorded value of the securities on its balance sheet ("write-them down" in common financial lingo) and record a loss. It appears, however, that during the financial crisis of 2008, employees at some financial institutions chose to look the other way as the value of their investments skidded.

A number of Wall Street traders that worked for the investment bank Credit Suisse Group were charged with intentionally overstating the value of securities that had suffered declines of approximately $2.85 billion. One reason that they may have been reluctant to record the losses is out of fear that the company's shareholders and clients would panic if they saw the magnitude of the losses. However, personal self-interest might have been equally to blame—the bonuses of the traders were tied to the value of the investment securities.

Source: S. Pulliam, J. Eaglesham, and M. Siconolfi, "U.S. Plans Changes on Bond Fraud," *Wall Street Journal Online* (February 1, 2012).

What incentives might employees have had to overstate the value of these investment securities on the company's financial statements? (Go to **WileyPLUS** for this answer and additional questions.)

STANDARD FORM OF ACCOUNT

The simple T-account form used in accounting textbooks is often very useful for illustration purposes. However, in practice, the account forms used in ledgers are much more structured. Illustration 2-16 shows a typical form, using assumed data from a cash account.

Illustration 2-16
Three-column form of account

CASH						NO. 101
Date		**Explanation**	**Ref.**	**Debit**	**Credit**	**Balance**
2017						
June	1			25,000		25,000
	2				8,000	17,000
	3			4,200		21,200
	9			7,500		28,700
	17				11,700	17,000
	20				250	16,750
	30				7,300	9,450

This format is called the **three-column form of account**. It has three money columns—debit, credit, and balance. The balance in the account is determined after each transaction. Companies use the explanation space and reference columns to provide special information about the transaction.

Posting

Transferring journal entries to the ledger accounts is called **posting**. This phase of the recording process accumulates the effects of journalized transactions into the individual accounts. Posting involves the following steps.

1. In the **ledger**, in the appropriate columns of the account(s) debited, enter the date, journal page, and debit amount shown in the journal.
2. In the reference column of the **journal**, write the account number to which the debit amount was posted.
3. In the **ledger**, in the appropriate columns of the account(s) credited, enter the date, journal page, and credit amount shown in the journal.
4. In the reference column of the **journal**, write the account number to which the credit amount was posted.

Illustration 2-17 shows these four steps using Softbyte's first journal entry. The boxed numbers indicate the sequence of the steps.

Illustration 2-17
Posting a journal entry

GENERAL JOURNAL — J1

Date	Account Titles and Explanation	Ref.	Debit	Credit
2017 Sept.1	Cash	101	15,000	
	Owner's Capital	301		15,000
	(Owner's investment of cash in business)			

GENERAL LEDGER

Cash — No.101

Date	Explanation	Ref.	Debit	Credit	Balance
2017 Sept.1		J1	15,000		15,000

Owner's Capital — No.301

Date	Explanation	Ref.	Debit	Credit	Balance
2017 Sept.1		J1		15,000	15,000

Key: $\boxed{1}$ Post to debit account–date, journal page number, and amount.
$\boxed{2}$ Enter debit account number in journal reference column.
$\boxed{3}$ Post to credit account–date, journal page number, and amount.
$\boxed{4}$ Enter credit account number in journal reference column.

Posting should be performed in chronological order. That is, the company should post all the debits and credits of one journal entry before proceeding to the next journal entry. Postings should be made on a timely basis to ensure that the ledger is up-to-date.[3]

The reference column of a ledger account indicates the journal page from which the transaction was posted.[4] The explanation space of the ledger account is used infrequently because an explanation already appears in the journal.

[3]*In homework problems, you can journalize all transactions before posting any of the journal entries.*

[4]After the last entry has been posted, the accountant should scan the reference column **in the journal**, to confirm that all postings have been made.

CHART OF ACCOUNTS

The number and type of accounts differ for each company. The number of accounts depends on the amount of detail management desires. For example, the management of one company may want a single account for all types of utility expense. Another may keep separate expense accounts for each type of utility, such as gas, electricity, and water. Similarly, a small company like Softbyte will have fewer accounts than a corporate giant like **Dell**. Softbyte may be able to manage and report its activities in 20 to 30 accounts, while Dell may require thousands of accounts to keep track of its worldwide activities.

Most companies have a **chart of accounts**. This chart lists the accounts and the account numbers that identify their location in the ledger. The numbering system that identifies the accounts usually starts with the balance sheet accounts and follows with the income statement accounts.

Helpful Hint
On the textbook's front endpapers, you also will find an expanded chart of accounts.

In this and the next two chapters, we will be explaining the accounting for Pioneer Advertising (a service company). Accounts 101–199 indicate asset accounts; 200–299 indicate liabilities; 301–350 indicate owner's equity accounts; 400–499, revenues; 601–799, expenses; 800–899, other revenues; and 900–999, other expenses. Illustration 2-18 shows Pioneer's chart of accounts. Accounts listed in red are used in this chapter; accounts shown in black are explained in later chapters.

Illustration 2-18
Chart of accounts

PIONEER ADVERTISING
Chart of Accounts

Assets	Owner's Equity
101 Cash	301 Owner's Capital
112 Accounts Receivable	306 Owner's Drawings
126 Supplies	350 Income Summary
130 Prepaid Insurance	**Revenues**
157 Equipment	400 Service Revenue
158 Accumulated Depreciation—Equipment	
Liabilities	**Expenses**
200 Notes Payable	631 Supplies Expense
201 Accounts Payable	711 Depreciation Expense
209 Unearned Service Revenue	722 Insurance Expense
212 Salaries and Wages Payable	726 Salaries and Wages Expense
230 Interest Payable	729 Rent Expense
	732 Utilities Expense
	905 Interest Expense

You will notice that there are gaps in the numbering system of the chart of accounts for Pioneer. Companies leave gaps to permit the insertion of new accounts as needed during the life of the business.

The Recording Process Illustrated

Helpful Hint
The Accounting Cycle Tutorial in *WileyPLUS* provides an interactive presentation of the accounting cycle using these transaction analyses.

Illustrations 2-19 through 2-28 (pages 61–65) show the basic steps in the recording process, using the October transactions of Pioneer Advertising. Pioneer's accounting period is a month. In these illustrations, a basic analysis, an equation analysis, and a debit-credit analysis precede the journal entry and posting of each transaction. For simplicity, we use the T-account form to show the posting instead of the standard account form.

Study these transaction analyses carefully. **The purpose of transaction analysis is first to identify the type of account involved, and then to determine whether to make a debit or a credit to the account.** You should always perform this type of analysis before preparing a journal entry. Doing so will help you understand the journal entries discussed in this chapter as well as more complex journal entries in later chapters.

Illustration 2-19
Investment of cash by owner

Transaction
On October 1, C. R. Byrd invests $10,000 cash in an advertising company called Pioneer Advertising.

Basic Analysis
The asset Cash increases $10,000; owner's equity (specifically, Owner's Capital) increases $10,000.

Equation Analysis

Assets	=	Liabilities	+	Owner's Equity
Cash	=			Owner's Capital
+10,000				+10,000

Debit–Credit Analysis
Debits increase assets: debit Cash $10,000.
Credits increase owner's equity: credit Owner's Capital $10,000.

Journal Entry

Oct. 1	Cash	101	10,000	
	Owner's Capital	301		10,000
	(Owner's investment of cash in business)			

Posting

Cash			101
Oct. 1	10,000		

Owner's Capital			301
		Oct. 1	10,000

Cash Flows
+10,000

Helpful Hint
Follow these steps:
1. Determine what type of account is involved.
2. Determine what items increased or decreased and by how much.
3. Translate the increases and decreases into debits and credits.

Illustration 2-20
Purchase of office equipment

Transaction
On October 1, Pioneer purchases office equipment costing $5,000 by signing a 3-month, 12%, $5,000 note payable.

Basic Analysis
The asset Equipment increases $5,000; the liability Notes Payable increases $5,000.

Equation Analysis

Assets	=	Liabilities	+	Owner's Equity
Equipment	=	Notes Payable		
+5,000		+5,000		

Debit–Credit Analysis
Debits increase assets: debit Equipment $5,000.
Credits increase liabilities: credit Notes Payable $5,000.

Journal Entry

Oct. 1	Equipment	157	5,000	
	Notes Payable	200		5,000
	(Issued 3-month, 12% note for office equipment)			

Posting

Equipment			157
Oct. 1	5,000		

Notes Payable			200
		Oct. 1	5,000

Cash Flows
no effect

Illustration 2-21
Receipt of cash for future service

Transaction

On October 2, Pioneer receives a $1,200 cash advance from R. Knox, a client, for advertising services that are expected to be completed by December 31.

Basic Analysis

The asset Cash increases $1,200; the liability Unearned Service Revenue increases $1,200 because the service has not been performed yet. That is, when Pioneer receives an advance payment, it should record an unearned revenue (a liability) in order to recognize the obligation that exists. Note also that although most liabilities have the word "payable" in their title, unearned revenue is considered a liability because the liability is satisfied by providing a product or performing a service.

Equation Analysis

Assets	=	Liabilities	+	Owner's Equity
Cash	=	Unearned Service Revenue		
+1,200		+1,200		

Cash Flows
+1,200

Debit–Credit Analysis

Debits increase assets: debit Cash $1,200.
Credits increase liabilities: credit Unearned Service Revenue $1,200.

Journal Entry

Oct. 2	Cash	101	1,200	
	Unearned Service Revenue	209		1,200
	(Received cash from R. Knox for future service)			

Posting

Cash			101
Oct. 1	10,000		
2	1,200		

Unearned Service Revenue			209
		Oct. 2	1,200

Illustration 2-22
Payment of monthly rent

Transaction

On October 3, Pioneer pays office rent for October in cash, $900.

Basic Analysis

The expense account Rent Expense increases $900 because the payment pertains only to the current month; the asset Cash decreases $900.

Equation Analysis

Assets	=	Liabilities	+	Owner's Equity
Cash	=			Rent Expense
-900				-900

Cash Flows
−900

Debit–Credit Analysis

Debits increase expenses: debit Rent Expense $900.
Credits decrease assets: credit Cash $900.

Journal Entry

Oct. 3	Rent Expense	729	900	
	Cash	101		900
	(Paid October rent)			

Posting

Cash			101
Oct. 1	10,000	Oct. 3	900
2	1,200		

Rent Expense			729
Oct. 3	900		

Illustration 2-23
Payment for insurance

Transaction

On October 4, Pioneer pays $600 for a one-year insurance policy that will expire next year on September 30.

Basic Analysis

The asset Prepaid Insurance increases $600 because the payment extends to more than the current month; the asset Cash decreases $600. Payments of expenses that will benefit more than one accounting period are prepaid expenses or prepayments. When a company makes a payment, it debits an asset account in order to show the service or benefit that will be received in the future.

Equation Analysis

Assets			=	**Liabilities**	+	**Owner's Equity**
Cash	+	Prepaid Insurance				
-600		+600				

Cash Flows
−600

Debit–Credit Analysis

Debits increase assets: debit Prepaid Insurance $600.
Credits decrease assets: credit Cash $600.

Journal Entry

Oct. 4	Prepaid Insurance	130	600	
	Cash	101		600
	(Paid one-year policy; effective date October 1)			

Posting

Cash			101
Oct. 1	10,000	Oct. 3	900
2	1,200	4	600

Prepaid Insurance			130
Oct. 4	600		

Illustration 2-24
Purchase of supplies on credit

Transaction

On October 5, Pioneer purchases an estimated 3-month supply of advertising materials on account from Aero Supply for $2,500.

Basic Analysis

The asset Supplies increases $2,500; the liability Accounts Payable increases $2,500.

Equation Analysis

Assets	=	**Liabilities**	+	**Owner's Equity**
Supplies	=	Accounts Payable		
+2,500		+2,500		

Cash Flows
no effect

Debit–Credit Analysis

Debits increase assets: debit Supplies $2,500.
Credits increase liabilities: credit Accounts Payable $2,500.

Journal Entry

Oct. 5	Supplies	126	2,500	
	Accounts Payable	201		2,500
	(Purchased supplies on account from Aero Supply)			

Posting

Supplies			126
Oct. 5	2,500		

Accounts Payable			201
		Oct. 5	2,500

Illustration 2-25
Hiring of employees

Cash Flows
no effect

Event

On October 9, Pioneer hires four employees to begin work on October 15. Each employee is to receive a weekly salary of $500 for a 5-day work week, payable every 2 weeks—first payment made on October 26.

Basic Analysis

A business transaction has not occurred. There is only an agreement between the employer and the employees to enter into a business transaction beginning on October 15. Thus, a debit–credit analysis is not needed because there is no accounting entry (see October 26 transaction for first entry).

Illustration 2-26
Withdrawal of cash by owner

Cash Flows
−500

Transaction

On October 20, C. R. Byrd withdraws $500 cash for personal use.

Basic Analysis

The owner's equity account Owner's Drawings increases $500; the asset Cash decreases $500.

Equation Analysis

Assets	=	**Liabilities**	+	**Owner's Equity**
Cash	=			Owner's Drawings
-500				-500

Debit–Credit Analysis

Debits increase drawings: debit Owner's Drawings $500.
Credits decrease assets: credit Cash $500.

Journal Entry

Oct. 20	Owner's Drawings	306	500	
	Cash	101		500
	(Withdrew cash for personal use)			

Posting

Cash			101
Oct. 1	10,000	Oct. 3	900
2	1,200	4	600
		20	500

Owner's Drawings			306
Oct. 20	500		

Illustration 2-27
Payment of salaries

Transaction

On October 26, Pioneer owes employee salaries of $4,000 and pays them in cash (see October 9 event).

Basic Analysis

The expense account Salaries and Wages Expense increases $4,000; the asset Cash decreases $4,000.

Equation Analysis

Assets	=	Liabilities	+	Owner's Equity
Cash	=			Salaries and Wages Expense
-4,000				-4,000

Debit–Credit Analysis

Debits increase expenses: debit Salaries and Wages Expense $4,000.
Credits decrease assets: credit Cash $4,000.

Journal Entry

Oct. 26	Salaries and Wages Expense	726	4,000	
	Cash	101		4,000
	(Paid salaries to date)			

Posting

Cash 101

Oct. 1	10,000	Oct. 3	900
2	1,200	4	600
		20	500
		26	4,000

Salaries and Wages Expense 726

Oct. 26	4,000		

Cash Flows
−4,000

Illustration 2-28
Receipt of cash for services performed

Transaction

On October 31, Pioneer receives $10,000 in cash from Copa Company for advertising services performed in October.

Basic Analysis

The asset Cash increases $10,000; the revenue account Service Revenue increases $10,000.

Equation Analysis

Assets	=	Liabilities	+	Owner's Equity
Cash	=			Service Revenue
+10,000				+10,000

Debit–Credit Analysis

Debits increase assets: debit Cash $10,000.
Credits increase revenues: credit Service Revenue $10,000.

Journal Entry

Oct. 31	Cash	101	10,000	
	Service Revenue	400		10,000
	(Received cash for services performed)			

Posting

Cash 101

Oct. 1	10,000	Oct. 3	900
2	1,200	4	600
31	10,000	20	500
		26	4,000

Service Revenue 400

		Oct. 31	10,000

Cash Flows
+10,000

Summary Illustration of Journalizing and Posting

Illustration 2-29 shows the journal for Pioneer Advertising for October.

Illustration 2-29
General journal entries

GENERAL JOURNAL — PAGE J1

Date	Account Titles and Explanation	Ref.	Debit	Credit
2017				
Oct. 1	Cash	101	10,000	
	Owner's Capital	301		10,000
	(Owner's investment of cash in business)			
1	Equipment	157	5,000	
	Notes Payable	200		5,000
	(Issued 3-month, 12% note for office equipment)			
2	Cash	101	1,200	
	Unearned Service Revenue	209		1,200
	(Received cash from R. Knox for future service)			
3	Rent Expense	729	900	
	Cash	101		900
	(Paid October rent)			
4	Prepaid Insurance	130	600	
	Cash	101		600
	(Paid one-year policy; effective date October 1)			
5	Supplies	126	2,500	
	Accounts Payable	201		2,500
	(Purchased supplies on account from Aero Supply)			
20	Owner's Drawings	306	500	
	Cash	101		500
	(Withdrew cash for personal use)			
26	Salaries and Wages Expense	726	4,000	
	Cash	101		4,000
	(Paid salaries to date)			
31	Cash	101	10,000	
	Service Revenue	400		10,000
	(Received cash for services performed)			

Illustration 2-30 shows the ledger, with all balances in red.

Illustration 2-30
General ledger

GENERAL LEDGER

Cash — No. 101

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1	10,000		10,000
2		J1	1,200		11,200
3		J1		900	10,300
4		J1		600	9,700
20		J1		500	9,200
26		J1		4,000	5,200
31		J1	10,000		**15,200**

Supplies — No. 126

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 5		J1	2,500		**2,500**

Prepaid Insurance — No. 130

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 4		J1	600		**600**

Equipment — No. 157

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1	5,000		**5,000**

Notes Payable — No. 200

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1		5,000	**5,000**

Accounts Payable — No. 201

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 5		J1		2,500	**2,500**

Unearned Service Revenue — No. 209

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 2		J1		1,200	**1,200**

Owner's Capital — No. 301

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1		10,000	**10,000**

Owner's Drawings — No. 306

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 20		J1	500		**500**

Service Revenue — No. 400

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31		J1		10,000	**10,000**

Salaries and Wages Expense — No. 726

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 26		J1	4,000		**4,000**

Rent Expense — No. 729

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 3		J1	900		**900**

DO IT! 3 Posting

Kate Browne recorded the following transactions in a general journal during the month of March.

Mar. 4	Cash	2,280	
	Service Revenue		2,280
15	Salaries and Wages Expense	400	
	Cash		400
19	Utilities Expense	92	
	Cash		92

Post these entries to the Cash account of the general ledger to determine its ending balance. The beginning balance of Cash on March 1 was $600.

Solution

Cash

3/1 Bal.	600	3/15	400
3/4	2,280	3/19	92
3/31 Bal.	2,388		

Related exercise material: **BE2-7, BE2-8, E2-8, E2-12, and DO IT! 2-3.**

Action Plan

✔ Recall that posting involves transferring the journalized debits and credits to specific accounts in the ledger.

✔ Determine the ending balance by netting the total debits and credits.

LEARNING OBJECTIVE 4

Prepare a trial balance.

A **trial balance** is a list of accounts and their balances at a given time. Customarily, companies prepare a trial balance at the end of an accounting period. They list accounts in the order in which they appear in the ledger. Debit balances appear in the left column and credit balances in the right column.

The trial balance proves the mathematical equality of debits and credits after posting. Under the double-entry system, this equality occurs when the sum of the debit account balances equals the sum of the credit account balances. **A trial balance may also uncover errors in journalizing and posting.** For example, a trial balance may well have detected the error at MF Global discussed in the Feature Story. **In addition, a trial balance is useful in the preparation of financial statements**, as we will explain in the next two chapters.

The steps for preparing a trial balance are:

1. List the account titles and their balances in the appropriate debit or credit column.
2. Total the debit and credit columns.
3. Prove the equality of the two columns.

Illustration 2-31 shows the trial balance prepared from Pioneer Advertising's ledger. Note that the total debits equal the total credits.

Illustration 2-31
A trial balance

Helpful Hint
Note that the order of presentation in the trial balance is:
Assets
Liabilities
Owner's equity
Revenues
Expenses

PIONEER ADVERTISING
Trial Balance
October 31, 2017

	Debit	Credit
Cash	$ 15,200	
Supplies	2,500	
Prepaid Insurance	600	
Equipment	5,000	
Notes Payable		$ 5,000
Accounts Payable		2,500
Unearned Service Revenue		1,200
Owner's Capital		10,000
Owner's Drawings	500	
Service Revenue		10,000
Salaries and Wages Expense	4,000	
Rent Expense	900	
	$28,700	$28,700

A trial balance is a necessary checkpoint for uncovering certain types of errors. For example, if only the debit portion of a journal entry has been posted, the trial balance would bring this error to light.

Limitations of a Trial Balance

A trial balance does not guarantee freedom from recording errors, however. Numerous errors may exist even though the totals of the trial balance columns agree. For example, the trial balance may balance even when:

1. A transaction is not journalized.
2. A correct journal entry is not posted.
3. A journal entry is posted twice.

ETHICS NOTE

An *error* is the result of an unintentional mistake; it is neither ethical nor unethical. An *irregularity* is an intentional misstatement, which *is* viewed as unethical.

4. Incorrect accounts are used in journalizing or posting.
5. Offsetting errors are made in recording the amount of a transaction.

As long as equal debits and credits are posted, even to the wrong account or in the wrong amount, the total debits will equal the total credits. **The trial balance does not prove that the company has recorded all transactions or that the ledger is correct.**

Locating Errors

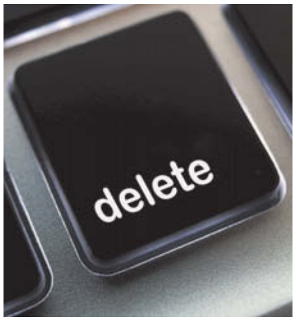
Errors in a trial balance generally result from mathematical mistakes, incorrect postings, or simply transcribing data incorrectly. What do you do if you are faced with a trial balance that does not balance? First, determine the amount of the difference between the two columns of the trial balance. After this amount is known, the following steps are often helpful:

1. If the error is $1, $10, $100, or $1,000, re-add the trial balance columns and recompute the account balances.
2. If the error is divisible by 2, scan the trial balance to see whether a balance equal to half the error has been entered in the wrong column.
3. If the error is divisible by 9, retrace the account balances on the trial balance to see whether they are incorrectly copied from the ledger. For example, if a balance was $12 and it was listed as $21, a $9 error has been made. Reversing the order of numbers is called a **transposition error**.
4. If the error is not divisible by 2 or 9, scan the ledger to see whether an account balance in the amount of the error has been omitted from the trial balance, and scan the journal to see whether a posting of that amount has been omitted.

Dollar Signs and Underlining

Note that dollar signs do not appear in journals or ledgers. Dollar signs are typically used only in the trial balance and the financial statements. Generally, a dollar sign is shown only for the first item in the column and for the total of that column. A single line (a totaling rule) is placed under the column of figures to be added or subtracted. Total amounts are double-underlined to indicate they are final sums.

Investor Insight Fannie Mae



Enviromatic/iStockphoto

Why Accuracy Matters

While most companies record transactions very carefully, the reality is that mistakes still happen. For example, bank regulators fined Bank One Corporation (now Chase) $1.8 million because they felt that the unreliability of the bank's accounting system caused it to violate regulatory requirements.

Also, in recent years Fannie Mae, the government-chartered mortgage association, announced a series of large accounting errors. These announcements caused alarm among investors, regulators, and politicians because they fear that the errors may suggest larger, undetected problems. This is important because the home-mortgage market depends on Fannie Mae to buy hundreds of billions of dollars of mortgages each year from banks, thus enabling the banks to issue new mortgages.

Finally, before a major overhaul of its accounting system, the financial records of Waste Management Inc. were in such disarray that of the company's 57,000 employees, 10,000 were receiving pay slips that were in error.

The Sarbanes-Oxley Act was created to minimize the occurrence of errors like these by increasing every employee's responsibility for accurate financial reporting.

In order for these companies to prepare and issue financial statements, their accounting equations (debits and credits) must have been in balance at year-end. How could these errors or misstatements have occurred? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 4 Trial Balance

The following accounts come from the ledger of SnowGo Company at December 31, 2017.

157	Equipment	$88,000	301	Owner's Capital	$20,000
306	Owner's Drawings	8,000	212	Salaries and Wages Payable	2,000
201	Accounts Payable	22,000	200	Notes Payable (due in 3 months)	19,000
726	Salaries and Wages Expense	42,000	732	Utilities Expense	3,000
112	Accounts Receivable	4,000	130	Prepaid Insurance	6,000
400	Service Revenue	95,000	101	Cash	7,000

Prepare a trial balance in good form.

Action Plan

✔ Determine normal balances and list accounts in the order they appear in the ledger.

✔ Accounts with debit balances appear in the left column, and those with credit balances in the right column.

✔ Total the debit and credit columns to prove equality.

Solution

SNOWGO COMPANY
Trial Balance
December 31, 2017

	Debit	Credit
Cash	$ 7,000	
Accounts Receivable	4,000	
Prepaid Insurance	6,000	
Equipment	88,000	
Notes Payable		$ 19,000
Accounts Payable		22,000
Salaries and Wages Payable		2,000
Owner's Capital		20,000
Owner's Drawings	8,000	
Service Revenue		95,000
Utilities Expense	3,000	
Salaries and Wages Expense	42,000	
	$158,000	$158,000

Related exercise material: **BE2-9, BE2-10, E2-9, E2-10, E2-11, E2-13, E2-14, and DO IT! 2-4.**

REVIEW AND PRACTICE

LEARNING OBJECTIVES REVIEW

1 **Describe how accounts, debits, and credits are used to record business transactions.** An account is a record of increases and decreases in specific asset, liability, and owner's equity items. The terms debit and credit are synonymous with left and right. Assets, drawings, and expenses are increased by debits and decreased by credits. Liabilities, owner's capital, and revenues are increased by credits and decreased by debits.

2 **Indicate how a journal is used in the recording process.** The basic steps in the recording process are (a) analyze each transaction for its effects on the accounts, (b) enter the transaction information in a journal, and (c) transfer the journal information to the appropriate accounts in the ledger.

The initial accounting record of a transaction is entered in a journal before the data are entered in the accounts. A journal (a) discloses in one place the complete effects of a transaction, (b) provides a chronological record of transactions, and (c) prevents or locates errors because the debit and credit amounts for each entry can be easily compared.

3 **Explain how a ledger and posting help in the recording process.** The ledger is the entire group of accounts maintained by a company. The ledger provides the

balance in each of the accounts as well as keeps track of changes in these balances. Posting is the transfer of journal entries to the ledger accounts. This phase of the recording process accumulates the effects of journalized transactions in the individual accounts.

4 **Prepare a trial balance.** A trial balance is a list of accounts and their balances at a given time. Its primary purpose is to prove the equality of debits and credits after posting. A trial balance also uncovers errors in journalizing and posting and is useful in preparing financial statements.

GLOSSARY REVIEW

Account A record of increases and decreases in specific asset, liability, or owner's equity items. (p. 50).

Chart of accounts A list of accounts and the account numbers that identify their location in the ledger. (p. 60).

Compound entry A journal entry that involves three or more accounts. (p. 56).

Credit The right side of an account. (p. 50).

Debit The left side of an account. (p. 50).

Double-entry system A system that records in appropriate accounts the dual effect of each transaction. (p. 51).

General journal The most basic form of journal. (p. 55).

General ledger A ledger that contains all asset, liability, and owner's equity accounts. (p. 57).

Journal An accounting record in which transactions are initially recorded in chronological order. (p. 55).

Journalizing The entering of transaction data in the journal. (p. 55).

Ledger The entire group of accounts maintained by a company. (p. 57).

Normal balance An account balance on the side where an increase in the account is recorded. (p. 51).

Posting The procedure of transferring journal entries to the ledger accounts. (p. 59).

Simple entry A journal entry that involves only two accounts. (p. 56).

T-account The basic form of an account. (p. 50).

Three-column form of account A form with columns for debit, credit, and balance amounts in an account. (p. 58).

Trial balance A list of accounts and their balances at a given time. (p. 68).

PRACTICE MULTIPLE-CHOICE QUESTIONS

(LO 1) **1.** Which of the following statements about an account is **true**?
(a) The right side of an account is the debit or increase side.
(b) An account is an individual accounting record of increases and decreases in specific asset, liability, and owner's equity items.
(c) There are separate accounts for specific assets and liabilities but only one account for owner's equity items.
(d) The left side of an account is the credit or decrease side.

(LO 1) **2.** Debits:
(a) increase both assets and liabilities.
(b) decrease both assets and liabilities.
(c) increase assets and decrease liabilities.
(d) decrease assets and increase liabilities.

(LO 1) **3.** A revenue account:
(a) is increased by debits.
(b) is decreased by credits.
(c) has a normal balance of a debit.
(d) is increased by credits.

(LO 1) **4.** Accounts that normally have debit balances are:
(a) assets, expenses, and revenues.
(b) assets, expenses, and owner's capital.
(c) assets, liabilities, and owner's drawings.
(d) assets, owner's drawings, and expenses.

5. The expanded accounting equation is: (LO 1)
(a) Assets + Liabilities = Owner's Capital + Owner's Drawings + Revenues + Expenses.
(b) Assets = Liabilities + Owner's Capital + Owner's Drawings + Revenues − Expenses.
(c) Assets = Liabilities − Owner's Capital − Owner's Drawings − Revenues − Expenses.
(d) Assets = Liabilities + Owner's Capital − Owner's Drawings + Revenues − Expenses.

6. Which of the following is **not** part of the recording process? (LO 2)
(a) Analyzing transactions.
(b) Preparing a trial balance.
(c) Entering transactions in a journal.
(d) Posting transactions.

7. Which of the following statements about a journal is **false**? (LO 2)
(a) It is not a book of original entry.
(b) It provides a chronological record of transactions.
(c) It helps to locate errors because the debit and credit amounts for each entry can be readily compared.
(d) It discloses in one place the complete effect of a transaction.

8. The purchase of supplies on account should result in: (LO 2)
(a) a debit to Supplies Expense and a credit to Cash.
(b) a debit to Supplies Expense and a credit to Accounts Payable.

(c) a debit to Supplies and a credit to Accounts Payable.
(d) a debit to Supplies and a credit to Accounts Receivable.

(LO 3) **9.** The order of the accounts in the ledger is:
(a) assets, revenues, expenses, liabilities, owner's capital, owner's drawings.
(b) assets, liabilities, owner's capital, owner's drawings, revenues, expenses.
(c) owner's capital, assets, revenues, expenses, liabilities, owner's drawings.
(d) revenues, assets, expenses, liabilities, owner's capital, owner's drawings.

(LO 3) **10.** A ledger:
(a) contains only asset and liability accounts.
(b) should show accounts in alphabetical order.
(c) is a collection of the entire group of accounts maintained by a company.
(d) is a book of original entry.

(LO 3) **11.** Posting:
(a) normally occurs before journalizing.
(b) transfers ledger transaction data to the journal.
(c) is an optional step in the recording process.
(d) transfers journal entries to ledger accounts.

(LO 3) **12.** Before posting a payment of $5,000, the Accounts Payable of Senator Company had a normal balance of $16,000. The balance after posting this transaction was:
(a) $21,000. (c) $11,000.
(b) $5,000. (d) Cannot be determined.

13. A trial balance: (LO 4)
(a) is a list of accounts with their balances at a given time.
(b) proves the journalized transactions are correct.
(c) will not balance if a correct journal entry is posted twice.
(d) proves that all transactions have been recorded.

14. A trial balance will not balance if: (LO 4)
(a) a correct journal entry is posted twice.
(b) the purchase of supplies on account is debited to Supplies and credited to Cash.
(c) a $100 cash drawing by the owner is debited to Owner's Drawings for $1,000 and credited to Cash for $100.
(d) a $450 payment on account is debited to Accounts Payable for $45 and credited to Cash for $45.

15. The trial balance of Jeong Company had accounts with the following normal balances: Cash $5,000, Service Revenue $85,000, Salaries and Wages Payable $4,000, Salaries and Wages Expense $40,000, Rent Expense $10,000, Owner's Capital $42,000, Owner's Drawings $15,000, and Equipment $61,000. In preparing a trial balance, the total in the debit column is: (LO 4)
(a) $131,000. (c) $91,000.
(b) $216,000. (d) $116,000.

Solutions

1. (b) An account is an individual accounting record of increases and decreases in specific asset, liability, and owner's equity items. The other choices are incorrect because (a) the right side of the account is the credit side, not the debit side, and can be the increase or the decrease side, depending on the specific classification account; (c) there are also separate accounts for different owner's equity items; and (d) the left side of the account is the debit side, not the credit side, and can be either the decrease or the increase side, depending on the specific classification account.

2. (c) Debits increase assets but they decrease liabilities. The other choices are incorrect because debits (a) decrease, not increase, liabilities; (b) increase, not decrease, assets; and (d) increase, not decrease, assets and decrease, not increase, liabilities.

3. (d) A revenue account is increased by credits. The other choices are incorrect because a revenue account (a) is increased by credits, not debits; (b) is decreased by debits, not credits; and (c) has a normal balance of a credit, not a debit.

4. (d) Assets, owner's drawings, and expenses all have normal debit balances. The other choices are incorrect because (a) revenues have normal credit balances, (b) owner's capital has a normal credit balance, and (c) liabilities have normal credit balances.

5. (d) The expanded accounting equation is Assets = Liabilities + Owner's Capital − Owner's Drawings + Revenue − Expenses. The other choices are incorrect because (a) both Owner's Drawings and Expenses must be subtracted, not added, and Liabilities should be added to the right side of equation, not to the left side; (b) Owner's Drawings must be subtracted, not added; and (c) Owner's Capital and Revenues must be added, not subtracted.

6. (b) Preparing the trial balance is not part of the recording process. Choices (a) analyzing transactions, (b) preparing a trial balance, and (c) entering transactions in a journal are all part of the recording process.

7. (a) The journal is a book of original entry. The other choices are all true statements.

8. (c) The purchase of supplies on account results in a debit to Supplies and a credit to Accounts Payable. The other choices are incorrect because the purchase of supplies on account results in (a) a debit to Supplies, not Supplies Expense, and a credit to Accounts Payable, not Cash; (b) a debit to Supplies, not Supplies Expense; and (d) a credit to Accounts Payable, not Accounts Receivable.

9. (b) The correct order of the accounts in the ledger is assets, liabilities, owner's capital, owner's drawing, revenues, expenses. The other choices are incorrect because they do not reflect this order. The order of the accounts in the ledger is (1) balance sheet accounts: assets, liabilities, and owner's equity accounts (owner's capital and owner's drawings); and then (2) income statement accounts: revenues and expenses.

10. (c) A ledger is a collection of all the accounts maintained by a company. The other choices are incorrect because a ledger (a) contains all account types—assets, liabilities, owner's equity, revenue, and expense accounts—not just assets and liability accounts; (b) usually shows accounts in account number order, not alphabetical order; and (d) is not a book of original entry because entries made in the ledger come from the journals (the books of original entry).

11. (d) Posting transfers journal entries to ledger accounts. The other choices are incorrect because posting (a) occurs after journalizing, (b) transfers journal transaction data to the ledger; and (c) is not an optional step in the recording process.

12. (c) The balance is $11,000 ($16,000 normal balance − $5,000 payment), not (a) $21,000 or (b) $5,000. Choice (d) is incorrect because the balance can be determined.

13. (a) A trial balance is a list of accounts with their balances at a given time. The other choices are incorrect because (b) the trial balance does not prove that journalized transactions are correct; (c) if a journal entry is posted twice, the trial balance will still balance; and (d) the trial balance does not prove that all transactions have been recorded.

14. (c) The trial balance will not balance in this case because the debit of $1,000 to Owner's Drawings is not equal to the credit of $100 to Cash. The other choices are incorrect because (a) if a correct journal entry is posted twice, the trial balance will still balance; (b) if the purchase of supplies on account is debited to Supplies and credited to Cash, Cash and Accounts Payable will be understated but the trial balance will still balance; and (d) since the debit and credit amounts are the same, the trial balance will still balance but both Accounts Payable and Cash will be overstated.

15. (a) The total debit column = $5,000 (Cash) + $40,000 (Salaries and Wages Expense) + $10,000 (Rent Expense) + $15,000 (Owner's Drawings) + $61,000 (Equipment) = $131,000. The normal balance for Assets, Expenses, and Owner's Drawings is a debit. The other choices are incorrect because (b) revenue of $85,000 should not be included in the total of $216,000 and its normal balance is a credit; (c) the total of $91,000 is missing the Salaries and Wages Expense of $40,000, which has a normal balance of a debit; and (d) the total of $116,000 is missing the Owner's Drawings of $15,000, which has a normal balance of a debit.

PRACTICE EXERCISES

1. Presented below is information related to Hammond Real Estate Agency.

Analyze transactions and determine their effect on accounts.

(LO 1)

Oct. 1 Lia Berge begins business as a real estate agent with a cash investment of $30,000
2 Paid rent, $700, on office space.
3 Purchases office equipment for $2,800, on account.
6 Sells a house and lot for Hal Smith; bills Hal Smith $4,400 for realty services performed.
27 Pays $1,100 on the balance related to the transaction of October 3.
30 Receives bill for October utilities, $130 (not paid at this time).

Instructions

Journalize the transactions. (You may omit explanations)

Solution

1. **GENERAL JOURNAL**

Date	Account Titles and Explanation	Ref.	Debit	Credit
Oct. 1	Cash		30,000	
	Owner's Capital			30,000
2	Rent Expense		700	
	Cash			700
3	Equipment		2,800	
	Accounts Payable			2,800
6	Accounts Receivable		4,400	
	Service Revenue			4,400
27	Accounts Payable		1,100	
	Cash			1,100
30	Utilities Expense		130	
	Accounts Payable			130

2. The T-accounts below summarize the ledger of Depot Company at the end of the first month of operations.

Journalize transactions from account data and prepare a trial balance.

(LO 2, 4)

Cash No. 101

4/1	16,000	4/15	700
4/12	1,200	4/25	1,600
4/29	900		
4/30	1,600		

Unearned Service Revenue No. 209

		4/30	1,600

Accounts Receivable	No. 112		
4/7	2,900	4/29	900

Supplies	No. 126		
4/4	1,900		

Accounts Payable	No. 201		
4/25	1,600	4/4	1,900

Owner's Capital	No. 301		
		4/1	16,000

Service Revenue	No. 400		
		4/7	2,900
		4/12	1,200

Salaries and Wages Expense	No. 726		
4/15	700		

Instructions

(a) Prepare the complete general journal (including explanations) from which the postings to Cash were made.

(b) Prepare a trial balance at April 30, 2017.

Solution

2. (a)

GENERAL JOURNAL

Date	Account Titles and Explanation	Ref.	Debit	Credit
Apr. 1	Cash		16,000	
	Owner's Capital			16,000
	(Owner's investment of cash in business)			
12	Cash		1,200	
	Service Revenue			1,200
	(Received cash for services performed)			
15	Salaries and Wages Expense		700	
	Cash			700
	(Paid salaries to date)			
25	Accounts payable		1,600	
	Cash			1,600
	(Paid creditors on account)			
29	Cash		900	
	Accounts Receivable			900
	(Received cash in payment of account)			
30	Cash		1,600	
	Unearned Service Revenue			1,600
	(Received cash for future services)			

(b)

DEPOT COMPANY
Trial Balance
April 30, 2017

	Debit	Credit
Cash	$17,400	
Accounts Receivable	2,000	
Supplies	1,900	
Accounts Payable		$ 300
Unearned Service Revenue		1,600
Owner's Capital		16,000
Service Revenue		4,100
Salaries and Wages Expense	700	
	$22,000	$22,000

PRACTICE PROBLEM

Journalize transactions, post, and prepare a trial balance.

(LO 1, 2, 3, 4)

Bob Sample opened the Campus Laundromat on September 1, 2017. During the first month of operations, the following transactions occurred.

Sept.	1	Bob invested $20,000 cash in the business.
	2	The company paid $1,000 cash for store rent for September.
	3	Purchased washers and dryers for $25,000, paying $10,000 in cash and signing a $15,000, 6-month, 12% note payable.
	4	Paid $1,200 for a one-year accident insurance policy.
	10	Received a bill from the *Daily News* for online advertising of the opening of the laundromat $200.
	20	Bob withdrew $700 cash for personal use.
	30	The company determined that cash receipts for laundry services for the month were $6,200.

The chart of accounts for the company is the same as that for Pioneer Advertising plus No. 610 Advertising Expense.

Instructions

(a) Journalize the September transactions. (Use J1 for the journal page number.)

(b) Open ledger accounts and post the September transactions.

(c) Prepare a trial balance at September 30, 2017.

Solution

(a) **GENERAL JOURNAL** **J1**

Date	Account Titles and Explanation	Ref.	Debit	Credit
2017				
Sept. 1	Cash	101	20,000	
	Owner's Capital	301		20,000
	(Owner's investment of cash in business)			
2	Rent Expense	729	1,000	
	Cash	101		1,000
	(Paid September rent)			
3	Equipment	157	25,000	
	Cash	101		10,000
	Notes Payable	200		15,000
	(Purchased laundry equipment for cash and 6-month, 12% note payable)			
4	Prepaid Insurance	130	1,200	
	Cash	101		1,200
	(Paid one-year insurance policy)			
10	Advertising Expense	610	200	
	Accounts Payable	201		200
	(Received bill from *Daily News* for advertising)			
20	Owner's Drawings	306	700	
	Cash	101		700
	(Withdrew cash for personal use)			
30	Cash	101	6,200	
	Service Revenue	400		6,200
	(Received cash for services performed)			

(b)

GENERAL LEDGER

Cash No. 101

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 1		J1	20,000		20,000
2		J1		1,000	19,000
3		J1		10,000	9,000
4		J1		1,200	7,800
20		J1		700	7,100
30		J1	6,200		13,300

Prepaid Insurance No. 130

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 4		J1	1,200		1,200

Equipment No. 157

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 3		J1	25,000		25,000

Notes Payable No. 200

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 3		J1		15,000	15,000

Accounts Payable No. 201

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 10		J1		200	200

Owner's Capital No. 301

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 1		J1		20,000	20,000

Owner's Drawings No. 306

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 20		J1	700		700

Service Revenue No. 400

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 30		J1		6,200	6,200

Advertising Expense No. 610

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 10		J1	200		200

Rent Expense No. 729

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Sept. 2		J1	1,000		1,000

(c)

CAMPUS LAUNDROMAT
Trial Balance
September 30, 2017

	Debit	Credit
Cash	$13,300	
Prepaid Insurance	1,200	
Equipment	25,000	
Notes Payable		$15,000
Accounts Payable		200
Owner's Capital		20,000
Owner's Drawings	700	
Service Revenue		6,200
Advertising Expense	200	
Rent Expense	1,000	
	$41,400	$41,400

QUESTIONS

1. Describe the parts of a T-account.
2. "The terms debit and credit mean increase and decrease, respectively." Do you agree? Explain.
3. Heath Precourt, a fellow student, contends that the double-entry system means each transaction must be recorded twice. Is Heath correct? Explain.

4. Erica Mendez, a beginning accounting student, believes debit balances are favorable and credit balances are unfavorable. Is Erica correct? Discuss.

5. State the rules of debit and credit as applied to (a) asset accounts, (b) liability accounts, and (c) the owner's equity accounts (revenue, expenses, owner's drawings, and owner's capital).

6. What is the normal balance for each of the following accounts? (a) Accounts Receivable. (b) Cash. (c) Owner's Drawings. (d) Accounts Payable. (e) Service Revenue. (f) Salaries and Wages Expense. (g) Owner's Capital.

7. Indicate whether each of the following accounts is an asset, a liability, or an owner's equity account and whether it has a normal debit or credit balance: (a) Accounts Receivable, (b) Accounts Payable, (c) Equipment, (d) Owner's Drawings, and (e) Supplies.

8. For the following transactions, indicate the account debited and the account credited.
- (a) Supplies are purchased on account.
- (b) Cash is received on signing a note payable.
- (c) Employees are paid salaries in cash.

9. Indicate whether the following accounts generally will have (a) debit entries only, (b) credit entries only, or (c) both debit and credit entries.
- (1) Cash.
- (2) Accounts Receivable.
- (3) Owner's Drawings.
- (4) Accounts Payable.
- (5) Salaries and Wages Expense.
- (6) Service Revenue.

10. What are the basic steps in the recording process?

11. What are the advantages of using a journal in the recording process?

12. (a) When entering a transaction in the journal, should the debit or credit be written first?
(b) Which should be indented, the debit or credit?

13. Describe a compound entry, and provide an example.

14. (a) Should business transaction debits and credits be recorded directly in the ledger accounts?
(b) What are the advantages of first recording transactions in the journal and then posting to the ledger?

15. The account number is entered as the last step in posting the amounts from the journal to the ledger. What is the advantage of this step?

16. Journalize the following business transactions.
- (a) Qing Wei invests $9,000 cash in the business.
- (b) Insurance of $800 is paid for the year.
- (c) Supplies of $2,000 are purchased on account.
- (d) Cash of $7,500 is received for services performed.

17. (a) What is a ledger?
(b) What is a chart of accounts and why is it important?

18. What is a trial balance and what are its purposes?

19. Victor Grimm is confused about how accounting information flows through the accounting system. He believes the flow of information is as follows.
- (a) Debits and credits posted to the ledger.
- (b) Business transaction occurs.
- (c) Information entered in the journal.
- (d) Financial statements are prepared.
- (e) Trial balance is prepared.

Is Victor correct? If not, indicate to Victor the proper flow of the information.

20. Two students are discussing the use of a trial balance. They wonder whether the following errors, each considered separately, would prevent the trial balance from balancing.
- (a) The bookkeeper debited Cash for $600 and credited Salaries and Wages Expense for $600 for payment of wages.
- (b) Cash collected on account was debited to Cash for $900 and Service Revenue was credited for $90.

What would you tell them?

21. What are the normal balances for Apple's Cash, Accounts Payable, and Interest Expense accounts?

BRIEF EXERCISES

Indicate debit and credit effects and normal balance.
(LO 1)

BE2-1 For each of the following accounts, indicate the effects of (a) a debit and (b) a credit on the accounts and (c) the normal balance of the account.

1. Accounts Payable.
2. Advertising Expense.
3. Service Revenue.
4. Accounts Receivable.
5. Owner's Capital.
6. Owner's Drawings.

Identify accounts to be debited and credited.
(LO 1)

BE2-2 Transactions for the Tage Oslo Company for the month of June are presented below. Identify the accounts to be debited and credited for each transaction.

June	1	Tage Oslo invests $5,000 cash in a small welding business of which he is the sole proprietor.
	2	Purchases equipment on account for $2,400.
	3	$800 cash is paid to landlord for June rent.
	12	Sends a bill to J. Kronsnoble for $300 for welding work performed on account.

Journalize transactions.
(LO 2)

BE2-3 Using the data in BE2-2, journalize the transactions. (You may omit explanations.)

Identify and explain steps in recording process.
(LO 2)

BE2-4 Jen Shumway, a fellow student, is unclear about the basic steps in the recording process. Identify and briefly explain the steps in the order in which they occur.

Indicate basic and debit-credit analysis.
(LO 2)

BE2-5 M. Gonzales has the following transactions during August of the current year. Indicate (a) the effect on the accounting equation and (b) the debit-credit analysis illustrated on pages 61–65 of the textbook.

Aug.	1	Opens an office as a financial advisor, investing $8,000 in cash.
	4	Pays insurance in advance for 6 months, $1,800 cash.
	16	Receives $3,600 from clients for services performed.
	27	Pays secretary $1,000 salary.

Journalize transactions.
(LO 2)

BE2-6 Using the data in BE2-5, journalize the transactions. (You may omit explanations.)

Post journal entries to T-accounts.
(LO 3)

BE2-7 Selected transactions for the Brook Wang Company are presented in journal form below. Post the transactions to T-accounts. Make one T-account for each item and determine each account's ending balance.

J1

Date	Account Titles and Explanation	Ref.	Debit	Credit
May 5	Accounts Receivable		4,400	
	Service Revenue			4,400
	(Billed for services performed)			
12	Cash		2,400	
	Accounts Receivable			2,400
	(Received cash in payment of account)			
15	Cash		3,000	
	Service Revenue			3,000
	(Received cash for services performed)			

Post journal entries to standard form of account.
(LO 3)

BE2-8 Selected journal entries for the Brook Wang Company are presented in BE2-7. Post the transactions using the standard form of account.

Prepare a trial balance.
(LO 4)

BE2-9 From the ledger balances given below, prepare a trial balance for the Amaro Company at June 30, 2017. List the accounts in the order shown on page 58 of the textbook. All account balances are normal.

Accounts Payable $8,100, Cash $5,800, Owner's Capital $15,000, Owner's Drawings $1,200, Equipment $17,000, Service Revenue $10,000, Accounts Receivable $3,000, Salaries and Wages Expense $5,100, and Rent Expense $1,000.

Prepare a correct trial balance.
(LO 4)

BE2-10 An inexperienced bookkeeper prepared the following trial balance. Prepare a correct trial balance, assuming all account balances are normal.

CAPPSHAW COMPANY
Trial Balance
December 31, 2017

	Debit	Credit
Cash	$10,800	
Prepaid Insurance		$ 3,500
Accounts Payable		3,000
Unearned Service Revenue	2,200	
Owner's Capital		9,000
Owner's Drawings		4,500
Service Revenue		25,600
Salaries and Wages Expense	18,600	
Rent Expense		2,400
	$31,600	$48,000

DO IT! Exercises

DO IT! 2-1 Tom Rast has just rented space in a strip mall. In this space, he will open a photography studio, to be called "Picture This!" A friend has advised Tom to set up a double-entry set of accounting records in which to record all of his business transactions.

Identify normal balances. (LO 1)

Identify the balance sheet accounts that Tom will likely need to record the transactions needed to open his business. Indicate whether the normal balance of each account is a debit or credit.

DO IT! 2-2 Tom Rast engaged in the following activities in establishing his photography studio, Picture This!:

Record business activities. (LO 2)

1. Opened a bank account in the name of Picture This! and deposited $6,300 of his own money into this account as his initial investment.
2. Purchased photography supplies at a total cost of $1,100. The business paid $400 in cash and the balance is on account.
3. Obtained estimates on the cost of photography equipment from three different manufacturers.

In what form (type of record) should Tom record these three activities? Prepare the entries to record the transactions.

DO IT! 2-3 Tom Rast recorded the following transactions during the month of April.

Post transactions. (LO 3)

April 3	Cash	3,400	
	Service Revenue		3,400
April 16	Rent Expense	700	
	Cash		700
April 20	Salaries and Wages Expense	250	
	Cash		250

Post these entries to the Cash T-account of the general ledger to determine the ending balance in cash. The beginning balance in cash on April 1 was $1,600.

DO IT! 2-4 The following accounts are taken from the ledger of Carland Company at December 31, 2017.

Prepare a trial balance. (LO 4)

200	Notes Payable	$20,000	101	Cash	$ 6,000
301	Owner's Capital	28,000	126	Supplies	6,000
157	Equipment	80,000	729	Rent Expense	4,000
306	Owner's Drawings	8,000	212	Salaries and Wages Payable	3,000
726	Salaries and Wages Expense	38,000	201	Accounts Payable	11,000
400	Service Revenue	88,000	112	Accounts Receivable	8,000

Prepare a trial balance in good form.

EXERCISES

E2-1 Kim Yi has prepared the following list of statements about accounts.

Analyze statements about accounting and the recording process. (LO 1)

1. An account is an accounting record of either a specific asset or a specific liability.
2. An account shows only increases, not decreases, in the item it relates to.
3. Some items, such as Cash and Accounts Receivable, are combined into one account.
4. An account has a left, or credit side, and a right, or debit side.
5. A simple form of an account consisting of just the account title, the left side, and the right side, is called a T-account.

Instructions
Identify each statement as true or false. If false, indicate how to correct the statement.

E2-2 Selected transactions for A. Mane, an interior decorator, in her first month of business, are as follows.

Identify debits, credits, and normal balances. (LO 1)

Jan. 2 Invested $10,000 cash in business.
3 Purchased used car for $3,000 cash for use in business.

9 Purchased supplies on account for $500.
11 Billed customers $2,400 for services performed.
16 Paid $350 cash for advertising.
20 Received $700 cash from customers billed on January 11.
23 Paid creditor $300 cash on balance owed.
28 Withdrew $1,000 cash for personal use by owner.

Instructions

For each transaction, indicate the following.

(a) The basic type of account debited and credited (asset, liability, owner's equity).
(b) The specific account debited and credited (Cash, Rent Expense, Service Revenue, etc.).
(c) Whether the specific account is increased or decreased.
(d) The normal balance of the specific account.

Use the following format, in which the January 2 transaction is given as an example.

	Account Debited				Account Credited			
Date	**(a) Basic Type**	**(b) Specific Account**	**(c) Effect**	**(d) Normal Balance**	**(a) Basic Type**	**(b) Specific Account**	**(c) Effect**	**(d) Normal Balance**
Jan. 2	Asset	Cash	Increase	Debit	Owner's Equity	Owner's Capital	Increase	Credit

Journalize transactions.
(LO 2)

E2-3 Data for A. Mane, interior decorator, are presented in E2-2.

Instructions

Journalize the transactions using journal page J1. (You may omit explanations.)

Analyze transactions and determine their effect on accounts.
(LO 1)

E2-4 The following information relates to Sanculi Real Estate Agency.

Oct. 1 Alan Sanculi begins business as a real estate agent with a cash investment of $15,000.
2 Hires an administrative assistant.
3 Purchases office furniture for $1,900, on account.
6 Sells a house and lot for R. Craig; bills R. Craig $3,800 for realty services performed.
27 Pays $1,100 on the balance related to the transaction of October 3.
30 Pays the administrative assistant $2,500 in salary for October.

Instructions

Prepare the debit-credit analysis for each transaction as illustrated on pages 61–65.

Journalize transactions.
(LO 2)

E2-5 Transaction data for Sanculi Real Estate Agency are presented in E2-4.

Instructions

Journalize the transactions. (You may omit explanations.)

Analyze transactions and journalize.
(LO 1, 2)

E2-6 Marx Industries had the following transactions.

1. Borrowed $5,000 from the bank by signing a note.
2. Paid $3,100 cash for a computer.
3. Purchased $850 of supplies on account.

Instructions

(a) Indicate what accounts are increased and decreased by each transaction.
(b) Journalize each transaction. (Omit explanations.)

Analyze transactions and journalize.
(LO 1, 2)

E2-7 Halladay Enterprises had the following selected transactions.

1. Bo Halladay invested $4,000 cash in the business.
2. Paid office rent of $840.
3. Performed consulting services and billed a client $5,200.
4. Bo Halladay withdrew $750 cash for personal use.

Instructions

(a) Indicate the effect each transaction has on the accounting equation (Assets = Liabilities + Owner's Equity), using plus and minus signs.
(b) Journalize each transaction. (Omit explanations.)

E2-8 Teresa Alvarez has prepared the following list of statements about the general ledger.

Analyze statements about the ledger. **(LO 3)**

1. The general ledger contains all the asset and liability accounts but no owner's equity accounts.
2. The general ledger is sometimes referred to as simply the ledger.
3. The accounts in the general ledger are arranged in alphabetical order.
4. Each account in the general ledger is numbered for easier identification.
5. The general ledger is a book of original entry.

Instructions

Identify each statement as true or false. If false, indicate how to correct the statement.

E2-9 Selected transactions from the journal of June Feldman, investment broker, are presented below.

Post journal entries and prepare a trial balance. **(LO 3, 4)**

Date	Account Titles and Explanation	Ref.	Debit	Credit
Aug. 1	Cash		5,000	
	Owner's Capital			5,000
	(Owner's investment of cash in business)			
10	Cash		2,600	
	Service Revenue			2,600
	(Received cash for services performed)			
12	Equipment		5,000	
	Cash			2,300
	Notes Payable			2,700
	(Purchased equipment for cash and notes payable)			
25	Accounts Receivable		1,700	
	Service Revenue			1,700
	(Billed clients for services performed)			
31	Cash		900	
	Accounts Receivable			900
	(Receipt of cash on account)			

Instructions

(a) Post the transactions to T-accounts.
(b) Prepare a trial balance at August 31, 2017.

E2-10 The T-accounts below summarize the ledger of Daggett Landscaping Company at the end of the first month of operations.

Journalize transactions from account data and prepare a trial balance. **(LO 2, 4)**

Cash — No. 101

Date	Debit	Date	Credit
4/1	12,000	4/15	1,300
4/12	900	4/25	1,500
4/29	400		
4/30	1,000		

Accounts Receivable — No. 112

Date	Debit	Date	Credit
4/7	3,200	4/29	400

Supplies — No. 126

Date	Debit	Date	Credit
4/4	1,800		

Accounts Payable — No. 201

Date	Debit	Date	Credit
4/25	1,500	4/4	1,800

Unearned Service Revenue — No. 209

Date	Debit	Date	Credit
		4/30	1,000

Owner's Capital — No. 301

Date	Debit	Date	Credit
		4/1	12,000

Service Revenue — No. 400

Date	Debit	Date	Credit
		4/7	3,200
		4/12	900

Salaries and Wages Expense — No. 726

Date	Debit	Date	Credit
4/15	1,300		

Instructions

(a) Prepare the complete general journal (including explanations) from which the postings to Cash were made.
(b) Prepare a trial balance at April 30, 2017.

Journalize transactions from account data and prepare a trial balance.
(LO 2, 4)

E2-11 Presented below is the ledger for Shumway Co.

Cash No. 101

10/1	3,000	10/4	400
10/10	750	10/12	1,500
10/10	4,000	10/15	350
10/20	500	10/30	300
10/25	2,000	10/31	500

Accounts Receivable No. 112

10/6	800	10/20	500
10/20	940		

Supplies No. 126

10/4	400		

Equipment No. 157

10/3	2,000		

Notes Payable No. 200

		10/10	4,000

Accounts Payable No. 201

10/12	1,500	10/3	2,000

Owner's Capital No. 301

		10/1	3,000
		10/25	2,000

Owner's Drawings No. 306

10/30	300		

Service Revenue No. 400

		10/6	800
		10/10	750
		10/20	940

Salaries and Wages Expense No. 726

10/31	500		

Rent Expense No. 729

10/15	350		

Instructions

(a) Reproduce the journal entries for the transactions that occurred on October 1, 10, and 20, and provide explanations for each.
(b) Determine the October 31 balance for each of the accounts above, and prepare a trial balance at October 31, 2017.

Prepare journal entries and post using standard account form.
(LO 2, 3)

E2-12 Selected transactions for Dianne Burke Company during its first month in business are presented below.

Sept.	1	Invested $10,000 cash in the business.
	5	Purchased equipment for $12,000 paying $4,000 in cash and the balance on account.
	25	Paid $3,000 cash on balance owed for equipment.
	30	Withdrew $700 cash for personal use.

Burke's chart of accounts shows: No. 101 Cash, No. 157 Equipment, No. 201 Accounts Payable, No. 301 Owner's Capital, and No. 306 Owner's Drawings.

Instructions

(a) Journalize the transactions on page J1 of the journal. (Omit explanations.)
(b) Post the transactions using the standard account form.

Analyze errors and their effects on trial balance.
(LO 4)

E2-13 The bookkeeper for J.L. Kang Equipment Repair made a number of errors in journalizing and posting, as described below.

1. A credit posting of $525 to Accounts Receivable was omitted.
2. A debit posting of $750 for Prepaid Insurance was debited to Insurance Expense.
3. A collection from a customer of $100 in payment of its account owed was journalized and posted as a debit to Cash $100 and a credit to Service Revenue $100.
4. A credit posting of $415 to Property Taxes Payable was made twice.

5. A cash purchase of supplies for $250 was journalized and posted as a debit to Supplies $25 and a credit to Cash $25.
6. A debit of $625 to Advertising Expense was posted as $652.

Instructions

For each error:

(a) Indicate whether the trial balance will balance.
(b) If the trial balance will not balance, indicate the amount of the difference.
(c) Indicate the trial balance column that will have the larger total.

Consider each error separately. Use the following form, in which error (1) is given as an example.

Error	(a) In Balance	(b) Difference	(c) Larger Column
(1)	No	$525	debit

E2-14 The accounts in the ledger of Overnite Delivery Service contain the following balances on July 31, 2017.

Prepare a trial balance.

(LO 4)

Accounts Receivable	$ 7,642	Prepaid Insurance	$ 1,968
Accounts Payable	8,396	Maintenance and Repairs Expense	961
Cash	?	Service Revenue	10,610
Equipment	49,360	Owner's Drawings	700
Gasoline Expense	758	Owner's Capital	42,000
Utilities Expense	523	Salaries and Wages Expense	4,428
Notes Payable	17,000	Salaries and Wages Payable	815

Instructions

Prepare a trial balance with the accounts arranged as illustrated in the chapter and fill in the missing amount for Cash.

EXERCISES: SET B AND CHALLENGE EXERCISES

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Exercises: Set B and Challenge Exercises.

PROBLEMS: SET A

P2-1A Holz Disc Golf Course was opened on March 1 by Ian Holz. The following selected events and transactions occurred during March.

Journalize a series of transactions.

(LO 1, 2)

Mar.	1	Invested $20,000 cash in the business.
	3	Purchased Rainbow Golf Land for $15,000 cash. The price consists of land $12,000, shed $2,000, and equipment $1,000. (Make one compound entry.)
	5	Paid advertising expenses of $900.
	6	Paid cash $600 for a one-year insurance policy.
	10	Purchased golf discs and other equipment for $1,050 from Stevenson Company payable in 30 days.
	18	Received $1,100 in cash for golf fees (Holz records golf fees as service revenue).
	19	Sold 150 coupon books for $10 each. Each book contains 4 coupons that enable the holder to play one round of disc golf.
	25	Withdrew $800 cash for personal use.
	30	Paid salaries of $250.
	30	Paid Stevenson Company in full.
	31	Received $2,700 cash for golf fees.

Holz Disc Golf uses the following accounts: Cash, Prepaid Insurance, Land, Buildings, Equipment, Accounts Payable, Unearned Service Revenue, Owner's Capital, Owner's Drawings, Service Revenue, Advertising Expense, and Salaries and Wages Expense.

Instructions

Journalize the March transactions.

Journalize transactions, post, and prepare a trial balance.

(LO 1, 2, 3, 4)

GLS

P2-2A Emily Valley is a licensed dentist. During the first month of the operation of her business, the following events and transactions occurred.

April	1	Invested $20,000 cash in her business.
	1	Hired a secretary-receptionist at a salary of $700 per week payable monthly.
	2	Paid office rent for the month $1,100.
	3	Purchased dental supplies on account from Dazzle Company $4,000.
	10	Performed dental services and billed insurance companies $5,100.
	11	Received $1,000 cash advance from Leah Mataruka for an implant.
	20	Received $2,100 cash for services performed from Michael Santos.
	30	Paid secretary-receptionist for the month $2,800.
	30	Paid $2,400 to Dazzle for accounts payable due.

Emily uses the following chart of accounts: No. 101 Cash, No. 112 Accounts Receivable, No. 126 Supplies, No. 201 Accounts Payable, No. 209 Unearned Service Revenue, No. 301 Owner's Capital, No. 400 Service Revenue, No. 726 Salaries and Wages Expense, and No. 729 Rent Expense.

Instructions

(a) Journalize the transactions.
(b) Post to the ledger accounts.
(c) Prepare a trial balance on April 30, 2017.

(c) Trial balance totals $29,800

Journalize transactions, post, and prepare a trial balance.

(LO 1, 2, 3, 4)

P2-3A Maquoketa Services was formed on May 1, 2017. The following transactions took place during the first month.

Transactions on May 1:

1. Jay Bradford invested $40,000 cash in the company, as its sole owner.
2. Hired two employees to work in the warehouse. They will each be paid a salary of $3,050 per month.
3. Signed a 2-year rental agreement on a warehouse; paid $24,000 cash in advance for the first year.
4. Purchased furniture and equipment costing $30,000. A cash payment of $10,000 was made immediately; the remainder will be paid in 6 months.
5. Paid $1,800 cash for a one-year insurance policy on the furniture and equipment.

Transactions during the remainder of the month:

6. Purchased basic office supplies for $420 cash.
7. Purchased more office supplies for $1,500 on account.
8. Total revenues earned were $20,000—$8,000 cash and $12,000 on account.
9. Paid $400 to suppliers for accounts payable due.
10. Received $3,000 from customers in payment of accounts receivable.
11. Received utility bills in the amount of $380, to be paid next month.
12. Paid the monthly salaries of the two employees, totaling $6,100.

Instructions

(a) Prepare journal entries to record each of the events listed. (Omit explanations.)
(b) Post the journal entries to T-accounts.
(c) Prepare a trial balance as of May 31, 2017.

(c) Trial balance totals $81,480

Prepare a correct trial balance.

(LO 4)

XLS

P2-4A The trial balance of Avtar Sandhu Co. shown below does not balance.

AVTAR SANDHU CO.
Trial Balance
June 30, 2017

	Debit	Credit
Cash		$ 3,340
Accounts Receivable	$ 2,812	
Supplies	1,200	
Equipment	2,600	
Accounts Payable		3,666
Unearned Service Revenue	1,100	
Owner's Capital		8,000
Owner's Drawings	800	
Service Revenue		2,480
Salaries and Wages Expense	3,200	
Utilities Expense	810	
	$12,522	$17,486

Each of the listed accounts has a normal balance per the general ledger. An examination of the ledger and journal reveals the following errors.

1. Cash received from a customer in payment of its account was debited for $580, and Accounts Receivable was credited for the same amount. The actual collection was for $850.
2. The purchase of a computer on account for $710 was recorded as a debit to Supplies for $710 and a credit to Accounts Payable for $710.
3. Services were performed on account for a client for $980. Accounts Receivable was debited for $980, and Service Revenue was credited for $98.
4. A debit posting to Salaries and Wages Expense of $700 was omitted.
5. A payment of a balance due for $306 was credited to Cash for $306 and credited to Accounts Payable for $360.
6. The withdrawal of $600 cash for Sandhu's personal use was debited to Salaries and Wages Expense for $600 and credited to Cash for $600.

Instructions

Prepare a correct trial balance. (*Hint:* It helps to prepare the correct journal entry for the transaction described and compare it to the mistake made.)

Trial balance totals $15,462

P2-5A The Starr Theater, owned by Meg Vargo, will begin operations in March. The Starr will be unique in that it will show only triple features of sequential theme movies. As of March 1, the ledger of Starr showed: No. 101 Cash $3,000, No. 140 Land $24,000, No. 145 Buildings (concession stand, projection room, ticket booth, and screen) $10,000, No. 157 Equipment $10,000, No. 201 Accounts Payable $7,000, and No. 301 Owner's Capital $40,000. During the month of March, the following events and transactions occurred.

Journalize transactions, post, and prepare a trial balance.

(LO 1, 2, 3, 4)

GLS

Mar.	2	Rented the three *Indiana Jones* movies to be shown for the first 3 weeks of March. The film rental was $3,500; $1,500 was paid in cash and $2,000 will be paid on March 10.
	3	Ordered the *Lord of the Rings* movies to be shown the last 10 days of March. It will cost $200 per night.
	9	Received $4,300 cash from admissions.
	10	Paid balance due on *Indiana Jones* movies rental and $2,100 on March 1 accounts payable.
	11	Starr Theater contracted with Adam Ladd to operate the concession stand. Ladd is to pay 15% of gross concession receipts, payable monthly, for the rental of the concession stand.
	12	Paid advertising expenses $900.
	20	Received $5,000 cash from customers for admissions.
	20	Received the *Lord of the Rings* movies and paid the rental fee of $2,000.
	31	Paid salaries of $3,100.
	31	Received statement from Adam Ladd showing gross receipts from concessions of $6,000 and the balance due to Starr Theater of $900 ($6,000 × 15%) for March. Ladd paid one-half the balance due and will remit the remainder on April 5.
	31	Received $9,000 cash from customers for admissions.

In addition to the accounts identified above, the chart of accounts includes: No. 112 Accounts Receivable, No. 400 Service Revenue, No. 429 Rent Revenue, No. 610 Advertising Expense, No. 726 Salaries and Wages Expense, and No. 729 Rent Expense.

Instructions

(a) Enter the beginning balances in the ledger. Insert a check mark (✓) in the reference column of the ledger for the beginning balance.

(b) Journalize the March transactions. Starr records admission revenue as service revenue, rental of the concession stand as rent revenue, and film rental expense as rent expense.

(c) Post the March journal entries to the ledger. Assume that all entries are posted from page 1 of the journal.

(d) Prepare a trial balance on March 31, 2017.

(d) Trial balance totals $64,100

PROBLEMS: SET B AND SET C

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Problems: Set B and Set C.

CONTINUING PROBLEM

COOKIE CREATIONS: AN ENTREPRENEURIAL JOURNEY

(*Note:* This is a continuation of the Cookie Creations problem from Chapter 1.)

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CC2 After researching the different forms of business organization. Natalie Koebel decides to operate "Cookie Creations" as a proprietorship. She then starts the process of getting the business running. In November 2016, the following activities take place.

Nov. 8 Natalie cashes her U.S. Savings Bonds and receives $520, which she deposits in her personal bank account.

8 She opens a bank account under the name "Cookie Creations" and transfers $500 from her personal account to the new account.

11 Natalie pays $65 for advertising.

13 She buys baking supplies, such as flour, sugar, butter, and chocolate chips, for $125 cash. (*Hint:* Use Supplies account.)

14 Natalie starts to gather some baking equipment to take with her when teaching the cookie classes. She has an excellent top-of-the-line food processor and mixer that originally cost her $750. Natalie decides to start using it only in her new business. She estimates that the equipment is currently worth $300. She invests the equipment in the business.

16 Natalie realizes that her initial cash investment is not enough. Her grandmother lends her $2,000 cash, for which Natalie signs a note payable in the name of the business. Natalie deposits the money in the business bank account. (*Hint:* The note does not have to be repaid for 24 months. As a result, the note payable should be reported in the accounts as the last liability and also on the balance sheet as the last liability.)

17 She buys more baking equipment for $900 cash.

20 She teaches her first class and collects $125 cash.

25 Natalie books a second class for December 4 for $150. She receives $30 cash in advance as a down payment.

30 Natalie pays $1,320 for a one-year insurance policy that will expire on December 1, 2017.

Instructions

(a) Prepare journal entries to record the November transactions.
(b) Post the journal entries to general ledger accounts.
(c) Prepare a trial balance at November 30.

BROADENING YOUR PERSPECTIVE

FINANCIAL REPORTING AND ANALYSIS

Financial Reporting Problem: Apple Inc.

BYP2-1 The financial statements of Apple Inc. are presented in Appendix A. Instructions for accessing and using the company's complete annual report, including the notes to the financial statements, are also provided in Appendix A.

Apple's financial statements contain the following selected accounts, stated in millions of dollars.

Accounts Payable	Cash and Cash Equivalents
Accounts Receivable	Research and Development Expense
Property, Plant, and Equipment	Inventories

Instructions

(a) Answer the following questions.
  (1) What is the increase and decrease side for each account?
  (2) What is the normal balance for each account?

(b) Identify the probable other account in the transaction and the effect on that account when:
(1) Accounts Receivable is decreased.
(2) Accounts Payable is decreased.
(3) Inventories are increased.
(c) Identify the other account(s) that ordinarily would be involved when:
(1) Research and Development Expense is increased.
(2) Property, Plant, and Equipment is increased.

Comparative Analysis Problem: PepsiCo, Inc. vs. The Coca-Cola Company

BYP2-2 PepsiCo, Inc.'s financial statements are presented in Appendix B. Financial statement of The Coca-Cola Company are presented in Appendix C. Instructions for accessing and using the complete annual reports of PepsiCo and Coca-Cola, including the notes to the financial statements, are also provided in Appendices B and C, respectively.

Instructions

(a) Based on the information contained in the financial statements, determine the normal balance of the listed accounts for each company.

PepsiCo	Coca-Cola
1. Inventory	1. Accounts Receivable
2. Property, Plant, and Equipment	2. Cash and Cash Equivalents
3. Accounts Payable	3. Cost of Goods Sold (expense)
4. Interest Expense	4. Sales (revenue)

(b) Identify the other account ordinarily involved when:
(1) Accounts Receivable is increased.
(2) Salaries and Wages Payable is decreased.
(3) Property, Plant, and Equipment is increased.
(4) Interest Expense is increased.

Comparative Analysis Problem: Amazon.com, Inc. vs. Wal-Mart Stores, Inc.

BYP2-3 Amazon.com, Inc.'s financial statements are presented in Appendix D. Financial statements of Wal-Mart Stores, Inc. are presented in Appendix E. Instructions for accessing and using the complete annual reports of Amazon and Wal-Mart, including the notes to the financial statements, are also provided in Appendices D and E, respectively.

Instructions

(a) Based on the information contained in the financial statements, determine the normal balance of the listed accounts for each company.

Amazon	Wal-Mart
1. Interest Expense	1. Net Product Revenues
2. Cash and Cash Equivalents	2. Inventories
3. Accounts Payable	3. Cost of Sales

(b) Identify the other account ordinarily involved when:
(1) Accounts Receivable is increased.
(2) Interest Expense is increased.
(3) Salaries and Wages Payable is decreased.
(4) Service Revenue is increased.

Real-World Focus

BYP2-4 Much information about specific companies is available on the Internet. Such information includes basic descriptions of the company's location, activities, industry, financial health, and financial performance.

Address: **biz.yahoo.com/i**, or go to **www.wiley.com/college/weygandt**

Steps

1. Type in a company name, or use index to find company name.
2. Choose **Profile**. Perform instructions (a)–(c) below.
3. Click on the company's specific industry to identify competitors. Perform instructions (d)–(g) below.

Instructions

Answer the following questions.

(a) What is the company's industry?
(b) What is the company's total sales?
(c) What is the company's net income?
(d) What are the names of four of the company's competitors?
(e) Choose one of these competitors.
(f) What is this competitor's name? What are its sales? What is its net income?
(g) Which of these two companies is larger by size of sales? Which one reported higher net income?

BYP2-5 The January 27, 2011, edition of the *New York Times* contains an article by Richard Sandomir entitled "N.F.L. Finances, as Seen Through Packers' Records." The article discusses the fact that the Green Bay Packers are the only NFL team that publicly publishes its annual report.

Instructions

Read the article and answer the following questions.

(a) Why are the Green Bay Packers the only professional football team to publish and distribute an annual report?
(b) Why is the football players' labor union particularly interested in the Packers' annual report?
(c) In addition to the players' labor union, what other outside party might be interested in the annual report?
(d) Even though the Packers' revenue increased in recent years, the company's operating profit fell significantly. How does the article explain this decline?

CRITICAL THINKING

Communication Activity

BYP2-6 Amelia's Maid Company offers home-cleaning service. Two recurring transactions for the company are billing customers for services performed and paying employee salaries. For example, on March 15, bills totaling $6,000 were sent to customers and $2,000 was paid in salaries to employees.

Instructions

Write a memo to your instructor that explains and illustrates the steps in the recording process for each of the March 15 transactions. Use the format illustrated in the text under the heading, "The Recording Process Illustrated" (p. 61).

Ethics Cases

BYP2-7 Ellynn Kole is the assistant chief accountant at Doman Company, a manufacturer of computer chips and cellular phones. The company presently has total sales of $20 million. It is the end of the first quarter. Ellynn is hurriedly trying to prepare a trial balance so that quarterly financial statements can be prepared and released to management and the regulatory agencies. The total credits on the trial balance exceed the debits by $1,000. In order to meet the 4 p.m. deadline, Ellynn decides to force the debits and credits into balance by adding the amount of the difference to the Equipment account. She chooses Equipment because it is one of the larger account balances; percentage-wise, it will be the least misstated. Ellynn "plugs" the difference! She believes that the difference will not affect anyone's decisions. She wishes that she had another few days to find the error but realizes that the financial statements are already late.

Instructions

(a) Who are the stakeholders in this situation?
(b) What are the ethical issues involved in this case?
(c) What are Ellynn's alternatives?

BYP2-8 If you haven't already done so, in the not-too-distant future you will prepare a résumé. In some ways, your résumé is like a company's annual report. Its purpose is to enable others to evaluate your past, in an effort to predict your future.

A résumé is your opportunity to create a positive first impression. It is important that it be impressive—but it should also be accurate. In order to increase their job prospects, some people are tempted to "inflate" their résumés by overstating the importance of some past accomplishments or positions. In fact, you might even think that "everybody does it" and that if you don't do it, you will be at a disadvantage.

David Edmondson, the president and CEO of well-known electronics retailer **Radio Shack**, overstated his accomplishments by claiming that he had earned a bachelor's of science degree, when in fact he had not. Apparently, his employer had not done a background check to ensure the accuracy of his résumé. Should Radio Shack have fired him?

> **YES:** Radio Shack is a publicly traded company. Investors, creditors, employees, and others doing business with the company will not trust it if its leader is known to have poor integrity. The "tone at the top" is vital to creating an ethical organization.
>
> **NO:** Mr. Edmondson had been a Radio Shack employee for 11 years. He had served the company in a wide variety of positions, and had earned the position of CEO through exceptional performance. While the fact that he lied 11 years earlier on his résumé was unfortunate, his service since then made this past transgression irrelevant. In addition, the company was in the midst of a massive restructuring, which included closing 700 of its 7,000 stores. It could not afford additional upheaval at this time.

Instructions
Write a response indicating your position regarding this situation. Provide support for your view.

All About You

BYP2-9 Every company needs to plan in order to move forward. Its top management must consider where it wants the company to be in three to five years. Like a company, you need to think about where you want to be three to five years from now, and you need to start taking steps now in order to get there.

Instructions
Provide responses to each of the following items.

(a) Where would you like to be working in three to five years? Describe your plan for getting there by identifying between five and 10 specific steps that you need to take.
(b) In order to get the job you want, you will need a résumé. Your résumé is the equivalent of a company's annual report. It needs to provide relevant and reliable information about your past accomplishments so that employers can decide whether to "invest" in you. Do a search on the Internet to find a good résumé format. What are the basic elements of a résumé?
(c) A company's annual report provides information about a company's accomplishments. In order for investors to use the annual report, the information must be reliable; that is, users must have faith that the information is accurate and believable. How can you provide assurance that the information on your résumé is reliable?
(d) Prepare a résumé assuming that you have accomplished the five to 10 specific steps you identified in part (a). Also, provide evidence that would give assurance that the information is reliable.

Considering People, Planet, and Profit

BYP2-10 Auditors provide a type of certification of corporate financial statements. Certification is used in many other aspects of business as well. For example, it plays a critical role in the sustainability movement. The February 7, 2012, issue of the *New York Times* contained an article by S. Amanda Caudill entitled "Better Lives in Better Coffee," which discusses the role of certification in the coffee business.

Address: **http://scientistatwork.blogs.nytimes.com/2012/02/07/better-lives-in-better-coffee**

Instructions
Read the article and answer the following questions.

(a) The article mentions three different certification types that coffee growers can obtain from three different certification bodies. Using financial reporting as an example, what potential problems might the existence of multiple certification types present to coffee purchasers?
(b) According to the author, which certification is most common among coffee growers? What are the possible reasons for this?
(c) What social and environmental benefits are coffee certifications trying to achieve? Are there also potential financial benefits to the parties involved?

A Look at IFRS

LEARNING OBJECTIVE 5 **Compare the procedures for the accounting process under GAAP and IFRS.**

International companies use the same set of procedures and records to keep track of transaction data. Thus, the material in Chapter 2 dealing with the account, general rules of debit and credit, and steps in the recording process—the journal, ledger, and chart of accounts—is the same under both GAAP and IFRS.

Key Points

Following are the key similarities and differences between GAAP and IFRS as related to the recording process.

Similarities

- Transaction analysis is the same under IFRS and GAAP.
- Both the IASB and the FASB go beyond the basic definitions provided in the textbook for the key elements of financial statements, that is assets, liabilities, equity, revenue, and expenses. The implications of the expanded definitions are discussed in more advanced accounting courses.
- As shown in the textbook, dollar signs are typically used only in the trial balance and the financial statements. The same practice is followed under IFRS, using the currency of the country where the reporting company is headquartered.
- A trial balance under IFRS follows the same format as shown in the textbook.

Differences

- IFRS relies less on historical cost and more on fair value than do FASB standards.
- Internal controls are a system of checks and balances designed to prevent and detect fraud and errors. While most public U.S. companies have these systems in place, many non-U.S. companies have never completely documented the controls nor had an independent auditors attest to their effectiveness.

Looking to the Future

The basic recording process shown in this textbook is followed by companies across the globe. It is unlikely to change in the future. The definitional structure of assets, liabilities, equity, revenues, and expenses may change over time as the IASB and FASB evaluate their overall conceptual framework for establishing accounting standards.

IFRS Practice

IFRS Self-Test Questions

1. Which statement is **correct** regarding IFRS?
   (a) IFRS reverses the rules of debits and credits, that is, debits are on the right and credits are on the left.
   (b) IFRS uses the same process for recording transactions as GAAP.
   (c) The chart of accounts under IFRS is different because revenues follow assets.
   (d) None of the above statements are correct.
2. The expanded accounting equation under IFRS is as follows:
   (a) Assets = Liabilities + Owner's Capital + Owner's Drawings + Revenues − Expenses.
   (b) Assets + Liabilities = Owner's Capital + Owner's Drawings + Revenues − Expenses.
   (c) Assets = Liabilities + Owner's Capital − Owner's Drawings + Revenues − Expenses.
   (d) Assets = Liabilities + Owner's Capital + Owner's Drawings − Revenues − Expenses.
3. A trial balance:
   (a) is the same under IFRS and GAAP.
   (b) proves that transactions are recorded correctly.

(c) proves that all transactions have been recorded.
(d) will not balance if a correct journal entry is posted twice.

4. One difference between IFRS and GAAP is that:
   (a) GAAP uses accrual-accounting concepts and IFRS uses primarily the cash basis of accounting.
   (b) IFRS uses a different posting process than GAAP.
   (c) IFRS uses more fair value measurements than GAAP.
   (d) the limitations of a trial balance are different between IFRS and GAAP.
5. The general policy for using proper currency signs (dollar, yen, pound, etc.) is the same for both IFRS and this textbook. This policy is as follows:
   (a) Currency signs only appear in ledgers and journal entries.
   (b) Currency signs are only shown in the trial balance.
   (c) Currency signs are shown for all compound journal entries.
   (d) Currency signs are shown in trial balances and financial statements.

International Financial Reporting Problem: Louis Vuitton

IFRS2-1 The financial statements of Louis Vuitton are presented in Appendix F. Instructions for accessing and using the company's complete annual report, including the notes to its financial statements, are also provided in Appendix F.

Instructions
Describe in which statement each of the following items is reported, and the position in the statement (e.g., current asset).

(a) Other operating income and expense.
(b) Cash and cash equivalents.
(c) Trade accounts payable.
(d) Cost of net financial debt.

Answers to IFRS Self-Test Questions

1. b **2.** c **3.** a **4.** c **5.** d

3 Adjusting the Accounts

CHAPTER PREVIEW In Chapter 1, you learned a neat little formula: Net income = Revenues − Expenses. In Chapter 2, you learned some rules for recording revenue and expense transactions. Guess what? Things are not really that nice and neat. In fact, it is often difficult for companies to determine in what time period they should report some revenues and expenses. In other words, in measuring net income, timing is everything.

FEATURE STORY

Keeping Track of Groupons

Who doesn't like buying things at a discount? That's why it's not surprising that three years after it started as a company, Groupon was estimated to be worth $16 billion. This translates into an average increase in value of almost $15 million per day.

Now consider that Groupon had previously been estimated to be worth even more than that. What happened? Well, accounting regulators and investors began to question the way that Groupon had accounted for some of its transactions. But if Groupon sells only coupons ("groupons"), how hard can it be to accurately account for that? It turns out that accounting for coupons is not as easy as you might think.

First, consider what happens when Groupon makes a sale. Suppose it sells a groupon for $30 for Highrise Hamburgers. When it receives the $30 from the customer, it must turn over half of that amount ($15) to Highrise Hamburgers. So should Groupon record revenue for the full $30 or just $15? Until recently, Groupon recorded the full $30. But, in response to an SEC ruling on the issue, Groupon now records revenue of $15 instead.

A second issue is a matter of timing. When should Groupon record this $15 revenue? Should it record the revenue when it sells the groupon, or must it wait until the customer uses the groupon at Highrise Hamburgers? You can find the answer to this question in the notes to Groupon's financial statements. It recognizes the revenue once "the number of customers who purchase the daily deal exceeds the predetermined threshold, the Groupon has been electronically delivered to the purchaser and a listing of Groupons sold has been made available to the merchant."

The accounting becomes even more complicated when you consider the company's loyalty programs. Groupon offers free or discounted groupons to its subscribers for doing things such as referring new customers or participating in promotions. These groupons are to be used for future purchases, yet the company must record the expense at the time the customer receives the groupon. The cost of these programs is huge for Groupon, so the timing of this expense can definitely affect its reported income.

The final kicker is that Groupon, like all other companies, must rely on many estimates in its financial reporting. For example, Groupon reports that "estimates are utilized for, but not limited to, stock-based compensation, income taxes, valuation of acquired goodwill and intangible assets, customer refunds, contingent liabilities and the depreciable lives of fixed assets." It concludes by saying that "actual results could differ materially from those estimates." So, next time you use a coupon, think about what that means for the company's accountants!.

Rudy Archuleta/Redux Pictures

CHAPTER OUTLINE

Learning Objectives

1 Explain the accrual basis of accounting and the reasons for adjusting entries.
- Fiscal and calendar years
- Accrual- vs. cash-basis accounting
- Recognizing revenues and expenses
- Need for adjusting entries
- Types of adjusting entries

DO IT! 1 Timing Concepts

2 Prepare adjusting entries for deferrals.
- Prepaid expenses
- Unearned revenues

DO IT! 2 Adjusting Entries for Deferrals

3 Prepare adjusting entries for accruals.
- Accrued revenues
- Accrued expenses
- Summary of basic relationships

DO IT! 3 Adjusting Entries for Accruals

4 Describe the nature and purpose of an adjusted trial balance.
- Preparing the adjusted trial balance
- Preparing financial statements

DO IT! 4 Trial Balance

Go to the ***REVIEW AND PRACTICE*** section at the end of the chapter for a review of key concepts and practice applications with solutions.

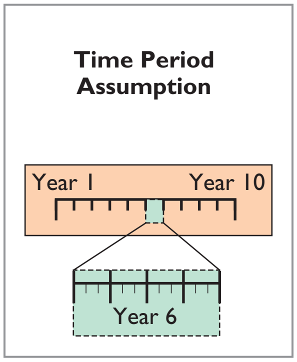
Visit **WileyPLUS with ORION** for additional tutorials and practice opportunities.

LEARNING OBJECTIVE 1

Explain the accrual basis of accounting and the reasons for adjusting entries.

If we could wait to prepare financial statements until a company ended its operations, no adjustments would be needed. At that point, we could easily determine its final balance sheet and the amount of lifetime income it earned.

However, most companies need immediate feedback about how well they are doing. For example, management usually wants monthly financial statements. The Internal Revenue Service requires all businesses to file annual tax returns. Therefore, **accountants divide the economic life of a business into artificial time periods**. This convenient assumption is referred to as the **time period assumption**.



Many business transactions affect more than one of these arbitrary time periods. For example, the airplanes purchased by Southwest Airlines five years ago are still in use today. We must determine the relevance of each business transaction to specific accounting periods. (How much of the cost of an airplane contributed to operations this year?)

Fiscal and Calendar Years

Both small and large companies prepare financial statements periodically in order to assess their financial condition and results of operations. **Accounting time periods are generally a month, a quarter, or a year.** Monthly and quarterly time periods are called **interim periods**. Most large companies must prepare both quarterly and annual financial statements.

Alternative Terminology
The time period assumption is also called the *periodicity assumption*.

An accounting time period that is one year in length is a **fiscal year**. A fiscal year usually begins with the first day of a month and ends 12 months later on the last day of a month. Many businesses use the **calendar year** (January 1 to December 31) as their accounting period. Some do not. Companies whose fiscal year differs from the calendar year include Delta Air Lines, June 30, and The Walt Disney Company, September 30. Sometimes a company's year-end will vary from year to year. For example, PepsiCo's fiscal year ends on the Friday closest to December 31, which was December 29 in 2012 and December 28 in 2013.

Accrual- versus Cash-Basis Accounting

What you will learn in this chapter is **accrual-basis accounting**. Under the accrual basis, companies record transactions that change a company's financial statements **in the periods in which the events occur**. For example, using the accrual basis to determine net income means companies recognize revenues when they perform services (rather than when they receive cash). It also means recognizing expenses when incurred (rather than when paid).

An alternative to the accrual basis is the cash basis. Under **cash-basis accounting**, companies record revenue when they receive cash. They record an expense when they pay out cash. The cash basis seems appealing due to its simplicity, but it often produces misleading financial statements. It fails to record revenue for a company that has performed services but for which the company has not received the cash. As a result, the cash basis does not match expenses with revenues.

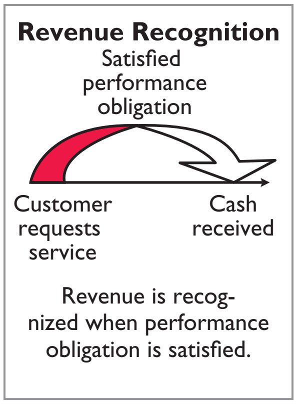
Accrual-basis accounting is therefore in accordance with generally accepted accounting principles (GAAP). Individuals and some small companies, however, do use cash-basis accounting. The cash basis is justified for small businesses because they often have few receivables and payables. Medium and large companies use accrual-basis accounting.

Recognizing Revenues and Expenses

It can be difficult to determine when to report revenues and expenses. The revenue recognition principle and the expense recognition principle help in this task.

REVENUE RECOGNITION PRINCIPLE

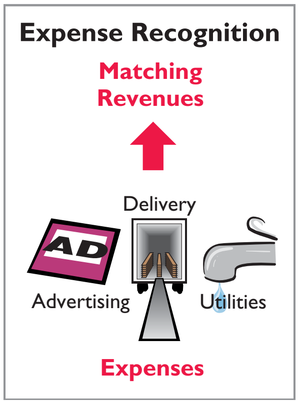
When a company agrees to perform a service or sell a product to a customer, it has a **performance obligation**. When the company meets this performance obligation, it recognizes revenue. The **revenue recognition principle** therefore requires that companies recognize revenue in the accounting period in which the performance obligation is satisfied. To illustrate, assume that Dave's Dry Cleaning cleans clothing on June 30 but customers do not claim and pay for their clothes until the first week of July. Dave's should record revenue in June when it performed the service (satisfied the performance obligation) rather than in July when it received the cash. At June 30, Dave's would report a receivable on its balance sheet and revenue in its income statement for the service performed.



EXPENSE RECOGNITION PRINCIPLE

Accountants follow a simple rule in recognizing expenses: "Let the expenses follow the revenues." Thus, expense recognition is tied to revenue recognition. In the dry cleaning example, this means that Dave's should report the salary expense incurred in performing the June 30 cleaning service in the same period in which it recognizes the service revenue. The critical issue in expense recognition is when the expense makes its contribution to revenue. This may or may not be the same period in which the expense is paid. If Dave's does not pay the salary incurred on June 30 until July, it would report salaries payable on its June 30 balance sheet.

This practice of expense recognition is referred to as the **expense recognition principle** (often referred to as the **matching principle**). It dictates that efforts (expenses) be matched with results (revenues). Illustration 3-1 summarizes the revenue and expense recognition principles.



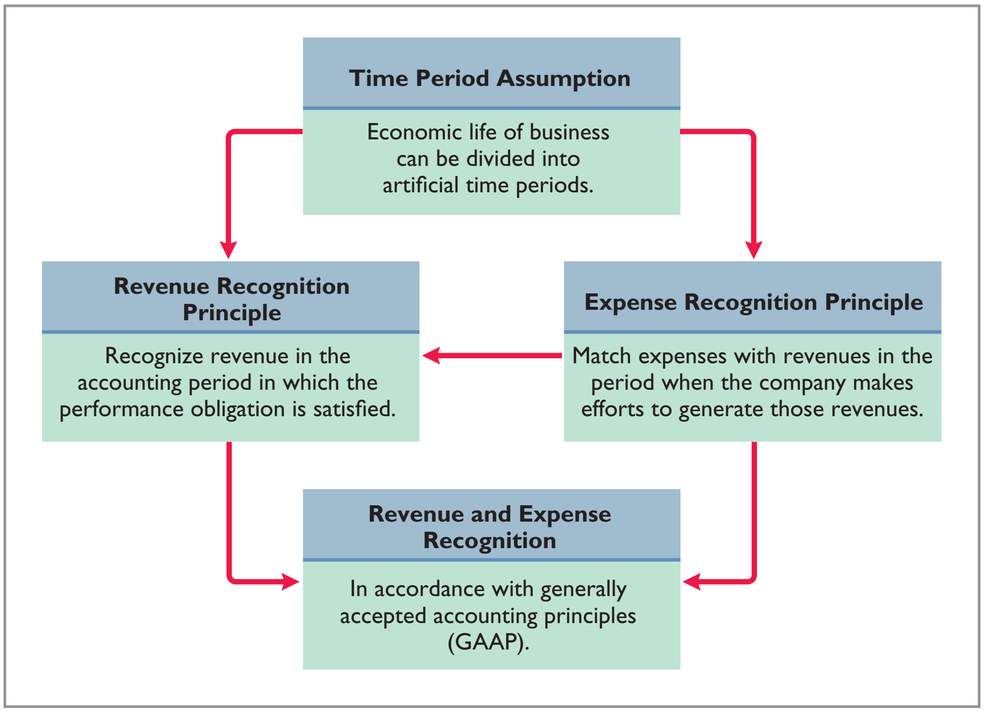


Illustration 3-1
GAAP relationships in revenue and expense recognition

Ethics Insight Krispy Kreme

© Dean Turner/iStockphoto

Cooking the Books?

Allegations of abuse of the revenue recognition principle have become all too common in recent years. For example, it was alleged that Krispy Kreme sometimes doubled the number of doughnuts shipped to wholesale customers at the end of a quarter to boost quarterly results. The customers shipped the unsold doughnuts back after the beginning of the next quarter for a refund. Conversely, Computer Associates International was accused of backdating sales—that is, reporting a sale in one period that did not actually occur until the next period in order to achieve the earlier period's sales targets.

What motivates sales executives and finance and accounting executives to participate in activities that result in inaccurate reporting of revenues? (Go to **WileyPLUS** for this answer and additional questions.)

The Need for Adjusting Entries

In order for revenues to be recorded in the period in which services are performed and for expenses to be recognized in the period in which they are incurred, companies make adjusting entries. **Adjusting entries ensure that the revenue recognition and expense recognition principles are followed**.

Adjusting entries are necessary because the **trial balance**—the first pulling together of the transaction data—may not contain up-to-date and complete data. This is true for several reasons:

1. Some events are not recorded daily because it is not efficient to do so. Examples are the use of supplies and the earning of wages by employees.
2. Some costs are not recorded during the accounting period because these costs expire with the passage of time rather than as a result of recurring daily transactions. Examples are charges related to the use of buildings and equipment, rent, and insurance.
3. Some items may be unrecorded. An example is a utility service bill that will not be received until the next accounting period.

Adjusting entries are required every time a company prepares financial statements. The company analyzes each account in the trial balance to determine whether it is complete and up-to-date for financial statement purposes. **Every adjusting entry will include one income statement account and one balance sheet account.**

> **International Note**
>
> Internal controls are a system of checks and balances designed to detect and prevent fraud and errors. The Sarbanes-Oxley Act requires U.S. companies to enhance their systems of internal control. However, many foreign companies do not have to meet strict internal control requirements. Some U.S. companies believe that this gives foreign firms an unfair advantage because developing and maintaining internal controls can be very expensive.

Types of Adjusting Entries

Adjusting entries are classified as either **deferrals** or **accruals**. As Illustration 3-2 shows, each of these classes has two subcategories.

Illustration 3-2
Categories of adjusting entries

Deferrals:

1. **Prepaid expenses**: Expenses paid in cash before they are used or consumed.
2. **Unearned revenues**: Cash received before services are performed.

Accruals:

1. **Accrued revenues**: Revenues for services performed but not yet received in cash or recorded.
2. **Accrued expenses**: Expenses incurred but not yet paid in cash or recorded.

Subsequent sections give examples of each type of adjustment. Each example is based on the October 31 trial balance of Pioneer Advertising from Chapter 2, reproduced in Illustration 3-3.

Illustration 3-3
Trial balance

PIONEER ADVERTISING
Trial Balance
October 31, 2017

	Debit	Credit
Cash	$ 15,200	
Supplies	2,500	
Prepaid Insurance	600	
Equipment	5,000	
Notes Payable		$ 5,000
Accounts Payable		2,500
Unearned Service Revenue		1,200
Owner's Capital		10,000
Owner's Drawings	500	
Service Revenue		10,000
Salaries and Wages Expense	4,000	
Rent Expense	900	
	$28,700	**$28,700**

We assume that Pioneer uses an accounting period of one month. Thus, monthly adjusting entries are made. The entries are dated October 31.

DO IT! 1 Timing Concepts

Several timing concepts are discussed on pages 94–95. A list of concepts is provided in the left column below, with a description of the concept in the right column below. There are more descriptions provided than concepts. Match the description of the concept to the concept.

1. ____Accrual-basis accounting.
2. ____Calendar year.
3. ____Time period assumption.
4. ____Expense recognition principle.

(a) Monthly and quarterly time periods.
(b) Efforts (expenses) should be matched with results (revenues).
(c) Accountants divide the economic life of a business into artificial time periods.
(d) Companies record revenues when they receive cash and record expenses when they pay out cash.
(e) An accounting time period that starts on January 1 and ends on December 31.
(f) Companies record transactions in the period in which the events occur.

Action Plan

✔ Review the glossary terms identified on pages 122–123.

✔ Study carefully the revenue recognition principle, the expense recognition principle, and the time period assumption.

Solution

1. f **2.** e **3.** c **4.** b

Related exercise material: **BE3-1, BE3-2, E3-1, E3-2, E3-3, and DO IT! 3-1.**

LEARNING OBJECTIVE 2

Prepare adjusting entries for deferrals.

To defer means to postpone or delay. **Deferrals** are expenses or revenues that are recognized at a date later than the point when cash was originally exchanged. The two types of deferrals are prepaid expenses and unearned revenues.

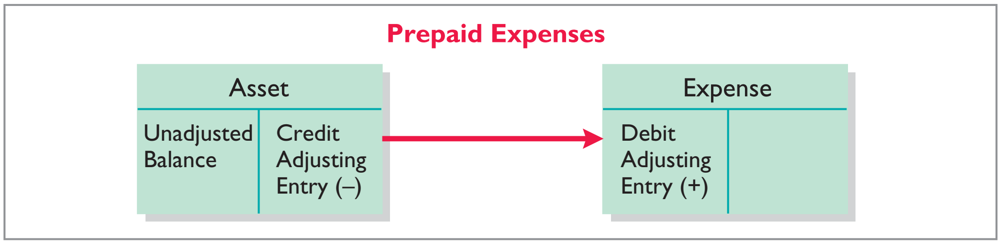
Prepaid Expenses

When companies record payments of expenses that will benefit more than one accounting period, they record an asset called **prepaid expenses** or **prepayments**. When expenses are prepaid, an asset account is increased (debited) to show the service or benefit that the company will receive in the future. Examples of common prepayments are insurance, supplies, advertising, and rent. In addition, companies make prepayments when they purchase buildings and equipment.

Prepaid expenses are costs that expire either with the passage of time (e.g., rent and insurance) **or through use** (e.g., supplies). The expiration of these costs does not require daily entries, which would be impractical and unnecessary. Accordingly, companies postpone the recognition of such cost expirations until they prepare financial statements. At each statement date, they make adjusting entries to record the expenses applicable to the current accounting period and to show the remaining amounts in the asset accounts.

Prior to adjustment, assets are overstated and expenses are understated. Therefore, as shown in Illustration 3-4, **an adjusting entry for prepaid expenses results in an increase (a debit) to an expense account and a decrease (a credit) to an asset account**.

Illustration 3-4
Adjusting entries for prepaid expenses



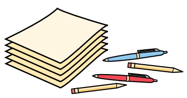
Let's look in more detail at some specific types of prepaid expenses, beginning with supplies.

SUPPLIES

The purchase of supplies, such as paper and envelopes, results in an increase (a debit) to an asset account. During the accounting period, the company uses supplies. Rather than record supplies expense as the supplies are used, companies recognize supplies expense at the **end** of the accounting period. At the end of the accounting period, the company counts the remaining supplies. As shown in Illustration 3-5, the difference between the unadjusted balance in the Supplies (asset) account and the actual cost of supplies on hand represents the supplies used (an expense) for that period.

Supplies

Oct. 5



Supplies purchased; record asset

Oct. 31

Supplies used; record supplies expense

Recall from Chapter 2 that Pioneer Advertising purchased supplies costing \$2,500 on October 5. Pioneer recorded the purchase by increasing (debiting) the asset Supplies. This account shows a balance of \$2,500 in the October 31 trial balance. An inventory count at the close of business on October 31 reveals that \$1,000 of supplies are still on hand. Thus, the cost of supplies used is \$1,500 (\$2,500 − \$1,000). This use of supplies decreases an asset, Supplies. It also decreases owner's equity by increasing an expense account, Supplies Expense. This is shown in Illustration 3-5.

After adjustment, the asset account Supplies shows a balance of \$1,000, which is equal to the cost of supplies on hand at the statement date. In addition, Supplies Expense shows a balance of \$1,500, which equals the cost of supplies used in October. **If Pioneer does not make the adjusting entry, October expenses are understated and net income is overstated by \$1,500. Moreover, both assets and owner's equity will be overstated by \$1,500 on the October 31 balance sheet**.

Illustration 3-5
Adjustment for supplies

Basic Analysis
The expense Supplies Expense is increased $1,500; the asset Supplies is decreased $1,500.

Equation Analysis

	Assets	=	Liabilities	+	Owner's Equity
(1)	Supplies	=			Supplies Expense
	−$1,500				−$1,500

Debit–Credit Analysis
Debits increase expenses: debit Supplies Expense $1,500.
Credits decrease assets: credit Supplies $1,500.

Journal Entry

Oct. 31	Supplies Expense	1,500	
	Supplies		1,500
	(To record supplies used)		

Posting

Supplies			126
Oct. 5 2,500	Oct. 31 **Adj. 1,500**		
Oct. 31 Bal. 1,000			

Supplies Expense		631
Oct. 31 **Adj. 1,500**		
Oct. 31 Bal. 1,500		

INSURANCE

Companies purchase insurance to protect themselves from losses due to fire, theft, and unforeseen events. Insurance must be paid in advance, often for more than one year. The cost of insurance (premiums) paid in advance is recorded as an increase (debit) in the asset account Prepaid Insurance. At the financial statement date, companies increase (debit) Insurance Expense and decrease (credit) Prepaid Insurance for the cost of insurance that has expired during the period.

On October 4, Pioneer Advertising paid $600 for a one-year fire insurance policy. Coverage began on October 1. Pioneer recorded the payment by increasing (debiting) Prepaid Insurance. This account shows a balance of $600 in the October 31 trial balance. Insurance of $50 ($600 ÷ 12) expires each month. The expiration of prepaid insurance decreases an asset, Prepaid Insurance. It also decreases owner's equity by increasing an expense account, Insurance Expense.

As shown in Illustration 3-6, the asset Prepaid Insurance shows a balance of $550, which represents the unexpired cost for the remaining 11 months of

Insurance

Oct. 4

Insurance purchased; record asset

Insurance Policy			
Oct $50	Nov $50	Dec $50	Jan $50
Feb $50	March $50	April $50	May $50
June $50	July $50	Aug $50	Sept $50
1 YEAR $600			

Oct. 31
Insurance expired; record insurance expense

Illustration 3-6
Adjustment for insurance

Basic Analysis
The expense Insurance Expense is increased $50; the asset Prepaid Insurance is decreased $50.

Equation Analysis

	Assets	=	Liabilities	+	Owner's Equity
(2)	Prepaid Insurance	=			Insurance Expense
	−$50				−$50

Debit–Credit Analysis
Debits increase expenses: debit Insurance Expense $50.
Credits decrease assets: credit Prepaid Insurance $50.

Journal Entry

Oct. 31	Insurance Expense	50	
	Prepaid Insurance		50
	(To record insurance expired)		

Posting

Prepaid Insurance		130
Oct. 4 600	Oct. 31 **Adj. 50**	
Oct. 31 Bal. 550		

Insurance Expense		722
Oct. 31 **Adj. 50**		
Oct. 31 Bal. 50		

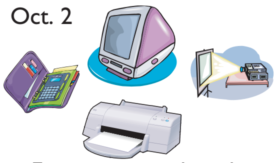
coverage. At the same time, the balance in Insurance Expense equals the insurance cost that expired in October. **If Pioneer does not make this adjustment, October expenses are understated by $50 and net income is overstated by $50. Moreover, both assets and owner's equity will be overstated by $50 on the October 31 balance sheet.**

DEPRECIATION

A company typically owns a variety of assets that have long lives, such as buildings, equipment, and motor vehicles. The period of service is referred to as the **useful life** of the asset. Because a building is expected to be of service for many years, it is recorded as an asset, rather than an expense, on the date it is acquired. As explained in Chapter 1, companies record such assets **at cost**, as required by the historical cost principle. To follow the expense recognition principle, companies allocate a portion of this cost as an expense during each period of the asset's useful life. **Depreciation** is the process of allocating the cost of an asset to expense over its useful life.

Depreciation

Oct. 2



Equipment purchased; record asset

Equipment			
Oct $40	Nov $40	Dec $40	Jan $40
Feb $40	March $40	April $40	May $40
June $40	July $40	Aug $40	Sept $40
Depreciation = $480/year			

Oct. 31

Depreciation recognized; record depreciation expense

NEED FOR ADJUSTMENT The acquisition of long-lived assets is essentially a long-term prepayment for the use of an asset. An adjusting entry for depreciation is needed to recognize the cost that has been used (an expense) during the period and to report the unused cost (an asset) at the end of the period. One very important point to understand: **Depreciation is an allocation concept, not a valuation concept.** That is, depreciation **allocates an asset's cost to the periods in which it is used**. **Depreciation does not attempt to report the actual change in the value of the asset.**

For Pioneer Advertising, assume that depreciation on the equipment is $480 a year, or $40 per month. As shown in Illustration 3-7, rather than decrease (credit) the asset account directly, Pioneer instead credits Accumulated Depreciation—Equipment. Accumulated Depreciation is called a **contra asset account**. Such

Illustration 3-7
Adjustment for depreciation

Basic Analysis: The expense Depreciation Expense is increased $40; the contra asset Accumulated Depreciation—Equipment is increased $40.

Equation Analysis:

Assets	=	Liabilities	+	Owner's Equity
Accumulated Depreciation—Equipment	=			Depreciation Expense
−$40				−$40

Debit–Credit Analysis: Debits increase expenses: debit Depreciation Expense $40.
Credits increase contra assets: credit Accumulated Depreciation—Equipment $40.

Journal Entry:

Date	Account	Debit	Credit
Oct. 31	Depreciation Expense	40	
	Accumulated Depreciation—Equipment		40
	(To record monthly depreciation)		

Posting:

Equipment 157			
Oct. 2	5,000		
Oct. 31	Bal. 5,000		

Accumulated Depreciation—Equipment 158			
		Oct. 31	Adj. 40
		Oct. 31	Bal. 40

Depreciation Expense 711			
Oct. 31	Adj. 40		
Oct. 31	Bal. 40		

an account is offset against an asset account on the balance sheet. Thus, the Accumulated Depreciation—Equipment account offsets the asset Equipment. **This account keeps track of the total amount of depreciation expense taken over the life of the asset.** To keep the accounting equation in balance, Pioneer decreases owner's equity by increasing an expense account, Depreciation Expense.

Helpful Hint
All contra accounts have increases, decreases, and normal balances opposite to the account to which they relate.

The balance in the Accumulated Depreciation—Equipment account will increase $40 each month, and the balance in Equipment remains $5,000.

STATEMENT PRESENTATION As indicated, Accumulated Depreciation—Equipment is a contra asset account. It is offset against Equipment on the balance sheet. The normal balance of a contra asset account is a credit. A theoretical alternative to using a contra asset account would be to decrease (credit) the asset account by the amount of depreciation each period. But using the contra account is preferable for a simple reason: It discloses **both** the original cost of the equipment **and** the total cost that has been expensed to date. Thus, in the balance sheet, Pioneer deducts Accumulated Depreciation—Equipment from the related asset account, as shown in Illustration 3-8.

Equipment	$ 5,000
Less: Accumulated depreciation—equipment	40
	$4,960

Illustration 3-8
Balance sheet presentation of accumulated depreciation

Book value is the difference between the cost of any depreciable asset and its related accumulated depreciation. In Illustration 3-8, the book value of the equipment at the balance sheet date is $4,960. The book value and the fair value of the asset are generally two different values. As noted earlier, **the purpose of depreciation is not valuation but a means of cost allocation**.

Alternative Terminology
Book value is also referred to as *carrying value*.

Depreciation expense identifies the portion of an asset's cost that expired during the period (in this case, in October). The accounting equation shows that **without this adjusting entry, total assets, total owner's equity, and net income are overstated by $40 and depreciation expense is understated by $40**.

Illustration 3-9 summarizes the accounting for prepaid expenses.

ACCOUNTING FOR PREPAID EXPENSES

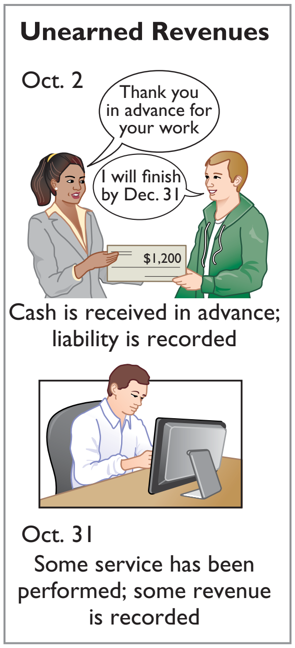
Examples	Reason for Adjustment	Accounts Before Adjustment	Adjusting Entry
Insurance, supplies, advertising, rent, depreciation	Prepaid expenses recorded in asset accounts have been used.	Assets overstated. Expenses understated.	Dr. Expenses Cr. Assets or Contra Assets

Illustration 3-9
Accounting for prepaid expenses

Unearned Revenues

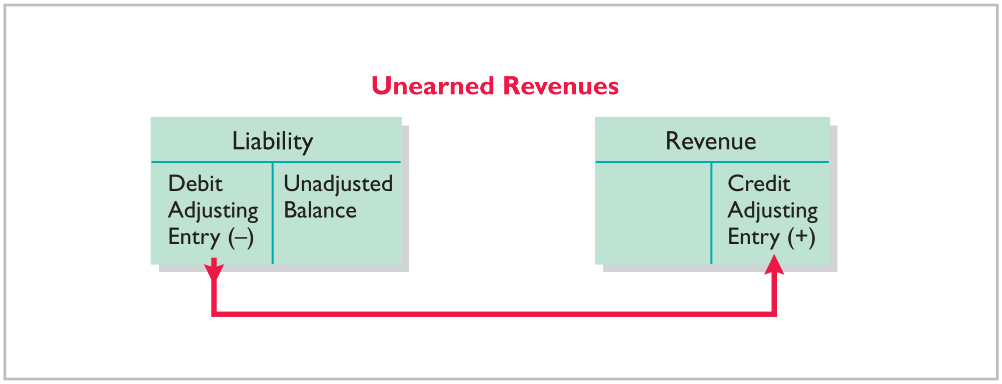
When companies receive cash before services are performed, they record a liability by increasing (crediting) a liability account called **unearned revenues**. In other words, a company now has a performance obligation (liability) to transfer a service to one of its customers. Items like rent, magazine subscriptions, and customer deposits for future service may result in unearned revenues. Airlines such as United, Southwest, and Delta, for instance, treat receipts from the sale of tickets as unearned revenue until the flight service is provided.

Unearned revenues are the opposite of prepaid expenses. Indeed, unearned revenue on the books of one company is likely to be a prepaid expense on the books of the company that has made the advance payment. For example, if identical accounting periods are assumed, a landlord will have unearned rent revenue when a tenant has prepaid rent.



When a company receives payment for services to be performed in a future accounting period, it increases (credits) an unearned revenue (a liability) account to recognize the liability that exists. The company subsequently recognizes revenues when it performs the service. During the accounting period, it is not practical to make daily entries as the company performs services. Instead, the company delays recognition of revenue until the adjustment process. Then, the company makes an adjusting entry to record the revenue for services performed during the period and to show the liability that remains at the end of the accounting period. Typically, prior to adjustment, liabilities are overstated and revenues are understated. Therefore, as shown in Illustration 3-10, **the adjusting entry for unearned revenues results in a decrease (a debit) to a liability account and an increase (a credit) to a revenue account**.

Illustration 3-10
Adjusting entries for unearned revenues



Pioneer Advertising received $1,200 on October 2 from R. Knox for advertising services expected to be completed by December 31. Pioneer credited the payment to Unearned Service Revenue. This liability account shows a balance of $1,200 in the October 31 trial balance. From an evaluation of the services Pioneer performed for Knox during October, the company determines that it should recognize $400 of revenue in October. The liability (Unearned Service Revenue) is therefore decreased, and owner's equity (Service Revenue) is increased.

As shown in Illustration 3-11, the liability Unearned Service Revenue now shows a balance of $800. That amount represents the remaining advertising services expected to be performed in the future. At the same time, Service Revenue shows

Illustration 3-11
Service revenue accounts after adjustment

Basic Analysis: The liability Unearned Service Revenue is decreased $400; the revenue Service Revenue is increased $400.

Equation Analysis:

Assets	=	Liabilities	+	Owner's Equity
		Unearned Service Revenue		Service Revenue
		−$400		+$400

Debit–Credit Analysis: Debits decrease liabilities: debit Unearned Service Revenue $400. Credits increase revenues: credit Service Revenue $400.

Journal Entry:

Oct. 31	Unearned Service Revenue	400	
	Service Revenue		400
	(To record revenue for services performed)		

Posting:

Unearned Service Revenue			209
Oct. 31	Adj. 400	Oct. 2	1,200
		Oct. 31 Bal.	800

Service Revenue			400
		Oct. 3	10,000
		31 Adj.	400
		Oct. 31 Bal.	10,400

total revenue recognized in October of $10,400. **Without this adjustment, revenues and net income are understated by $400 in the income statement. Moreover, liabilities will be overstated and owner's equity will be understated by $400 on the October 31 balance sheet.**

Illustration 3-12 summarizes the accounting for unearned revenues.

Illustration 3-12
Accounting for unearned revenues

ACCOUNTING FOR UNEARNED REVENUES

Examples	Reason for Adjustment	Accounts Before Adjustment	Adjusting Entry
Rent, magazine subscriptions, customer deposits for future service	Unearned revenues recorded in liability accounts are now recognized as revenue for services performed.	Liabilities overstated. Revenues understated.	Dr. Liabilities Cr. Revenues

Accounting Across the Organization — Best Buy

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Turning Gift Cards into Revenue

Those of you who are marketing majors (and even most of you who are not) know that gift cards are among the hottest marketing tools in merchandising today. Customers purchase gift cards and give them to someone for later use. In a recent year, gift-card sales topped $95 billion.

Although these programs are popular with marketing executives, they create accounting questions. Should revenue be recorded at the time the gift card is sold, or when it is exercised? How should expired gift cards be accounted for? In a recent balance sheet, Best Buy reported unearned revenue related to gift cards of $428 million.

Source: Robert Berner, "Gift Cards: No Gift to Investors," *BusinessWeek* (March 14, 2005), p. 86.

Suppose that Robert Jones purchases a $100 gift card at Best Buy on December 24, 2016, and gives it to his wife, Mary Jones, on December 25, 2016. On January 3, 2017, Mary uses the card to purchase $100 worth of CDs. When do you think Best Buy should recognize revenue and why? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 2 Adjusting Entries for Deferrals

The ledger of Hammond Company, on March 31, 2017, includes these selected accounts before adjusting entries are prepared.

	Debit	Credit
Prepaid Insurance	$ 3,600	
Supplies	2,800	
Equipment	25,000	
Accumulated Depreciation—Equipment		$5,000
Unearned Service Revenue		9,200

An analysis of the accounts shows the following.

1. Insurance expires at the rate of $100 per month.

2. Supplies on hand total $800.

3. The equipment depreciates $200 a month.

4. During March, services were performed for one-half of the unearned service revenue.

Prepare the adjusting entries for the month of March.

Action Plan

- ✔ Make adjusting entries at the end of the period for revenues recognized and expenses incurred in the period.
- ✔ Don't forget to make adjusting entries for deferrals. Failure to adjust for deferrals leads to overstatement of the asset or liability and understatement of the related expense or revenue.

Solution

1. Insurance Expense	100	
Prepaid Insurance		100
(To record insurance expired)		
2. Supplies Expense	2,000	
Supplies		2,000
(To record supplies used)		
3. Depreciation Expense	200	
Accumulated Depreciation—Equipment		200
(To record monthly depreciation)		
4. Unearned Service Revenue	4,600	
Service Revenue		4,600
(To record revenue for services performed)		

Related exercise material: **BE3-2, BE3-3, BE3-4, BE3-5, BE3-6, and DO IT! 3-2.**

LEARNING OBJECTIVE 3

Prepare adjusting entries for accruals.

The second category of adjusting entries is **accruals**. Prior to an accrual adjustment, the revenue account (and the related asset account) or the expense account (and the related liability account) are understated. Thus, the adjusting entry for accruals will **increase both a balance sheet and an income statement account**.

Accrued Revenues

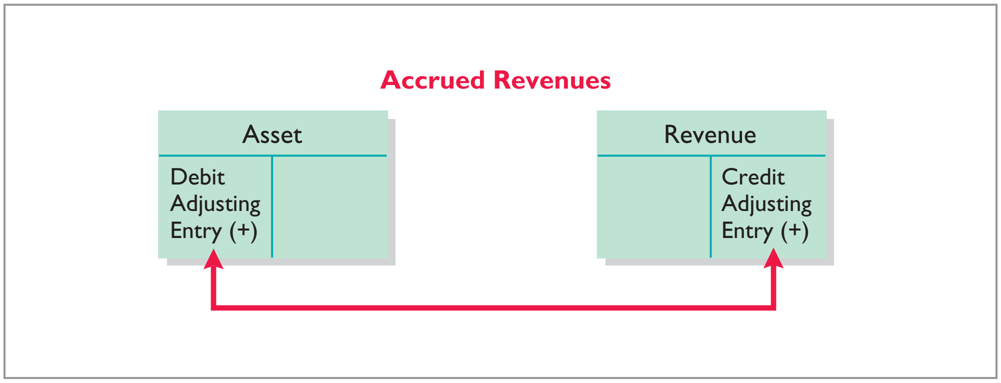
Accrued Revenues

Revenue and receivable are recorded for unbilled services

Revenues for services performed but not yet recorded at the statement date are **accrued revenues**. Accrued revenues may accumulate (accrue) with the passing of time, as in the case of interest revenue. These are unrecorded because the earning of interest does not involve daily transactions. Companies do not record interest revenue on a daily basis because it is often impractical to do so. Accrued revenues also may result from services that have been performed but not yet billed nor collected, as in the case of commissions and fees. These may be unrecorded because only a portion of the total service has been performed and the clients will not be billed until the service has been completed.

An adjusting entry records the receivable that exists at the balance sheet date and the revenue for the services performed during the period. Prior to adjustment, both assets and revenues are understated. As shown in Illustration 3-13, **an adjusting entry for accrued revenues results in an increase (a debit) to an asset account and an increase (a credit) to a revenue account**.

Illustration 3-13
Adjusting entries for accrued revenues



In October, Pioneer Advertising performed services worth $200 that were not billed to clients on or before October 31. Because these services are not billed, they are not recorded. The accrual of unrecorded service revenue increases an asset account, Accounts Receivable. It also increases owner's equity by increasing a revenue account, Service Revenue, as shown in Illustration 3-14.

Illustration 3-14
Adjustment for accrued revenue

Basic Analysis

The asset Accounts Receivable is increased $200; the revenue Service Revenue is increased $200.

Equation Analysis

Assets	=	Liabilities	+	Owner's Equity
Accounts Receivable				Service Revenue
+$200				+$200

Debit–Credit Analysis

Debits increase assets: debit Accounts Receivable $200.
Credits increase revenues: credit Service Revenue $200.

Journal Entry

Oct. 31	Accounts Receivable	200	
	Service Revenue		200
	(To record revenue for services performed)		

Posting

Accounts Receivable		112
Oct. 31 Adj. 200		
Oct. 31 Bal. 200		

Service Revenue		400
	Oct. 3	10,000
	31	400
	31 Adj.	200
	Oct. 31 Bal.	10,600

The asset Accounts Receivable shows that clients owe Pioneer $200 at the balance sheet date. The balance of $10,600 in Service Revenue represents the total revenue for services performed by Pioneer during the month ($10,000 + $400 + $200). **Without the adjusting entry, assets and owner's equity on the balance sheet and revenues and net income on the income statement are understated.**

On November 10, Pioneer receives cash of $200 for the services performed in October and makes the following entry.

Nov. 10	Cash	200	
	Accounts Receivable		200
	(To record cash collected on account)		

A	=	L	+	OE
+200				
−200				

Cash Flows
+200

The company records the collection of the receivables by a debit (increase) to Cash and a credit (decrease) to Accounts Receivable.

Illustration 3-15 summarizes the accounting for accrued revenues.

Equation analyses *summarize the effects of transactions on the three elements of the accounting equation, as well as the effect on cash flows.*

ACCOUNTING FOR ACCRUED REVENUES

Examples	Reason for Adjustment	Accounts Before Adjustment	Adjusting Entry
Interest, rent, services	Services performed but not yet received in cash or recorded.	Assets understated. Revenues understated.	Dr. Assets Cr. Revenues

Illustration 3-15
Accounting for accrued revenues

Accrued Expenses

Expenses incurred but not yet paid or recorded at the statement date are called **accrued expenses**. Interest, taxes, and salaries are common examples of accrued expenses.

Companies make adjustments for accrued expenses to record the obligations that exist at the balance sheet date and to recognize the expenses that apply to the current accounting period. Prior to adjustment, both liabilities and expenses are understated. Therefore, as Illustration 3-16 shows, **an adjusting entry for accrued expenses results in an increase (a debit) to an expense account and an increase (a credit) to a liability account**.

ETHICS NOTE

A report released by Fannie Mae's board of directors stated that improper adjusting entries at the mortgage-finance company resulted in delayed recognition of expenses caused by interest rate changes. The motivation for such accounting apparently was the desire to hit earnings estimates.

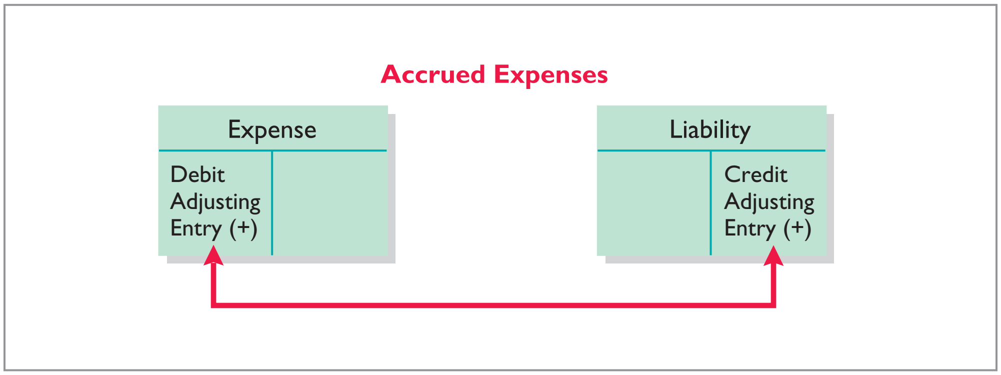


Illustration 3-16
Adjusting entries for accrued expenses

Let's look in more detail at some specific types of accrued expenses, beginning with accrued interest.

ACCRUED INTEREST

Pioneer Advertising signed a three-month note payable in the amount of $5,000 on October 1. The note requires Pioneer to pay interest at an annual rate of 12%.

The amount of the interest recorded is determined by three factors: (1) the face value of the note; (2) the interest rate, which is always expressed as an annual rate; and (3) the length of time the note is outstanding. For Pioneer, the total interest due on the $5,000 note at its maturity date three months in the future is $150 ($\$5{,}000 \times 12\% \times \frac{3}{12}$), or $50 for one month. Illustration 3-17 shows the formula for computing interest and its application to Pioneer for the month of October.

Illustration 3-17
Formula for computing interest

Face Value of Note	×	Annual Interest Rate	×	Time in Terms of One Year	=	Interest
$5,000	×	12%	×	$\frac{1}{12}$	=	$50

Helpful Hint
In computing interest, we express the time period as a fraction of a year.

As Illustration 3-18 shows, the accrual of interest at October 31 increases a liability account, Interest Payable. It also decreases owner's equity by increasing an expense account, Interest Expense.

Interest Expense shows the interest charges for the month of October. Interest Payable shows the amount of interest the company owes at the statement date. Pioneer will not pay the interest until the note comes due at the end of three months. Companies use the Interest Payable account, instead of crediting Notes Payable, to disclose the two different types of obligations—interest and principal—in the accounts and statements. **Without this adjusting entry, liabilities and interest expense are understated, and net income and owner's equity are overstated.**

ACCRUED SALARIES AND WAGES

Companies pay for some types of expenses, such as employee salaries and wages, after the services have been performed. Pioneer Advertising paid salaries and wages on October 26 for its employees' first two weeks of work. The next payment

Basic Analysis

The expense Interest Expense is increased $50; the liability Interest Payable is increased $50.

Equation Analysis

Assets	=	Liabilities	+	Owner's Equity
		Interest Payable		Interest Expense
		+$50		−$50

Debit–Credit Analysis

Debits increase expenses: debit Interest Expense $50.
Credits increase liabilities: credit Interest Payable $50.

Journal Entry

Oct. 31	Interest Expense	50	
	Interest Payable		50
	(To record interest on notes payable)		

Posting

Interest Expense			905
Oct. 31	Adj. 50		
Oct. 31	Bal. 50		

Interest Payable			230
		Oct. 31	Adj. 50
		Oct. 31	Bal. 50

Illustration 3-18
Adjustment for accrued interest

of salaries will not occur until November 9. As Illustration 3-19 shows, three working days remain in October (October 29–31).

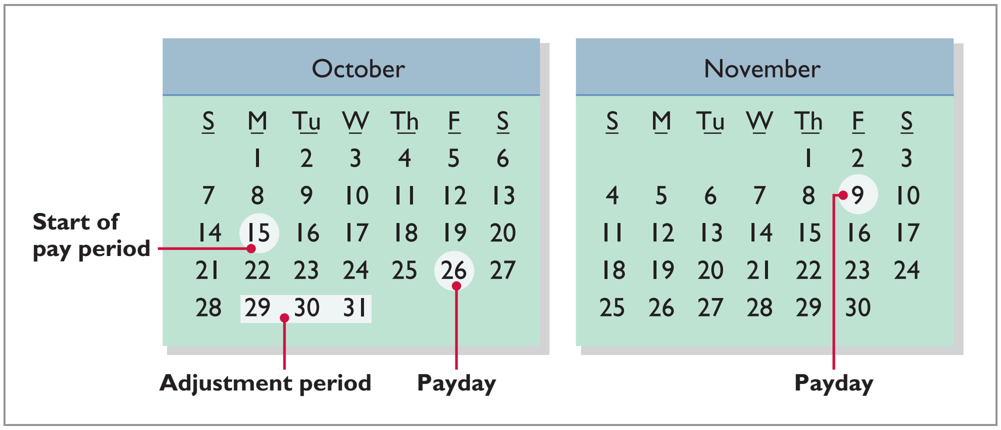


Illustration 3-19
Calendar showing Pioneer's pay periods

At October 31, the salaries and wages for these three days represent an accrued expense and a related liability to Pioneer. The employees receive total salaries and wages of $2,000 for a five-day work week, or $400 per day. Thus, accrued salaries and wages at October 31 are $1,200 ($400 × 3). This accrual increases a liability, Salaries and Wages Payable. It also decreases owner's equity by increasing an expense account, Salaries and Wages Expense, as shown in Illustration 3-20 (page 108).

After this adjustment, the balance in Salaries and Wages Expense of $5,200 (13 days × $400) is the actual salary and wages expense for October. The balance in Salaries and Wages Payable of $1,200 is the amount of the liability for salaries and wages Pioneer owes as of October 31. **Without the $1,200 adjustment for salaries and wages, Pioneer's expenses are understated $1,200 and its liabilities are understated $1,200.**

Pioneer pays salaries and wages every two weeks. Consequently, the next payday is November 9, when the company will again pay total salaries and wages of $4,000. The payment consists of $1,200 of salaries and wages payable at October 31 plus $2,800 of salaries and wages expense for November (7 working days, as shown in the November calendar × $400). Therefore, Pioneer makes the following entry on November 9.

Illustration 3-20
Adjustment for accrued salaries and wages

Basic Analysis	The expense Salaries and Wages Expense is increased $1,200; the liability account Salaries and Wages Payable is increased $1,200.
Equation Analysis	**Assets** = **Liabilities** (Salaries and Wages Payable +$1,200) + **Owner's Equity** (Salaries and Wages Expense −$1,200)
Debit–Credit Analysis	Debits increase expenses: debit Salaries and Wages Expense $1,200. Credits increase liabilities: credit Salaries and Wages Payable $1,200.
Journal Entry	Oct. 31 Salaries and Wages Expense 1,200 Salaries and Wages Payable 1,200 (To record accrued salaries and wages)

Posting

Salaries and Wages Expense 726				
Oct. 26		4,000		
31	**Adj.**	**1,200**		
Oct. 31	Bal.	5,200		

Salaries and Wages Payable 212				
		Oct. 31	**Adj.**	**1,200**
		Oct. 31	Bal.	1,200

A	=	L	+	OE
		−1,200		
				−2,800
−4,000				

Cash Flows
−4,000

Nov. 9	Salaries and Wages Payable	1,200	
	Salaries and Wages Expense	2,800	
	Cash		4,000
	(To record November 9 payroll)		

This entry eliminates the liability for Salaries and Wages Payable that Pioneer recorded in the October 31 adjusting entry, and it records the proper amount of Salaries and Wages Expense for the period between November 1 and November 9.

Illustration 3-21 summarizes the accounting for accrued expenses.

Illustration 3-21
Accounting for accrued expenses

ACCOUNTING FOR ACCRUED EXPENSES

Examples	Reason for Adjustment	Accounts Before Adjustment	Adjusting Entry
Interest, rent, salaries	Expenses have been incurred but not yet paid in cash or recorded.	Expenses understated. Liabilities understated.	Dr. Expenses Cr. Liabilities

People, Planet, and Profit Insight

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Got Junk?

Do you have an old computer or two that you no longer use? How about an old TV that needs replacing? Many people do. Approximately 163,000 computers and televisions become obsolete each day. Yet, in a recent year, only 11% of computers were recycled. It is estimated that 75% of all computers ever sold are sitting in storage somewhere, waiting to be disposed of. Each of these old TVs and computers is loaded with lead, cadmium, mercury, and other toxic chemicals. If you have one of these electronic gadgets, you have a responsibility, and a probable cost, for disposing of it. Companies have the same problem, but their discarded materials may include lead paint, asbestos, and other toxic chemicals.

What accounting issue might this cause for companies? (Go to **WileyPLUS** for this answer and additional questions.)

Summary of Basic Relationships

Illustration 3-22 summarizes the four basic types of adjusting entries. Take some time to study and analyze the adjusting entries. Be sure to note that **each adjusting entry affects one balance sheet account and one income statement account**.

Illustration 3-22
Summary of adjusting entries

Type of Adjustment	Accounts Before Adjustment	Adjusting Entry
Prepaid expenses	Assets overstated. Expenses understated.	Dr. Expenses Cr. Assets or Contra Assets
Unearned revenues	Liabilities overstated. Revenues understated.	Dr. Liabilities Cr. Revenues
Accrued revenues	Assets understated. Revenues understated.	Dr. Assets Cr. Revenues
Accrued expenses	Expenses understated. Liabilities understated.	Dr. Expenses Cr. Liabilities

Illustrations 3-23 (below) and 3-24 (on page 110) show the journalizing and posting of adjusting entries for Pioneer Advertising on October 31. The ledger identifies all adjustments by the reference J2 because they have been recorded on page 2 of the general journal. The company may insert a center caption "Adjusting Entries" between the last transaction entry and the first adjusting entry in the journal. When you review the general ledger in Illustration 3-24, note that the entries highlighted in color are the adjustments.

Illustration 3-23
General journal showing adjusting entries

GENERAL JOURNAL J2

Date	Account Titles and Explanation	Ref.	Debit	Credit
2017	Adjusting Entries			
Oct. 31	Supplies Expense	631	1,500	
	Supplies	126		1,500
	(To record supplies used)			
31	Insurance Expense	722	50	
	Prepaid Insurance	130		50
	(To record insurance expired)			
31	Depreciation Expense	711	40	
	Accumulated Depreciation—Equipment	158		40
	(To record monthly depreciation)			
31	Unearned Service Revenue	209	400	
	Service Revenue	400		400
	(To record revenue for services performed)			
31	Accounts Receivable	112	200	
	Service Revenue	400		200
	(To record revenue for services performed)			
31	Interest Expense	905	50	
	Interest Payable	230		50
	(To record interest on notes payable)			
31	Salaries and Wages Expense	726	1,200	
	Salaries and Wages Payable	212		1,200
	(To record accrued salaries and wages)			

Helpful Hint
(1) Adjusting entries should not involve debits or credits to Cash.
(2) Evaluate whether the adjustment makes sense. For example, an adjustment to recognize supplies used should increase Supplies Expense.
(3) Double-check all computations.
(4) Each adjusting entry affects one balance sheet account and one income statement account.

Illustration 3-24
General ledger after adjustment

GENERAL LEDGER

Cash — No. 101

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1	10,000		10,000
2		J1	1,200		11,200
3		J1		900	10,300
4		J1		600	9,700
20		J1		500	9,200
26		J1		4,000	5,200
31		J1	10,000		15,200

Accounts Receivable — No. 112

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	**Adj. entry**	**J2**	**200**		**200**

Supplies — No. 126

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 5		J1	2,500		2,500
31	**Adj. entry**	**J2**		**1,500**	**1,000**

Prepaid Insurance — No. 130

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 4		J1	600		600
31	**Adj. entry**	**J2**		**50**	**550**

Equipment — No. 157

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1	5,000		5,000

Accumulated Depreciation—Equipment — No. 158

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	**Adj. entry**	**J2**		**40**	**40**

Notes Payable — No. 200

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1		5,000	5,000

Accounts Payable — No. 201

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 5		J1		2,500	2,500

Unearned Service Revenue — No. 209

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 2		J1		1,200	1,200
31	**Adj. entry**	**J2**	**400**		**800**

Salaries and Wages Payable — No. 212

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	**Adj. entry**	**J2**		**1,200**	**1,200**

Interest Payable — No. 230

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	**Adj. entry**	**J2**		**50**	**50**

Owner's Capital — No. 301

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1		10,000	10,000

Owner's Drawings — No. 306

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 20		J1	500		500

Service Revenue — No. 400

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31		J1		10,000	10,000
31	**Adj. entry**	**J2**		**400**	**10,400**
31	**Adj. entry**	**J2**		**200**	**10,600**

Supplies Expense — No. 631

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	**Adj. entry**	**J2**	**1,500**		**1,500**

Depreciation Expense — No. 711

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	**Adj. entry**	**J2**	**40**		**40**

Insurance Expense — No. 722

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	**Adj. entry**	**J2**	**50**		**50**

Salaries and Wages Expense — No. 726

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 26		J1	4,000		4,000
31	**Adj. entry**	**J2**	**1,200**		**5,200**

Rent Expense — No. 729

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 3		J1	900		900

Interest Expense — No. 905

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	**Adj. entry**	**J2**	**50**		**50**

DO IT! 3 Adjusting Entries for Accruals

Micro Computer Services began operations on August 1, 2017. At the end of August 2017, management prepares monthly financial statements. The following information relates to August.

1. At August 31, the company owed its employees $800 in salaries and wages that will be paid on September 1.
2. On August 1, the company borrowed $30,000 from a local bank on a 15-year mortgage. The annual interest rate is 10%.
3. Revenue for services performed but unrecorded for August totaled $1,100.

Prepare the adjusting entries needed at August 31, 2017.

Solution

1. Salaries and Wages Expense	800	
Salaries and Wages Payable		800
(To record accrued salaries)		
2. Interest Expense	250	
Interest Payable		250
(To record accrued interest: $\$30{,}000 \times 10\% \times \frac{1}{12} = \$250$)		
3. Accounts Receivable	1,100	
Service Revenue		1,100
(To record revenue for services performed)		

Related exercise material: **BE3-7, E3-5, E3-6, E3-7, E3-8, E3-9, and DO IT! 3-3.**

Action Plan

✔ Make adjusting entries at the end of the period to recognize revenues for services performed and for expenses incurred.

✔ Don't forget to make adjusting entries for accruals. Adjusting entries for accruals will increase both a balance sheet and an income statement account.

LEARNING OBJECTIVE 4 Describe the nature and purpose of an adjusted trial balance.

After a company has journalized and posted all adjusting entries, it prepares another trial balance from the ledger accounts. This trial balance is called an **adjusted trial balance**. It shows the balances of all accounts, including those adjusted, at the end of the accounting period. The purpose of an adjusted trial balance is to **prove the equality** of the total debit balances and the total credit balances in the ledger after all adjustments. Because the accounts contain all data needed for financial statements, the adjusted trial balance is the **primary basis for the preparation of financial statements**.

Preparing the Adjusted Trial Balance

Illustration 3-25 (page 112) presents the adjusted trial balance for Pioneer Advertising prepared from the ledger accounts in Illustration 3-24. The amounts affected by the adjusting entries are highlighted in color. Compare these amounts to those in the unadjusted trial balance in Illustration 3-3 (page 97). In this comparison, you will see that there are more accounts in the adjusted trial balance as a result of the adjusting entries made at the end of the month.

Illustration 3-25
Adjusted trial balance

PIONEER ADVERTISING
Adjusted Trial Balance
October 31, 2017

	Debit	Credit
Cash	$ 15,200	
Accounts Receivable	**200**	
Supplies	**1,000**	
Prepaid Insurance	**550**	
Equipment	5,000	
Accumulated Depreciation—Equipment		**$ 40**
Notes Payable		5,000
Accounts Payable		2,500
Interest Payable		**50**
Unearned Service Revenue		**800**
Salaries and Wages Payable		**1,200**
Owner's Capital		10,000
Owner's Drawings	500	
Service Revenue		10,600
Salaries and Wages Expense	**5,200**	
Supplies Expense	**1,500**	
Rent Expense	900	
Insurance Expense	**50**	
Interest Expense	**50**	
Depreciation Expense	**40**	
	$30,190	**$30,190**

Preparing Financial Statements

Companies can prepare financial statements directly from the adjusted trial balance. Illustrations 3-26 (page 113) and 3-27 (page 114) present the interrelationships of data in the adjusted trial balance and the financial statements.

As Illustration 3-26 shows, companies prepare the income statement from the revenue and expense accounts. Next, they use the owner's capital and drawings accounts and the net income (or net loss) from the income statement to prepare the owner's equity statement.

PIONEER ADVERTISING
Adjusted Trial Balance
October 31, 2017

Account	Debit	Credit
Cash	$15,200	
Accounts Receivable	200	
Supplies	1,000	
Prepaid Insurance	550	
Equipment	5,000	
Accumulated Depreciation—Equipment		$ 40
Notes Payable		5,000
Accounts Payable		2,500
Unearned Service Revenue		800
Salaries and Wages Payable		1,200
Interest Payable		50
Owner's Capital		**10,000**
Owner's Drawings	**500**	
Service Revenue		**10,600**
Salaries and Wages Expense	**5,200**	
Supplies Expense	**1,500**	
Rent Expense	**900**	
Insurance Expense	**50**	
Interest Expense	**50**	
Depreciation Expense	**40**	
	$30,190	$30,190

PIONEER ADVERTISING
Income Statement
For the Month Ended October 31, 2017

Revenues		
Service revenue		$10,600
Expenses		
Salaries and wages expense	$5,200	
Supplies expense	1,500	
Rent expense	900	
Insurance expense	50	
Interest expense	50	
Depreciation expense	40	
Total expenses		7,740
Net income		$ 2,860

PIONEER ADVERTISING
Owner's Equity Statement
For the Month Ended October 31, 2017

Owner's capital, October 1	$ –0–
Add: Investments	10,000
	10,000
Net income	2,860
	12,860
Owner's drawings	500
Owner's capital, October 31	$12,360

To balance sheet

Illustration 3-26
Preparation of the income statement and owner's equity statement from the adjusted trial balance

As Illustration 3-27 (page 114) shows, companies then prepare the balance sheet from the asset and liability accounts and the ending owner's capital balance as reported in the owner's equity statement.

PIONEER ADVERTISING
Adjusted Trial Balance
October 31, 2017

Account	Debit	Credit
Cash	$15,200	
Accounts Receivable	200	
Supplies	1,000	
Prepaid Insurance	550	
Equipment	5,000	
Accumulated Depreciation—Equipment		$ 40
Notes Payable		5,000
Accounts Payable		2,500
Unearned Service Revenue		800
Salaries and Wages Payable		1,200
Interest Payable		50
Owner's Capital		10,000
Owner's Drawings	500	
Service Revenue		10,600
Salaries and Wages Expense	5,200	
Supplies Expense	1,500	
Rent Expense	900	
Insurance Expense	50	
Interest Expense	50	
Depreciation Expense	40	
	$30,190	$30,190

PIONEER ADVERTISING
Balance Sheet
October 31, 2017

Assets		
Cash		$15,200
Accounts receivable		200
Supplies		1,000
Prepaid insurance		550
Equipment	$5,000	
Less: Accumulated depreciation—equip.	40	4,960
Total assets		$21,910
Liabilities and Owner's Equity		
Liabilities		
Notes payable		$ 5,000
Accounts payable		2,500
Unearned service revenue		800
Salaries and wages payable		1,200
Interest payable		50
Total liabilities		9,550
Owner's equity		
Owner's capital		12,360
Total liabilities and owner's equity		$21,910

Capital balance at Oct. 31 from owner's equity statement in Illustration 3-26

Illustration 3-27
Preparation of the balance sheet from the adjusted trial balance

DO IT! 4 Trial Balance

Skolnick Co. was organized on April 1, 2017. The company prepares quarterly financial statements. The adjusted trial balance amounts at June 30 are shown below.

	Debit		Credit
Cash	$ 6,700	Accumulated Depreciation—Equipment	$ 850
Accounts Receivable	600	Notes Payable	5,000
Prepaid Rent	900	Accounts Payable	1,510
Supplies	1,000	Salaries and Wages Payable	400
Equipment	15,000	Interest Payable	50
Owner's Drawings	600	Unearned Rent Revenue	500
Salaries and Wages Expense	9,400	Owner's Capital	14,000
Rent Expense	1,500	Service Revenue	14,200
Depreciation Expense	850	Rent Revenue	800
Supplies Expense	200		
Utilities Expense	510		
Interest Expense	50		
	$37,310		$37,310

(a) Determine the net income for the quarter April 1 to June 30.
(b) Determine the total assets and total liabilities at June 30, 2017, for Skolnick Co.
(c) Determine the amount of owner's capital at June 30, 2017.

Solution

(a) The net income is determined by adding revenues and subtracting expenses. The net income is computed as follows.

Revenues		
Service revenue	$14,200	
Rent revenue	800	
Total revenues		$15,000
Expenses		
Salaries and wages expense	9,400	
Rent expense	1,500	
Depreciation expense	850	
Utilities expense	510	
Supplies expense	200	
Interest expense	50	
Total expenses		12,510
Net income		$ 2,490

(b) Total assets and liabilities are computed as follows.

Assets			Liabilities	
Cash		$ 6,700	Notes payable	$5,000
Accounts receivable		600	Accounts payable	1,510
Supplies		1,000	Unearned rent revenue	500
Prepaid rent		900		
Equipment	$15,000		Salaries and wages payable	400
Less: Accumulated depreciation—equipment	850	14,150	Interest payable	50
Total assets		$23,350	Total liabilities	$7,460

(c)

Owner's capital, April 1	$ 0
Add: Investments	14,000
Net income	2,490
Less: Owner's drawings	600
Owner's capital, June 30	$15,890

Related exercise material: **BE3-9, BE3-10, E3-11, E3-12, E3-13, and DO IT! 3-4.**

Action Plan

- ✔ In an adjusted trial balance, all asset, liability, revenue, and expense accounts are properly stated.
- ✔ To determine the ending balance in Owner's Capital, add net income and subtract dividends.

LEARNING OBJECTIVE *5

APPENDIX 3A: Prepare adjusting entries for the alternative treatment of deferrals.

In discussing adjusting entries for prepaid expenses and unearned revenues, we illustrated transactions for which companies made the initial entries to balance sheet accounts. In the case of prepaid expenses, the company debited the prepayment to an asset account. In the case of unearned revenue, the company credited a liability account to record the cash received.

Some companies use an alternative treatment. (1) When a company prepays an expense, it debits that amount to an expense account. (2) When it receives payment for future services, it credits the amount to a revenue account. In this appendix, we describe the circumstances that justify such entries and the different adjusting entries that may be required. This alternative treatment of prepaid expenses and unearned revenues has the same effect on the financial statements as the procedures described in the chapter.

Prepaid Expenses

Prepaid expenses become expired costs either through the passage of time (e.g., insurance) or through consumption (e.g., advertising supplies). If at the time of purchase the company expects to consume the supplies before the next financial statement date, **it may choose to debit (increase) an expense account rather than an asset account**. **This alternative treatment is simply more convenient.**

Assume that Pioneer Advertising expects that it will use before the end of the month all of the supplies purchased on October 5. A debit of $2,500 to Supplies Expense (rather than to the asset account Supplies) on October 5 will eliminate the need for an adjusting entry on October 31. At October 31, the Supplies Expense account will show a balance of $2,500, which is the cost of supplies used between October 5 and October 31.

But what if the company does not use all the supplies? For example, what if an inventory of $1,000 of advertising supplies remains on October 31? Obviously, the company would need to make an adjusting entry. Prior to adjustment, the expense account Supplies Expense is overstated $1,000, and the asset account Supplies is understated $1,000. Thus, Pioneer makes the following adjusting entry.

A	=	L	+	OE
+1,000				
				+1,000 Exp

Cash Flows
no effect

Oct. 31	Supplies	1,000	
	Supplies Expense		1,000
	(To record supplies inventory)		

After the company posts the adjusting entry, the accounts show the following.

Illustration 3A-1
Prepaid expenses accounts after adjustment

Supplies

10/31	**Adj.**	**1,000**	

Supplies Expense

10/5		2,500	10/31	**Adj.**	**1,000**
10/31	**Bal.**	**1,500**			

After adjustment, the asset account Supplies shows a balance of $1,000, which is equal to the cost of supplies on hand at October 31. In addition, Supplies Expense shows a balance of $1,500. This is equal to the cost of supplies used between October 5 and October 31. Without the adjusting entry, expenses are overstated and net income is understated by $1,000 in the October income statement. Also, both assets and owner's equity are understated by $1,000 on the October 31 balance sheet.

Illustration 3A-2 compares the entries and accounts for advertising supplies in the two adjustment approaches.

Illustration 3A-2
Adjustment approaches—a comparison

Prepayment Initially Debited to Asset Account (per chapter)				**Prepayment Initially Debited to Expense Account (per appendix)**			
Oct. 5	Supplies	2,500		Oct. 5	Supplies Expense	2,500	
	Accounts Payable		2,500		Accounts Payable		2,500
Oct. 31	Supplies Expense	1,500		Oct. 31	Supplies	1,000	
	Supplies		1,500		Supplies Expense		1,000

After Pioneer posts the entries, the accounts appear as follows.

Illustration 3A-3
Comparison of accounts

(per chapter)

Supplies

10/5		2,500	10/31	**Adj.**	**1,500**
10/31	**Bal.**	**1,000**			

Supplies Expense

10/31	**Adj.**	**1,500**			

(per appendix)

Supplies

10/31	**Adj.**	**1,000**			

Supplies Expense

10/5		2,500	10/31	**Adj.**	**1,000**
10/31	**Bal.**	**1,500**			

Note that the account balances under each alternative are the same at October 31: Supplies $1,000 and Supplies Expense $1,500.

Unearned Revenues

Unearned revenues are recognized as revenue at the time services are performed. Similar to the case for prepaid expenses, companies may credit (increase) a revenue account when they receive cash for future services.

To illustrate, assume that Pioneer Advertising received $1,200 for future services on October 2. Pioneer expects to perform the services before October 31.[1] In such a case, the company credits Service Revenue. If Pioneer in fact performs the service before October 31, no adjustment is needed.

Helpful Hint
The required adjusted balances here are Service Revenue $400 and Unearned Service Revenue $800.

However, if at the statement date Pioneer has not performed $800 of the services, it would make an adjusting entry. Without the entry, the revenue account Service Revenue is overstated $800, and the liability account Unearned Service Revenue is understated $800. Thus, Pioneer makes the following adjusting entry.

Oct. 31	Service Revenue	800	
	Unearned Service Revenue		800
	(To record unearned service revenue)		

A	=	L	+	OE
				−800 Rev
		+800		

Cash Flows
no effect

After Pioneer posts the adjusting entry, the accounts show the following.

Illustration 3A-4
Unearned service revenue accounts after adjustment

Unearned Service Revenue

			10/31	**Adj.**	**800**

Service Revenue

10/31	**Adj.**	**800**	10/2		1,200
			10/31	**Bal.**	**400**

The liability account Unearned Service Revenue shows a balance of $800. This equals the services that will be performed in the future. In addition, the balance in Service Revenue equals the services performed in October. Without the adjusting entry, both revenues and net income are overstated by $800 in the October income statement. Also, liabilities are understated by $800 and owner's equity is overstated by $800 on the October 31 balance sheet.

[1] This example focuses only on the alternative treatment of unearned revenues. For simplicity, we have ignored the entries to Service Revenue pertaining to the immediate recognition of revenue ($10,000) and the adjusting entry for accrued revenue ($200).

Illustration 3A-5 compares the entries and accounts for initially recording unearned service revenue in (1) a liability account or (2) a revenue account.

Illustration 3A-5
Adjustment approaches—a comparison

Unearned Service Revenue Initially Credited to Liability Account (per chapter)				**Unearned Service Revenue Initially Credited to Revenue Account (per appendix)**			
Oct. 2	Cash	1,200		Oct. 2	Cash	1,200	
	Unearned Service Revenue		1,200		Service Revenue		1,200
Oct. 31	Unearned Service Revenue	400		Oct. 31	Service Revenue	800	
	Service Revenue		400		Unearned Service Revenue		800

After Pioneer posts the entries, the accounts appear as follows.

Illustration 3A-6
Comparison of accounts

(per chapter)
Unearned Service Revenue

10/31 **Adj. 400**	10/2 1,200
	10/31 **Bal. 800**

Service Revenue

	10/31 **Adj. 400**

(per appendix)
Unearned Service Revenue

	10/31 **Adj. 800**

Service Revenue

10/31 **Adj. 800**	10/2 1,200
	10/31 **Bal. 400**

Note that the balances in the accounts are the same under the two alternatives: Unearned Service Revenue $800 and Service Revenue $400.

Summary of Additional Adjustment Relationships

Illustration 3A-7
Summary of basic relationships for deferrals

Illustration 3A-7 provides a summary of basic relationships for deferrals.

Type of Adjustment	Reason for Adjustment	Account Balances before Adjustment	Adjusting Entry
1. Prepaid expenses	(a) Prepaid expenses initially recorded in asset accounts have been used.	Assets overstated. Expenses understated.	Dr. Expenses Cr. Assets
	(b) **Prepaid expenses initially recorded in expense accounts have not been used.**	**Assets understated. Expenses overstated.**	**Dr. Assets Cr. Expenses**
2. Unearned revenues	(a) Unearned revenues initially recorded in liability accounts are now recognized as revenue.	Liabilities overstated. Revenues understated.	Dr. Liabilities Cr. Revenues
	(b) **Unearned revenues initially recorded in revenue accounts are still unearned.**	**Liabilities understated. Revenues overstated.**	**Dr. Revenues Cr. Liabilities**

Alternative adjusting entries **do not apply** to accrued revenues and accrued expenses because **no entries occur before companies make these types of adjusting entries**.

LEARNING OBJECTIVE *6

APPENDIX 3B: Discuss financial reporting concepts.

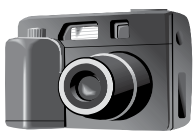
This appendix provides a summary of the concepts in action used in this textbook. In addition, it provides other useful concepts which accountants use as a basis for recording and reporting financial information.

Qualities of Useful Information

Recently, the FASB completed the first phase of a project in which it developed a conceptual framework to serve as the basis for future accounting standards. The framework begins by stating that the primary objective of financial reporting is to provide financial information that is **useful** to investors and creditors for making decisions about providing capital. Useful information should possess two fundamental qualities, relevance and faithful representation, as shown in Illustration 3B-1.

Illustration 3B-1
Fundamental qualities of useful information

Relevance Accounting information has **relevance** if it would make a difference in a business decision. Information is considered relevant if it provides information that has **predictive value**, that is, helps provide accurate expectations about the future, and has **confirmatory value**, that is, confirms or corrects prior expectations. **Materiality** is a company-specific aspect of relevance. An item is material when its **size** makes it likely to influence the decision of an investor or creditor.



Faithful Representation **Faithful representation** means that information accurately depicts what really happened. To provide a faithful representation, information must be **complete** (nothing important has been omitted), **neutral** (is not biased toward one position or another), and **free from error**.

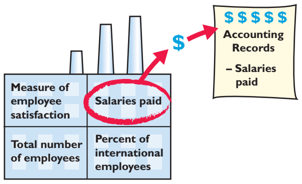
ENHANCING QUALITIES

In addition to the two fundamental qualities, the FASB also describes a number of enhancing qualities of useful information. These include **comparability**, **consistency**, **verifiability**, **timeliness**, and **understandability**. In accounting, **comparability** results when different companies use the same accounting principles. Another characteristic that enhances comparability is consistency. **Consistency** means that a company uses the same accounting principles and methods from year to year. Information is **verifiable** if independent observers, using the same methods, obtain similar results. For accounting information to have relevance, it must be **timely**. That is, it must be available to decision-makers before it loses its capacity to influence decisions. For example, public companies like Google or Best Buy provide their annual reports to investors within 60 days of their year-end. Information has the quality of **understandability** if it is presented in a clear and concise fashion, so that reasonably informed users of that information can interpret it and comprehend its meaning.

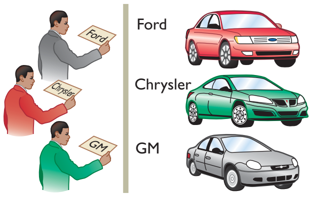
Assumptions in Financial Reporting

To develop accounting standards, the FASB relies on some key assumptions, as shown in Illustration 3B-2 (page 120). These include assumptions about the monetary unit, economic entity, time period, and going concern.

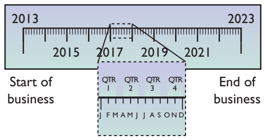
Illustration 3B-2
Key assumptions in financial reporting



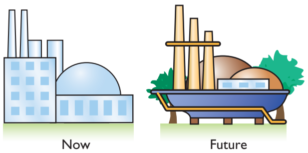
Monetary Unit Assumption The **monetary unit assumption** requires that only those things that can be expressed in money are included in the accounting records. This means that certain important information needed by investors, creditors, and managers, such as customer satisfaction, is not reported in the financial statements.



Economic Entity Assumption The **economic entity assumption** states that every economic entity can be separately identified and accounted for. In order to assess a company's performance and financial position accurately, it is important to not blur company transactions with personal transactions (especially those of its managers) or transactions of other companies.



Time Period Assumption Notice that the income statement, retained earnings statement, and statement of cash flows all cover periods of one year, and the balance sheet is prepared at the end of each year. The **time period assumption** states that the life of a business can be divided into artificial time periods and that useful reports covering those periods can be prepared for the business.



Going Concern Assumption The **going concern assumption** states that the business will remain in operation for the foreseeable future. Of course, many businesses do fail, but in general it is reasonable to assume that the business will continue operating.

Principles in Financial Reporting

MEASUREMENT PRINCIPLES

GAAP generally uses one of two measurement principles, the historical cost principle or the fair value principle. Selection of which principle to follow generally relates to trade-offs between relevance and faithful representation.

HISTORICAL COST PRINCIPLE The **historical cost principle** (or cost principle, discussed in Chapter 1) dictates that companies record assets at their cost. This is true not only at the time the asset is purchased but also over the time the asset is held. For example, if land that was purchased for $30,000 increases in value to $40,000, it continues to be reported at $30,000.

FAIR VALUE PRINCIPLE The **fair value principle** (discussed in Chapter 1) indicates that assets and liabilities should be reported at fair value (the price received to sell an asset or settle a liability). Fair value information may be more useful than historical cost for certain types of assets and liabilities. For example, certain investment securities are reported at fair value because market price information is often readily available for these types of assets. In choosing between cost and fair value, two qualities that make accounting information useful for decision-making are used—relevance and faithful representation. In determining which measurement principle to use, the factual nature of cost figures are weighed versus the relevance of fair value. In general, most assets follow the historical cost principle because fair values may not be representationally faithful. Only in situations where assets are actively traded, such as investment securities, is the fair value principle applied.

REVENUE RECOGNITION PRINCIPLE

The **revenue recognition principle** requires that companies recognize revenue in the accounting period in which the performance obligation is satisfied. As discussed earlier in the chapter, in a service company, revenue is recognized at the time the service is performed. In a merchandising company, the performance obligation is generally satisfied when the goods transfer from the seller to the buyer (discussed in Chapter 5). At this point, the sales transaction is complete and the sales price established.

EXPENSE RECOGNITION PRINCIPLE

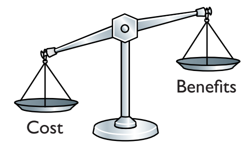
The **expense recognition principle** (often referred to as the matching principle, discussed earlier in the chapter) dictates that efforts (expenses) be matched with results (revenues). Thus, expenses follow revenues.

FULL DISCLOSURE PRINCIPLE

The **full disclosure principle** (discussed in Chapter 11) requires that companies disclose all circumstances and events that would make a difference to financial statement users. If an important item cannot reasonably be reported directly in one of the four types of financial statements, then it should be discussed in notes that accompany the statements.

Cost Constraint

Providing information is costly. In deciding whether companies should be required to provide a certain type of information, accounting standard-setters consider the **cost constraint**. It weighs the cost that companies will incur to provide the information against the benefit that financial statement users will gain from having the information available.



REVIEW AND PRACTICE

LEARNING OBJECTIVES REVIEW

1 Explain the accrual basis of accounting and the reasons for adjusting entries. The time period assumption assumes that the economic life of a business is divided into artificial time periods. Accrual-basis accounting means that companies record events that change a company's financial statements in the periods in which those events occur, rather than in the periods in which the company receives or pays cash.

Companies make adjusting entries at the end of an accounting period. Such entries ensure that companies recognize revenues in the period in which the performance obligation is satisfied and recognize expenses in the period in which they are incurred. The major types of adjusting entries are deferrals (prepaid expenses and unearned revenues) and accruals (accrued revenues and accrued expenses).

2 Prepare adjusting entries for deferrals. Deferrals are either prepaid expenses or unearned revenues. Companies make adjusting entries for deferrals to record the portion of the prepayment that represents the expense incurred or the revenue for services performed in the current accounting period.

3 Prepare adjusting entries for accruals. Accruals are either accrued revenues or accrued expenses. Companies make adjusting entries for accruals to record revenues for services performed and expenses incurred in the current accounting period that have not been recognized through daily entries.

4 Describe the nature and purpose of an adjusted trial balance. An adjusted trial balance shows the balances of all accounts, including those that have been adjusted, at the end of an accounting period. Its purpose is to prove the equality of the total debit balances and total credit balances in the ledger after all adjustments.

***5 Prepare adjusting entries for the alternative treatment of deferrals.** Companies may initially debit prepayments to an expense account. Likewise, they may credit unearned revenues to a revenue account. At the end of the period, these accounts may be overstated. The adjusting entries for prepaid expenses are a debit to an asset account and a credit to an expense account. Adjusting entries for unearned revenues are a debit to a revenue account and a credit to a liability account.

*6 **Discuss financial reporting concepts.** To be judged useful, information should have the primary characteristics of relevance and faithful representation. In addition, it should be comparable, consistent, verifiable, timely, and understandable.

The **monetary unit assumption** requires that companies include in the accounting records only transaction data that can be expressed in terms of money. The **economic entity assumption** states that economic events can be identified with a particular unit of accountability. The **time period assumption** states that the economic life of a business can be divided into artificial time periods and that meaningful accounting reports can be prepared for each period. The **going concern assumption** states that the company will continue in operation long enough to carry out its existing objectives and commitments.

The **historical cost principle** states that companies should record assets at their cost. The **fair value principle** indicates that assets and liabilities should be reported at fair value. The **revenue recognition principle** requires that companies recognize revenue in the accounting period in which the performance obligation is satisfied. The **expense recognition principle** dictates that efforts (expenses) be matched with results (revenues). The **full disclosure principle** requires that companies disclose circumstances and events that matter to financial statement users.

The **cost constraint** weighs the cost that companies incur to provide a type of information against its benefits to financial statement users.

GLOSSARY REVIEW

Accrual-basis accounting Accounting basis in which companies record transactions that change a company's financial statements in the periods in which the events occur. (p. 94).

Accruals Adjusting entries for either accrued revenues or accrued expenses. (p. 96).

Accrued expenses Expenses incurred but not yet paid in cash or recorded. (p. 106).

Accrued revenues Revenues for services performed but not yet received in cash or recorded. (p. 104).

Adjusted trial balance A list of accounts and their balances after the company has made all adjustments. (p. 111).

Adjusting entries Entries made at the end of an accounting period to ensure that companies follow the revenue recognition and expense recognition principles. (p. 96).

Book value The difference between the cost of a depreciable asset and its related accumulated depreciation. (p. 101).

Calendar year An accounting period that extends from January 1 to December 31. (p. 94).

Cash-basis accounting Accounting basis in which companies record revenue when they receive cash and an expense when they pay out cash. (p. 94).

***Comparability** Ability to compare the accounting information of different companies because they use the same accounting principles. (p. 119).

***Consistency** Use of the same accounting principles and methods from year to year within a company. (p. 119).

Contra asset account An account offset against an asset account on the balance sheet. (p. 100).

***Cost constraint** Constraint that weighs the cost that companies will incur to provide the information against the benefit that financial statement users will gain from having the information available. (p. 121).

Deferrals Adjusting entries for either prepaid expenses or unearned revenues. (p. 96).

Depreciation The process of allocating the cost of an asset to expense over its useful life. (p. 100).

***Economic entity assumption** An assumption that every economic entity can be separately identified and accounted for. (p. 120).

Expense recognition principle (matching principle) The principle that companies match efforts (expenses) with accomplishments (revenues). (pp. 95, 121).

***Fair value principle** Assets and liabilities should be reported at fair value (the price received to sell an asset or settle a liability). (p. 120).

***Faithful representation** Information that accurately depicts what really happened. (p. 119).

Fiscal year An accounting period that is one year in length. (p. 94).

***Full disclosure principle** Accounting principle that dictates that companies disclose circumstances and events that make a difference to financial statement users. (p. 121).

***Going concern assumption** The assumption that the company will continue in operation for the foreseeable future. (p. 120).

***Historical cost principle** An accounting principle that states that companies should record assets at their cost. (p. 120).

Interim periods Monthly or quarterly accounting time periods. (p. 94).

***Materiality** A company-specific aspect of relevance. An item is material when its size makes it likely to influence the decision of an investor or creditor. (p. 119).

***Monetary unit assumption** An assumption that requires that only those things that can be expressed in money are included in the accounting records. (p. 120).

Prepaid expenses (prepayments) Expenses paid in cash before they are used or consumed. (p. 98).

***Relevance** The quality of information that indicates the information makes a difference in a decision. (p. 119).

Revenue recognition principle The principle that companies recognize revenue in the accounting period in which the performance obligation is satisfied. (pp. 95, 121).

***Timely** Information that is available to decision-makers before it loses its capacity to influence decisions. (p. 119).

Time period assumption An assumption that accountants can divide the economic life of a business into artificial time periods. (pp. 94, 120).

***Understandability** Information presented in a clear and concise fashion so that users can interpret it and comprehend its meaning. (p. 119).

Unearned revenues A liability recorded for cash received before services are performed. (p. 101).

Useful life The length of service of a long-lived asset. (p. 100).

***Verifiable** The quality of information that occurs when independent observers, using the same methods, obtain similar results. (p. 119).

PRACTICE MULTIPLE-CHOICE QUESTIONS

(LO 1) **1.** The revenue recognition principle states that:
(a) revenue should be recognized in the accounting period in which a performance obligation is satisfied.
(b) expenses should be matched with revenues.
(c) the economic life of a business can be divided into artificial time periods.
(d) the fiscal year should correspond with the calendar year.

(LO 1) **2.** The time period assumption states that:
(a) companies must wait until the calendar year is completed to prepare financial statements.
(b) companies use the fiscal year to report financial information.
(c) the economic life of a business can be divided into artificial time periods.
(d) companies record information in the time period in which the events occur.

(LO 1) **3.** Which of the following statements about the accrual basis of accounting is **false**?
(a) Events that change a company's financial statements are recorded in the periods in which the events occur.
(b) Revenue is recognized in the period in which services are performed.
(c) This basis is in accord with generally accepted accounting principles.
(d) Revenue is recorded only when cash is received, and expense is recorded only when cash is paid.

(LO 1) **4.** The principle or assumption dictating that efforts (expenses) be matched with accomplishments (revenues) is the:
(a) expense recognition principle.
(b) cost assumption.
(c) time period assumption.
(d) revenue recognition principle.

(LO 1) **5.** Adjusting entries are made to ensure that:
(a) expenses are recognized in the period in which they are incurred.
(b) revenues are recorded in the period in which services are performed.
(c) balance sheet and income statement accounts have correct balances at the end of an accounting period.
(d) All the responses above are correct.

6. Each of the following is a major type (or category) of adjusting entries **except**: (LO 1)
(a) prepaid expenses.
(b) accrued revenues.
(c) accrued expenses.
(d) recognized revenues.

7. The trial balance shows Supplies $1,350 and Supplies Expense $0. If $600 of supplies are on hand at the end of the period, the adjusting entry is: (LO 2)

(a)	Supplies	600	
	Supplies Expense		600
(b)	Supplies	750	
	Supplies Expense		750
(c)	Supplies Expense	750	
	Supplies		750
(d)	Supplies Expense	600	
	Supplies		600

8. Adjustments for prepaid expenses: (LO 2)
(a) decrease assets and increase revenues.
(b) decrease expenses and increase assets.
(c) decrease assets and increase expenses.
(d) decrease revenues and increase assets.

9. Accumulated Depreciation is: (LO 2)
(a) a contra asset account.
(b) an expense account.
(c) an owner's equity account.
(d) a liability account.

10. Rivera Company computes depreciation on delivery equipment at $1,000 for the month of June. The adjusting entry to record this depreciation is as follows. (LO 2)

(a)	Depreciation Expense	1,000	
	Accumulated Depreciation—Rivera Company		1,000
(b)	Depreciation Expense	1,000	
	Equipment		1,000
(c)	Depreciation Expense	1,000	
	Accumulated Depreciation—Equipment		1,000
(d)	Equipment Expense	1,000	
	Accumulated Depreciation—Equipment		1,000

11. Adjustments for unearned revenues: (LO 2)
(a) decrease liabilities and increase revenues.
(b) have an assets-and-revenues-account relationship.

(c) increase assets and increase revenues.
(d) decrease revenues and decrease assets.

(LO 3) **12.** Adjustments for accrued revenues:
(a) have a liabilities-and-revenues-account relationship.
(b) have an assets-and-revenues-account relationship.
(c) decrease assets and revenues.
(d) decrease liabilities and increase revenues.

(LO 3) **13.** Anika Wilson earned a salary of $400 for the last week of September. She will be paid on October 1. The adjusting entry for Anika's employer at September 30 is:
(a) No entry is required.

(b) Salaries and Wages Expense	400	
Salaries and Wages Payable		400
(c) Salaries and Wages Expense	400	
Cash		400
(d) Salaries and Wages Payable	400	
Cash		400

(LO 4) **14.** Which of the following statements is **incorrect** concerning the adjusted trial balance?
(a) An adjusted trial balance proves the equality of the total debit balances and the total credit balances in the ledger after all adjustments are made.
(b) The adjusted trial balance provides the primary basis for the preparation of financial statements.
(c) The adjusted trial balance lists the account balances segregated by assets and liabilities.
(d) The adjusted trial balance is prepared after the adjusting entries have been journalized and posted.

***15.** The trial balance shows Supplies $0 and Supplies Expense $1,500. If $800 of supplies are on hand at the end of the period, the adjusting entry is: (LO 5)
(a) debit Supplies $800 and credit Supplies Expense $800.
(b) debit Supplies Expense $800 and credit Supplies $800.
(c) debit Supplies $700 and credit Supplies Expense $700.
(d) debit Supplies Expense $700 and credit Supplies $700.

***16.** Neutrality is an ingredient of: (LO 6)

	Faithful Representation	Relevance
(a)	Yes	Yes
(b)	No	No
(c)	Yes	No
(d)	No	Yes

***17.** Which item is a constraint in financial accounting? (LO 6)
(a) Comparability.
(b) Materiality.
(c) Cost.
(d) Consistency.

Solutions

1. (a) Revenue should be recognized in the accounting period in which a performance obligation is satisfied. The other choices are incorrect because (b) defines the expense recognition principle, (c) describes the time period assumption, and (d) a company's fiscal year does not need to correspond with the calendar year.

2. (c) The economic life of a business can be divided into artificial time periods. The other choices are incorrect because (a) companies report their activities on a more frequent basis and not necessarily based on a calendar year; (b) companies report financial information more frequently than annually, such as monthly or quarterly, in order to evaluate results of operations; and (d) describes accrual-basis accounting.

3. (d) Under the accrual basis of accounting, revenue is recognized when the performance obligation is satisfied, not when cash is received, and expense is recognized when incurred, not when cash is paid. The other choices are all true statements.

4. (a) The expense recognition principle dictates that expenses be matched with revenues. The other choices are incorrect because (b) there is no cost assumption, but the historical cost principle states that assets should be recorded at their cost; (c) the time period assumption states that the economic life of a business can be divided into artificial time periods; and (d) the revenue recognition principle indicates that revenue should be recognized in the accounting period in which a performance obligation is satisfied.

5. (d) Adjusting entries are made for the reasons noted in choices (a), (b), and (c). The other choices are true statements, but (d) is the better answer.

6. (d) Unearned revenues, not recognized revenues, are one of the major categories of adjusting entries. The other choices all list one of the major categories of adjusting entries.

7. (c) Debiting Supplies Expense for $750 and crediting Supplies for $750 will decrease Supplies and increase Supplies Expense. The other choices are incorrect because (a) will increase Supplies and decrease Supplies Expense and also for the wrong amounts, (b) will increase Supplies and decrease Supplies Expense, and (d) will cause Supplies to have an incorrect balance of $750 ($1,350 − $600) and Supplies Expense to have an incorrect balance of $600 ($0 + $600).

8. (c) Adjustments for prepaid expenses decrease assets and increase expenses. The other choices are incorrect because an adjusting entry for prepaid expenses (a) increases expenses, not revenues; (b) increases, not decreases, expenses and decreases, not increases, assets; and (d) increases expenses, not decreases, revenues and decreases, not increases, assets.

9. (a) Accumulated Depreciation is a contra asset account; it is offset against an asset account on the balance sheet. The other choices are incorrect because Accumulated Depreciation is not (b) an expense account nor located on the income statement, (c) an owner's equity account, or (d) a liability account.

10. (c) The adjusting entry is to debit Depreciation Expense and credit Accumulated Depreciation—Equipment. The other choices are incorrect because (a) the contra asset account title includes the asset being depreciated, not the company name; (b) the credit should be to the contra asset account, not directly to the asset; and (d) the debit for this entry should be Depreciation Expense, not Equipment Expense.

11. (a) Adjustments for unearned revenues will consist of a debit (decrease) to unearned revenues (a liability) and a credit (increase) to a revenue account. Choices (b), (c), and (d) are incorrect because adjustments for unearned revenues will increase revenues but will have no effect on assets.

12. (b) Adjustments for accrued revenues will have an assets-and-revenues-account relationship. Choices (a) and (d) are incorrect because adjustments for accrued revenues have no effect on liabilities. Choice (c) is incorrect because these adjustments will increase, not decrease, both assets and revenues.

13. (b) The adjusting entry should be to debit Salaries and Wages Expense for $400 and credit Salaries and Wages Payable for $400. The other choices are incorrect because (a) if an adjusting entry is not made, the amount of money owed (liability) that is shown on the balance sheet will be understated and the amount of salaries and wages expense will also be understated; (c) the credit account is incorrect as adjusting entries never affect cash; and (d) the debit account should be Salaries and Wages Expense and the credit account should be Salaries and Wages Payable. Adjusting entries never affect cash.

14. (c) The accounts on the trial balance can be segregated by the balance in the account—either debit or credit—not whether they are assets or liabilities. All accounts in the ledger are included in the adjusted trial balance, not just assets and liabilities. The other choices are all true statements.

***15. (a)** This adjusting entry correctly states the Supplies account at $800 ($0 + $800) and the Supplies Expense account at $700 ($1,500 − $800). The other choices are incorrect because (b) will cause the Supplies account to have a credit balance (assets have a normal debit balance) and the Supplies Expense account to be stated at $2,300, which is too high; (c) will result in a $700 balance in the Supplies account ($100 too low) and an $800 balance in the Supplies Expense account ($100 too high); and (d) will cause the Supplies account to have a credit balance (assets have a normal debit balance) and the Supplies Expense account to be stated at $2,200, which is too high.

***16. (c)** Neutrality is one of the enhancing qualities that makes information more representationally faithful, not relevant. Therefore, choices (a), (b), and (d) are incorrect.

***17. (c)** Cost is a constraint in financial accounting. The other choices are all enhancing qualities of useful information.

PRACTICE EXERCISES

Prepare adjusting entries. **(LO 2, 3)**

1. Evan Watts, D.D.S., opened a dental practice on January 1, 2017. During the first month of operations, the following transactions occurred.

1. Watts performed services for patients totaling $2,400. These services have not yet been recorded.
2. Utility expenses incurred but not paid prior to January 31 totaled $400.
3. Purchased dental equipment on January 1 for $80,000, paying $20,000 in cash and signing a $60,000, 3-year note payable. The equipment depreciates $500 per month. Interest is $600 per month.
4. Purchased a one-year malpractice insurance policy on January 1 for $12,000.
5. Purchased $2,600 of dental supplies. On January 31, determined that $900 of supplies were on hand.

Instructions

Prepare the adjusting entries on January 31. Account titles are Accumulated Depreciation—Equipment, Depreciation Expense, Service Revenue, Accounts Receivable, Insurance Expense, Interest Expense, Interest Payable, Prepaid Insurance, Supplies, Supplies Expense, Utilities Expense, and Utilities Payable.

Solution

1.	JANUARY 31		
Jan. 31	Accounts Receivable	2,400	
	Service Revenue		2,400
	Utilities Expense	400	
	Utilities Payable		400
	Depreciation Expense	500	
	Accumulated Depreciation—Equipment		500
	Interest Expense	600	
	Interest Payable		600
	Insurance Expense ($12,000 ÷ 12)	1,000	
	Prepaid Insurance		1,000
	Supplies Expense ($2,600 − $900)	1,700	
	Supplies		1,700

Prepare correct income statement.

(LO 2, 3, 4)

2. The income statement of Venden Co. for the month of July shows net income of $4,000 based on Service Revenue $8,700, Salaries and Wages Expense $2,500, Supplies Expense $1,700, and Utilities Expense $500. In reviewing the statement, you discover the following.

1. Insurance expired during July of $700 was omitted.
2. Supplies expense includes $250 of supplies that are still on hand at July 31.
3. Depreciation on equipment of $300 was omitted.
4. Accrued but unpaid wages at July 31 of $400 were not included.
5. Services performed but unrecorded totaled $650.

Instructions

Prepare a correct income statement for July 2017.

Solution

2.

VENDEN CO.
Income Statement
For the Month Ended July 31, 2017

Revenues		
Service revenue ($8,700 + $650)		$9,350
Expenses		
Salaries and wages expense ($2,500 + $400)	$2,900	
Supplies expense ($1,700 − $250)	1,450	
Utilities expense	500	
Insurance expense	700	
Depreciation expense	300	
Total expenses		5,850
Net income		$3,500

PRACTICE PROBLEM

Prepare adjusting entries from selected data.

(LO 2, 3)

The Green Thumb Lawn Care Company began operations on April 1. At April 30, the trial balance shows the following balances for selected accounts.

Prepaid Insurance	$ 3,600
Equipment	28,000
Notes Payable	20,000
Unearned Service Revenue	4,200
Service Revenue	1,800

Analysis reveals the following additional data.

1. Prepaid insurance is the cost of a 2-year insurance policy, effective April 1.
2. Depreciation on the equipment is $500 per month.
3. The note payable is dated April 1. It is a 6-month, 12% note.
4. Seven customers paid for the company's 6-month lawn service package of $600 beginning in April. The company performed services for these customers in April.
5. Lawn services performed for other customers but not recorded at April 30 totaled $1,500.

Instructions

Prepare the adjusting entries for the month of April. Show computations.

Solution

GENERAL JOURNAL					J1
Date		**Account Titles and Explanation**	**Ref.**	**Debit**	**Credit**
		Adjusting Entries			
Apr.	30	Insurance Expense		150	
		Prepaid Insurance			150
		(To record insurance expired: $3,600 ÷ 24 = $150 per month)			
	30	Depreciation Expense		500	
		Accumulated Depreciation—Equipment			500
		(To record monthly depreciation)			
	30	Interest Expense		200	
		Interest Payable			200
		(To record interest on notes payable: $20,000 × 12% × 1/12 = $200)			
	30	Unearned Service Revenue		700	
		Service Revenue			700
		(To record revenue for services performed: $600 ÷ 6 = $100; $100 per month × 7 = $700)			
	30	Accounts Receivable		1,500	
		Service Revenue			1,500
		(To record revenue for services performed)			

NOTE: All asterisked Questions, Exercises, and Problems relate to material in the appendices to the chapter.

QUESTIONS

1. (a) How does the time period assumption affect an accountant's analysis of business transactions?
   (b) Explain the terms fiscal year, calendar year, and interim periods.
2. Define two generally accepted accounting principles that relate to adjusting the accounts.
3. Susan Hardy, a lawyer, accepts a legal engagement in March, performs the work in April, and is paid in May. If Hardy's law firm prepares monthly financial statements, when should it recognize revenue from this engagement? Why?
4. Why do accrual-basis financial statements provide more useful information than cash-basis statements?
5. In completing the engagement in Question 3, Hardy pays no costs in March, $2,000 in April, and $2,500 in May (incurred in April). How much expense should the firm deduct from revenues in the month when it recognizes the revenue? Why?
6. "Adjusting entries are required by the historical cost principle of accounting." Do you agree? Explain.
7. Why may a trial balance not contain up-to-date and complete financial information?
8. Distinguish between the two categories of adjusting entries, and identify the types of adjustments applicable to each category.
9. What is the debit/credit effect of a prepaid expense adjusting entry?
10. "Depreciation is a valuation process that results in the reporting of the fair value of the asset." Do you agree? Explain.
11. Explain the differences between depreciation expense and accumulated depreciation.
12. G. Phillips Company purchased equipment for $18,000. By the current balance sheet date, $6,000 had been depreciated. Indicate the balance sheet presentation of the data.
13. What is the debit/credit effect of an unearned revenue adjusting entry?
14. A company fails to recognize revenue for services performed but not yet received in cash or recorded. Which of the following accounts are involved in the adjusting entry: (a) asset, (b) liability, (c) revenue, or (d) expense? For the accounts selected, indicate whether they would be debited or credited in the entry.
15. A company fails to recognize an expense incurred but not paid. Indicate which of the following accounts is debited and which is credited in the adjusting entry: (a) asset, (b) liability, (c) revenue, or (d) expense.
16. A company makes an accrued revenue adjusting entry for $900 and an accrued expense adjusting entry for

$700. How much was net income understated prior to these entries? Explain.

17. On January 9, a company pays $5,000 for salaries and wages of which $2,000 was reported as Salaries and Wages Payable on December 31. Give the entry to record the payment.
18. For each of the following items before adjustment, indicate the type of adjusting entry (prepaid expense, unearned revenue, accrued revenue, or accrued expense) that is needed to correct the misstatement. If an item could result in more than one type of adjusting entry, indicate each of the types.
    (a) Assets are understated.
    (b) Liabilities are overstated.
    (c) Liabilities are understated.
    (d) Expenses are understated.
    (e) Assets are overstated.
    (f) Revenue is understated.
19. One-half of the adjusting entry is given below. Indicate the account title for the other half of the entry.
    (a) Salaries and Wages Expense is debited.
    (b) Depreciation Expense is debited.
    (c) Interest Payable is credited.
    (d) Supplies is credited.
    (e) Accounts Receivable is debited.
    (f) Unearned Service Revenue is debited.
20. "An adjusting entry may affect more than one balance sheet or income statement account." Do you agree? Why or why not?
21. Why is it possible to prepare financial statements directly from an adjusted trial balance?

*22. Dashan Company debits Supplies Expense for all purchases of supplies and credits Rent Revenue for all advanced rentals. For each type of adjustment, give the adjusting entry.

*23. (a) What is the primary objective of financial reporting?
    (b) Identify the characteristics of useful accounting information.

*24. Dan Fineman, the president of King Company, is pleased. King substantially increased its net income in 2017 while keeping its unit inventory relatively the same. Howard Gross, chief accountant, cautions Dan, however. Gross says that since King changed its method of inventory valuation, there is a consistency problem and it is difficult to determine whether King is better off. Is Gross correct? Why or why not?

*25. What is the distinction between comparability and consistency?

*26. Describe the constraint inherent in the presentation of accounting information.

*27. Quinn Becker is president of Better Books. She has no accounting background. Becker cannot understand why fair value is not used as the basis for all accounting measurement and reporting. Discuss.

*28. What is the economic entity assumption? Give an example of its violation.

BRIEF EXERCISES

Indicate why adjusting entries are needed.
(LO 1)

BE3-1 The ledger of Althukair Company includes the following accounts. Explain why each account may require adjustment.

(a) Prepaid Insurance.
(b) Depreciation Expense.
(c) Unearned Service Revenue.
(d) Interest Payable.

Identify the major types of adjusting entries.
(LO 1, 2)

BE3-2 Kee Company accumulates the following adjustment data at December 31. Indicate (a) the type of adjustment (prepaid expense, accrued revenue, and so on), and (b) the status of accounts before adjustment (overstated or understated).

1. Supplies of $100 are on hand.
2. Services performed but not recorded total $900.
3. Interest of $200 has accumulated on a note payable.
4. Rent collected in advance totaling $650 has been earned.

Prepare adjusting entry for supplies.
(LO 2)

BE3-3 Schramel Advertising Company's trial balance at December 31 shows Supplies $6,700 and Supplies Expense $0. On December 31, there are $2,100 of supplies on hand. Prepare the adjusting entry at December 31, and using T-accounts, enter the balances in the accounts, post the adjusting entry, and indicate the adjusted balance in each account.

Prepare adjusting entry for depreciation.
(LO 2)

BE3-4 At the end of its first year, the trial balance of Bronowski Company shows Equipment $30,000 and zero balances in Accumulated Depreciation—Equipment and Depreciation Expense. Depreciation for the year is estimated to be $4,000. Prepare the adjusting entry for depreciation at December 31, post the adjustments to T-accounts, and indicate the balance sheet presentation of the equipment at December 31.

Prepare adjusting entry for prepaid expense.
(LO 2)

BE3-5 On July 1, 2017, Major Co. pays $15,120 to Cruz Insurance Co. for a 3-year insurance contract. Both companies have fiscal years ending December 31. For Major Co., journalize and post the entry on July 1 and the adjusting entry on December 31.

BE3-6 Using the data in BE3-5, journalize and post the entry on July 1 and the adjusting entry on December 31 for Cruz Insurance Co. Cruz uses the accounts Unearned Service Revenue and Service Revenue.

Prepare adjusting entry for unearned revenue.

(LO 2)

BE3-7 The bookkeeper for Abduli Company asks you to prepare the following accrued adjusting entries at December 31.

Prepare adjusting entries for accruals.

(LO 3)

1. Interest on notes payable of $400 is accrued.
2. Services performed but not recorded total $2,300.
3. Salaries earned by employees of $900 have not been recorded.

Use the following account titles: Service Revenue, Accounts Receivable, Interest Expense, Interest Payable, Salaries and Wages Expense, and Salaries and Wages Payable.

BE3-8 The trial balance of Obenauf Company includes the following balance sheet accounts, which may require adjustment. For each account that requires adjustment, indicate (a) the type of adjusting entry (prepaid expense, unearned revenue, accrued revenue, or accrued expense) and (b) the related account in the adjusting entry.

Analyze accounts in an unadjusted trial balance.

(LO 1, 2, 3)

Accounts Receivable	Interest Payable
Prepaid Insurance	Unearned Service Revenue
Accumulated Depreciation—Equipment	

BE3-9 The adjusted trial balance of Wilder Company at December 31, 2017, includes the following accounts: Owner's Capital $15,600, Owner's Drawings $7,000, Service Revenue $39,000, Salaries and Wages Expense $16,000, Insurance Expense $2,000, Rent Expense $4,000, Supplies Expense $1,500, and Depreciation Expense $1,300. Prepare an income statement for the year.

Prepare an income statement from an adjusted trial balance.

(LO 4)

BE3-10 Partial adjusted trial balance data for Wilder Company is presented in BE3-9. The balance in Owner's Capital is the balance as of January 1. Prepare an owner's equity statement for the year assuming net income is $14,200 for the year.

Prepare an owner's equity statement from an adjusted trial balance.

(LO 4)

***BE3-11** Eckholm Company records all prepayments in income statement accounts. At April 30, the trial balance shows Supplies Expense $2,800, Service Revenue $9,200, and zero balances in related balance sheet accounts. Prepare the adjusting entries at April 30 assuming (a) $400 of supplies on hand and (b) $3,000 of service revenue should be reported as unearned.

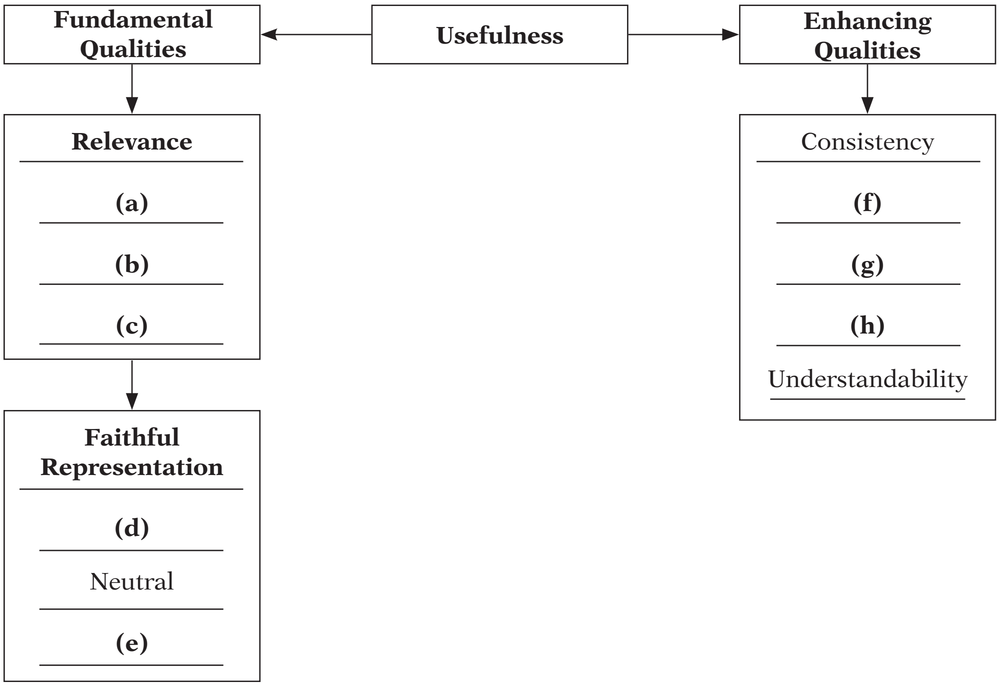
Prepare adjusting entries under alternative treatment of deferrals.

(LO 5)

***BE3-12** The accompanying chart shows the qualitative characteristics of useful accounting information. Fill in the blanks.

Identify characteristics of useful information.

(LO 6)



Identify characteristics of useful information.
(LO 6)

***BE3-13** Given the characteristics of useful accounting information, complete each of the following statements.

(a) For information to be _____, it should have predictive value, confirmatory value, and be material.
(b) _____ is the quality of information that gives assurance that the information accurately depicts what really happened.
(c) _____ means using the same accounting principles and methods from year to year within a company.

Identify characteristics of useful information.
(LO 6)

***BE3-14** Here are some qualitative characteristics of useful accounting information:

1. Predictive value.	3. Verifiable.
2. Neutral.	4. Timely.

Match each qualitative characteristic to one of the following statements.

________ (a) Accounting information should help provide accurate expectations about future events.
________ (b) Accounting information cannot be selected, prepared, or presented to favor one set of interested users over another.
________ (c) The quality of information that occurs when independent observers, using the same methods, obtain similar results.
________ (d) Accounting information must be available to decision-makers before it loses its capacity to influence their decisions.

Define full disclosure principle.
(LO 6)

***BE3-15** Select the response that completes the following statement correctly. The full disclosure principle dictates that:

(a) financial statements should disclose all assets at their cost.
(b) financial statements should disclose only those events that can be measured in currency.
(c) financial statements should disclose all events and circumstances that would matter to users of financial statements.
(d) financial statements should not be relied on unless an auditor has expressed an unqualified opinion on them.

DO IT! Exercises

Identify timing concepts.
(LO 1)

DO IT! 3-1 Several timing concepts are discussed on pages 94–95. A list of concepts is provided below in the left column, with a description of the concept in the right column. There are more descriptions provided than concepts. Match the description of the concept to the concept.

1. ____ Cash-basis accounting.
2. ____ Fiscal year.
3. ____ Revenue recognition principle.
4. ____ Expense recognition principle.

(a) Monthly and quarterly time periods.
(b) Accountants divide the economic life of a business into artificial time periods.
(c) Efforts (expenses) should be matched with accomplishments (revenues).
(d) Companies record revenues when they receive cash and record expenses when they pay out cash.
(e) An accounting time period that is one year in length.
(f) An accounting time period that starts on January 1 and ends on December 31.
(g) Companies record transactions in the period in which the events occur.
(h) Recognize revenue in the accounting period in which a performance obligation is satisfied.

Prepare adjusting entries for deferrals.
(LO 2)

DO IT! 3-2 The ledger of Jahnke, Inc. on March 31, 2017, includes the following selected accounts before adjusting entries.

	Debit	Credit
Prepaid Insurance	2,400	
Supplies	2,500	
Equipment	30,000	
Unearned Service Revenue		9,000

An analysis of the accounts shows the following.

1. Insurance expires at the rate of $300 per month.
2. Supplies on hand total $1,100.
3. The equipment depreciates $480 per month.
4. During March, services were performed for two-fifths of the unearned service revenue.

Prepare the adjusting entries for the month of March.

Prepare adjusting entries for accruals. (LO 3)

DO IT! 3-3 Fiske Computer Services began operations in July 2017. At the end of the month, the company prepares monthly financial statements. It has the following information for the month.

1. At July 31, the company owed employees $1,300 in salaries that the company will pay in August.
2. On July 1, the company borrowed $20,000 from a local bank on a 10-year note. The annual interest rate is 6%.
3. Service revenue unrecorded in July totaled $2,400.

Prepare the adjusting entries needed at July 31, 2017.

Calculate amounts from trial balance. (LO 4)

DO IT! 3-4 Yang Co. was organized on April 1, 2017. The company prepares quarterly financial statements. The adjusted trial balance amounts at June 30 are shown below.

	Debit		Credit
Cash	$ 5,360	Accumulated Depreciation—Equipment	$ 700
Accounts Receivable	480	Notes Payable	4,000
Prepaid Rent	720	Accounts Payable	790
Supplies	920	Salaries and Wages Payable	300
Equipment	12,000	Interest Payable	40
Owner's Drawings	500	Unearned Rent Revenue	400
Salaries and Wages Expense	7,400	Owner's Capital	11,200
Rent Expense	1,200	Service Revenue	11,360
Depreciation Expense	700	Rent Revenue	1,100
Supplies Expense	160		$29,890
Utilities Expense	410		
Interest Expense	40		
	$29,890		

(a) Determine the net income for the quarter April 1 to June 30.
(b) Determine the total assets and total liabilities at June 30, 2017, for Yang Company.
(c) Determine the amount that appears for Owner's Capital at June 30, 2017.

EXERCISES

Explain the time period assumption. (LO 1)

E3-1 Chloe Davis has prepared the following list of statements about the time period assumption.

1. Adjusting entries would not be necessary if a company's life were not divided into artificial time periods.
2. The IRS requires companies to file annual tax returns.
3. Accountants divide the economic life of a business into artificial time periods, but each transaction affects only one of these periods.
4. Accounting time periods are generally a month, a quarter, or a year.
5. A time period lasting one year is called an interim period.
6. All fiscal years are calendar years, but not all calendar years are fiscal years.

Instructions
Identify each statement as true or false. If false, indicate how to correct the statement.

Distinguish between cash and accrual basis of accounting.
(LO 1)

E3-2 On numerous occasions, proposals have surfaced to put the federal government on the accrual basis of accounting. This is no small issue. If this basis were used, it would mean that billions in unrecorded liabilities would have to be booked, and the federal deficit would increase substantially.

Instructions
(a) What is the difference between accrual-basis accounting and cash-basis accounting?
(b) Why would politicians prefer the cash basis over the accrual basis?
(c) Write a letter to your senator explaining why the federal government should adopt the accrual basis of accounting.

Compute cash and accrual accounting income.
(LO 1)

E3-3 Carillo Industries collected $108,000 from customers in 2017. Of the amount collected, $25,000 was for services performed in 2016. In addition, Carillo performed services worth $36,000 in 2017, which will not be collected until 2018.

Carillo Industries also paid $72,000 for expenses in 2017. Of the amount paid, $30,000 was for expenses incurred on account in 2016. In addition, Carillo incurred $42,000 of expenses in 2017, which will not be paid until 2018.

Instructions
(a) Compute 2017 cash-basis net income.
(b) Compute 2017 accrual-basis net income.

Identify the type of adjusting entry needed.
(LO 1, 2, 3)

E3-4 Hong Corporation encounters the following situations:

1. Hong collects $1,300 from a customer in 2017 for services to be performed in 2018.
2. Hong incurs utility expense which is not yet paid in cash or recorded.
3. Hong's employees worked 3 days in 2017 but will not be paid until 2018.
4. Hong performs services for customers but has not yet received cash or recorded the transaction.
5. Hong paid $2,400 rent on December 1 for the 4 months starting December 1.
6. Hong received cash for future services and recorded a liability until the service was performed.
7. Hong performed consulting services for a client in December 2017. On December 31, it had not billed the client for services provided of $1,200.
8. Hong paid cash for an expense and recorded an asset until the item was used up.
9. Hong purchased $900 of supplies in 2017; at year-end, $400 of supplies remain unused.
10. Hong purchased equipment on January 1, 2017; the equipment will be used for 5 years.
11. Hong borrowed $10,000 on October 1, 2017, signing an 8% one-year note payable.

Instructions
Identify what type of adjusting entry (prepaid expense, unearned revenue, accrued expense, or accrued revenue) is needed in each situation at December 31, 2017.

Prepare adjusting entries from selected data.
(LO 2, 3)

E3-5 Devin Wolf Company has the following balances in selected accounts on December 31, 2017.

Accounts Receivable	$ –0–
Accumulated Depreciation—Equipment	–0–
Equipment	7,000
Interest Payable	–0–
Notes Payable	10,000
Prepaid Insurance	2,100
Salaries and Wages Payable	–0–
Supplies	2,450
Unearned Service Revenue	30,000

All the accounts have normal balances. The information below has been gathered at December 31, 2017.

1. Devin Wolf Company borrowed $10,000 by signing a 9%, one-year note on September 1, 2017.

2. A count of supplies on December 31, 2017, indicates that supplies of $900 are on hand.
3. Depreciation on the equipment for 2017 is $1,000.
4. Devin Wolf Company paid $2,100 for 12 months of insurance coverage on June 1, 2017.
5. On December 1, 2017, Devin Wolf collected $32,000 for consulting services to be performed from December 1, 2017, through March 31, 2018.
6. Devin Wolf performed consulting services for a client in December 2017. The client will be billed $4,200.
7. Devin Wolf Company pays its employees total salaries of $9,000 every Monday for the preceding 5-day week (Monday through Friday). On Monday, December 29, employees were paid for the week ending December 26. All employees worked the last 3 days of 2017.

Instructions
Prepare adjusting entries for the seven items described above.

E3-6 Zaragoza Company accumulates the following adjustment data at December 31.

Identify types of adjustments and account relationships.

(LO 2, 3, 4)

1. Services performed but not recorded total $1,000.
2. Supplies of $300 have been used.
3. Utility expenses of $225 are unpaid.
4. Services related to unearned service revenue of $260 were performed.
5. Salaries of $800 are unpaid.
6. Prepaid insurance totaling $350 has expired.

Instructions
For each of the above items indicate the following.

(a) The type of adjustment (prepaid expense, unearned revenue, accrued revenue, or accrued expense).
(b) The status of accounts before adjustment (overstatement or understatement).

E3-7 The ledger of Passehl Rental Agency on March 31 of the current year includes the selected accounts, shown below, before adjusting entries have been prepared.

Prepare adjusting entries from selected account data.

(LO 2, 3)

	Debit	Credit
Prepaid Insurance	$ 3,600	
Supplies	2,800	
Equipment	25,000	
Accumulated Depreciation—Equipment		$ 8,400
Notes Payable		20,000
Unearned Rent Revenue		10,200
Rent Revenue		60,000
Interest Expense	–0–	
Salaries and Wages Expense	14,000	

An analysis of the accounts shows the following.

1. The equipment depreciates $400 per month.
2. One-third of the unearned rent revenue was earned during the quarter.
3. Interest of $500 is accrued on the notes payable.
4. Supplies on hand total $750.
5. Insurance expires at the rate of $300 per month.

Instructions
Prepare the adjusting entries at March 31, assuming that adjusting entries are made **quarterly**. Additional accounts are Depreciation Expense, Insurance Expense, Interest Payable, and Supplies Expense.

E3-8 Meghan Lindh, D.D.S., opened a dental practice on January 1, 2017. During the first month of operations, the following transactions occurred.

Prepare adjusting entries.

(LO 2, 3)

1. Performed services for patients who had dental plan insurance. At January 31, $875 of such services were performed but not yet recorded.
2. Utility expenses incurred but not paid prior to January 31 totaled $650.

3. Purchased dental equipment on January 1 for $80,000, paying $20,000 in cash and signing a $60,000, 3-year note payable. The equipment depreciates $400 per month. Interest is $500 per month.
4. Purchased a one-year malpractice insurance policy on January 1 for $24,000.
5. Purchased $1,600 of dental supplies. On January 31, determined that $400 of supplies were on hand.

Instructions
Prepare the adjusting entries on January 31. Account titles are Accumulated Depreciation—Equipment, Depreciation Expense, Service Revenue, Accounts Receivable, Insurance Expense, Interest Expense, Interest Payable, Prepaid Insurance, Supplies, Supplies Expense, Utilities Expense, and Utilities Payable.

Prepare adjusting entries.
(LO 2, 3)

E3-9 The trial balance for Pioneer Advertising is shown in Illustration 3-3 (page 97). Instead of the adjusting entries shown in the textbook at October 31, assume the following adjustment data.

1. Supplies on hand at October 31 total $500.
2. Expired insurance for the month is $120.
3. Depreciation for the month is $50.
4. Services related to unearned service revenue in October worth $600 were performed.
5. Services performed but not recorded at October 31 are $360.
6. Interest accrued at October 31 is $95.
7. Accrued salaries at October 31 are $1,625.

Instructions
Prepare the adjusting entries for the items above.

Prepare correct income statement.
(LO 1, 2, 3)

E3-10 The income statement of Montee Co. for the month of July shows net income of $1,400 based on Service Revenue $5,500, Salaries and Wages Expense $2,300, Supplies Expense $1,200, and Utilities Expense $600. In reviewing the statement, you discover the following.

1. Insurance expired during July of $400 was omitted.
2. Supplies expense includes $250 of supplies that are still on hand at July 31.
3. Depreciation on equipment of $150 was omitted.
4. Accrued but unpaid salaries and wages at July 31 of $300 were not included.
5. Services performed but unrecorded totaled $650.

Instructions
Prepare a correct income statement for July 2017.

Analyze adjusted data.
(LO 1, 2, 3, 4)

E3-11 A partial adjusted trial balance of Frangesch Company at January 31, 2017, shows the following.

FRANGESCH COMPANY
Adjusted Trial Balance
January 31, 2017

	Debit	Credit
Supplies	$ 850	
Prepaid Insurance	2,400	
Salaries and Wages Payable		$ 920
Unearned Service Revenue		750
Supplies Expense	950	
Insurance Expense	400	
Salaries and Wages Expense	2,900	
Service Revenue		2,000

Instructions
Answer the following questions, assuming the year begins January 1.

(a) If the amount in Supplies Expense is the January 31 adjusting entry, and $1,000 of supplies was purchased in January, what was the balance in Supplies on January 1?

(b) If the amount in Insurance Expense is the January 31 adjusting entry, and the original insurance premium was for one year, what was the total premium and when was the policy purchased?
(c) If $3,800 of salaries was paid in January, what was the balance in Salaries and Wages Payable at December 31, 2016?

E3-12 Selected accounts of Holly Company are shown as follows.

Journalize basic transactions and adjusting entries.

(LO 2, 3)

Supplies Expense

7/31	800		

Supplies

7/1 Bal.	1,100	7/31	800
7/10	650		

Salaries and Wages Payable

		7/31	1,200

Accounts Receivable

7/31	500		

Unearned Service Revenue

7/31	1,150	7/1 Bal.	1,500
		7/20	1,000

Salaries and Wages Expense

7/15	1,200		
7/31	1,200		

Service Revenue

		7/14	2,000
		7/31	1,150
		7/31	500

Instructions

After analyzing the accounts, journalize (a) the July transactions and (b) the adjusting entries that were made on July 31. (*Hint:* July transactions were for cash.)

E3-13 The trial balances before and after adjustment for Turnquist Company at the end of its fiscal year are presented below.

Prepare adjusting entries from analysis of trial balances.

(LO 2, 3, 4)

TURNQUIST COMPANY
Trial Balance
August 31, 2017

	Before Adjustment		After Adjustment	
	Dr.	**Cr.**	**Dr.**	**Cr.**
Cash	$10,400		$10,400	
Accounts Receivable	8,800		11,400	
Supplies	2,300		900	
Prepaid Insurance	4,000		2,500	
Equipment	14,000		14,000	
Accumulated Depreciation—Equipment		$ 3,600		$ 4,500
Accounts Payable		5,800		5,800
Salaries and Wages Payable		–0–		1,100
Unearned Rent Revenue		1,500		400
Owner's Capital		15,600		15,600
Service Revenue		34,000		36,600
Rent Revenue		11,000		12,100
Salaries and Wages Expense	17,000		18,100	
Supplies Expense	–0–		1,400	
Rent Expense	15,000		15,000	
Insurance Expense	–0–		1,500	
Depreciation Expense	–0–		900	
	$71,500	$71,500	$76,100	$76,100

Instructions

Prepare the adjusting entries that were made.

Prepare financial statements from adjusted trial balance.
(LO 4)

E3-14 The adjusted trial balance for Turnquist Company is given in E3-13.

Instructions
Prepare the income and owner's equity statements for the year and the balance sheet at August 31.

Record transactions on accrual basis; convert revenue to cash receipts.
(LO 2, 3)

E3-15 The following data are taken from the comparative balance sheets of Bundies Billiards Club, which prepares its financial statements using the accrual basis of accounting.

December 31	2017	2016
Accounts receivable from members	$16,000	$ 8,000
Unearned service revenue	17,000	25,000

Members are billed based upon their use of the club's facilities. Unearned service revenues arise from the sale of gift certificates, which members can apply to their future use of club facilities. The 2017 income statement for the club showed that service revenue of $161,000 was earned during the year.

Instructions
(*Hint:* You will probably find it helpful to use T-accounts to analyze these data.)

(a) Prepare journal entries for each of the following events that took place during 2017.
   (1) Accounts receivable from 2016 were all collected.
   (2) Gift certificates outstanding at the end of 2016 were all redeemed.
   (3) An additional $38,000 worth of gift certificates were sold during 2017. A portion of these was used by the recipients during the year; the remainder was still outstanding at the end of 2017.
   (4) Services performed for members for 2017 were billed to members.
   (5) Accounts receivable for 2017 (i.e., those billed in item [4] above) were partially collected.

(b) Determine the amount of cash received by the club, with respect to member services, during 2017.

Journalize adjusting entries.
(LO 5)

***E3-16** Zac Brown Company has the following balances in selected accounts on December 31, 2017.

Service Revenue	$40,000
Insurance Expense	2,700
Supplies Expense	2,450

All the accounts have normal balances. Zac Brown Company debits prepayments to expense accounts when paid, and credits unearned revenues to revenue accounts when received. The following information below has been gathered at December 31, 2017.

1. Zac Brown Company paid $2,700 for 12 months of insurance coverage on June 1, 2017.
2. On December 1, 2017, Zac Brown Company collected $40,000 for consulting services to be performed from December 1, 2017, through March 31, 2018.
3. A count of supplies on December 31, 2017, indicates that supplies of $900 are on hand.

Instructions
Prepare the adjusting entries needed at December 31, 2017.

Journalize transactions and adjusting entries.
(LO 5)

***E3-17** At Sekon Company, prepayments are debited to expense when paid, and unearned revenues are credited to revenue when cash is received. During January of the current year, the following transactions occurred.

Jan.	2	Paid $1,920 for fire insurance protection for the year.
	10	Paid $1,700 for supplies.
	15	Received $6,100 for services to be performed in the future.

On January 31, it is determined that $2,100 of the services were performed and that there are $650 of supplies on hand.

Instructions
(a) Journalize and post the January transactions. (Use T-accounts.)
(b) Journalize and post the adjusting entries at January 31.
(c) Determine the ending balance in each of the accounts.

***E3-18** Presented below are the assumptions and principles discussed in this chapter.

Identify accounting assumptions and principles.

(LO 6)

1. Full disclosure principle.	4. Time period assumption.
2. Going concern assumption.	5. Historical cost principle.
3. Monetary unit assumption.	6. Economic entity assumption.

Instructions

Identify by number the accounting assumption or principle that is described below. Do not use a number more than once.

_______ (a) Is the rationale for why plant assets are not reported at liquidation value. (*Note:* Do not use the historical cost principle.)

_______ (b) Indicates that personal and business recordkeeping should be separately maintained.

_______ (c) Assumes that the monetary unit is the "measuring stick" used to report on financial performance.

_______ (d) Separates financial information into time periods for reporting purposes.

_______ (e) Measurement basis used when a reliable estimate of fair value is not available.

_______ (f) Dictates that companies should disclose all circumstances and events that make a difference to financial statement users.

***E3-19** Weber Co. had three major business transactions during 2017.

Identify the assumption or principle that has been violated.

(LO 6)

(a) Reported at its fair value of $260,000 merchandise inventory with a cost of $208,000.

(b) The president of Weber Co., Austin Weber, purchased a truck for personal use and charged it to his expense account.

(c) Weber Co. wanted to make its 2017 income look better, so it added 2 more weeks to the year (a 54-week year). Previous years were 52 weeks.

Instructions

In each situation, identify the assumption or principle that has been violated, if any, and discuss what the company should have done.

***E3-20** The following characteristics, assumptions, principles, or constraint guide the FASB when it creates accounting standards.

Identity financial accounting concepts and principles.

(LO 6)

Relevance	Expense recognition principle
Faithful representation	Time period assumption
Comparability	Going concern assumption
Consistency	Historical cost principle
Monetary unit assumption	Full disclosure principle
Economic entity assumption	Materiality

Match each item above with a description below.

1. ________ Ability to easily evaluate one company's results relative to another's.
2. ________ Belief that a company will continue to operate for the foreseeable future.
3. ________ The judgment concerning whether an item's size is large enough to matter to decision-makers.
4. ________ The reporting of all information that would make a difference to financial statement users.
5. ________ The practice of preparing financial statements at regular intervals.
6. ________ The quality of information that indicates the information makes a difference in a decision.
7. ________ A belief that items should be reported on the balance sheet at the price that was paid to acquire them.
8. ________ A company's use of the same accounting principles and methods from year to year.
9. ________ Tracing accounting events to particular companies.
10. ________ The desire to minimize bias in financial statements.
11. ________ Reporting only those things that can be measured in monetary units.
12. ________ Dictates that efforts (expenses) be matched with results (revenues).

***E3-21** Speyeware International Inc., headquartered in Vancouver, Canada, specializes in Internet safety and computer security products for both the home and commercial markets. In a recent balance sheet, it reported a deficit of US$5,678,288. It has reported only net losses since its inception. In spite of these losses, Speyeware's shares of stock have traded anywhere from a high of $3.70 to a low of $0.32 on the Canadian Venture Exchange.

Comment on the objective and qualitative characteristics of accounting information.

(LO 6)

Speyeware's financial statements have historically been prepared in Canadian dollars. Recently, the company adopted the U.S. dollar as its reporting currency.

Instructions

(a) What is the objective of financial reporting? How does this objective meet or not meet Speyeware's investors' needs?
(b) Why would investors want to buy Speyeware's shares if the company has consistently reported losses over the last few years? Include in your answer an assessment of the relevance of the information reported on Speyeware's financial statements.
(c) Comment on how the change in reporting information from Canadian dollars to U.S. dollars likely affected the readers of Speyeware's financial statements. Include in your answer an assessment of the comparability of the information.

Comment on the objective and qualitative characteristics of financial reporting.

(LO 6)

***E3-22** A friend of yours, Gina Moore, recently completed an undergraduate degree in science and has just started working with a biotechnology company. Gina tells you that the owners of the business are trying to secure new sources of financing which are needed in order for the company to proceed with development of a new healthcare product. Gina said that her boss told her that the company must put together a report to present to potential investors.

Gina thought that the company should include in this package the detailed scientific findings related to the Phase I clinical trials for this product. She said, "I know that the biotech industry sometimes has only a 10% success rate with new products, but if we report all the scientific findings, everyone will see what a sure success this is going to be! The president was talking about the importance of following some set of accounting principles. Why do we need to look at some accounting rules? What they need to realize is that we have scientific results that are quite encouraging, some of the most talented employees around, and the start of some really great customer relationships. We haven't made any sales yet, but we will. We just need the funds to get through all the clinical testing and get government approval for our product. Then these investors will be quite happy that they bought in to our company early!"

Instructions

(a) What is accounting information?
(b) Comment on how Gina's suggestions for what should be reported to prospective investors conforms to the qualitative characteristics of accounting information. Do you think that the things that Gina wants to include in the information for investors will conform to financial reporting guidelines?

EXERCISES: SET B AND CHALLENGE EXERCISES

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Exercises: Set B and Challenge Exercises.

PROBLEMS: SET A

Prepare adjusting entries, post to ledger accounts, and prepare an adjusted trial balance.

(LO 2, 3, 4)

P3-1A Logan Krause started her own consulting firm, Krause Consulting, on May 1, 2017. The trial balance at May 31 is as follows.

KRAUSE CONSULTING
Trial Balance
May 31, 2017

Account Number		Debit	Credit
101	Cash	$ 4,500	
112	Accounts Receivable	6,000	
126	Supplies	1,900	
130	Prepaid Insurance	3,600	
149	Equipment	11,400	
201	Accounts Payable		$ 4,500
209	Unearned Service Revenue		2,000
301	Owner's Capital		18,700
400	Service Revenue		9,500
726	Salaries and Wages Expense	6,400	
729	Rent Expense	900	
		$34,700	$34,700

In addition to those accounts listed on the trial balance, the chart of accounts for Krause Consulting also contains the following accounts and account numbers: No. 150 Accumulated Depreciation—Equipment, No. 212 Salaries and Wages Payable, No. 631 Supplies Expense, No. 717 Depreciation Expense, No. 722 Insurance Expense, and No. 732 Utilities Expense.

Other data:

1. $900 of supplies have been used during the month.
2. Utilities expense incurred but not paid on May 31, 2017, $250.
3. The insurance policy is for 2 years.
4. $400 of the balance in the unearned service revenue account remains unearned at the end of the month.
5. May 31 is a Wednesday, and employees are paid on Fridays. Krause Consulting has two employees, who are paid $920 each for a 5-day work week.
6. The office furniture has a 5-year life with no salvage value. It is being depreciated at $190 per month for 60 months.
7. Invoices representing $1,700 of services performed during the month have not been recorded as of May 31.

Instructions

(a) Prepare the adjusting entries for the month of May. Use J4 as the page number for your journal.
(b) Post the adjusting entries to the ledger accounts. Enter the totals from the trial balance as beginning account balances and place a check mark in the posting reference column.
(c) Prepare an adjusted trial balance at May 31, 2017.

(c) Adj. trial balance $37,944

P3-2A Mac's Motel opened for business on May 1, 2017. Its trial balance before adjustment on May 31 is as follows.

Prepare adjusting entries, post, and prepare adjusted trial balance and financial statements.

(LO 2, 3, 4)

GLS

MAC'S MOTEL
Trial Balance
May 31, 2017

Account Number		Debit	Credit
101	Cash	$ 3,500	
126	Supplies	2,080	
130	Prepaid Insurance	2,400	
140	Land	12,000	
141	Buildings	60,000	
149	Equipment	15,000	
201	Accounts Payable		$ 4,800
208	Unearned Rent Revenue		3,300
275	Mortgage Payable		40,000
301	Owner's Capital		41,380
429	Rent Revenue		10,300
610	Advertising Expense	600	
726	Salaries and Wages Expense	3,300	
732	Utilities Expense	900	
		$99,780	$99,780

In addition to those accounts listed on the trial balance, the chart of accounts for Mac's Motel also contains the following accounts and account numbers: No. 142 Accumulated Depreciation—Buildings, No. 150 Accumulated Depreciation—Equipment, No. 212 Salaries and Wages Payable, No. 230 Interest Payable, No. 619 Depreciation Expense, No. 631 Supplies Expense, No. 718 Interest Expense, and No. 722 Insurance Expense.

Other data:

1. Prepaid insurance is a 1-year policy starting May 1, 2017.
2. A count of supplies shows $750 of unused supplies on May 31.
3. Annual depreciation is $3,000 on the buildings and $1,500 on equipment.
4. The mortgage interest rate is 12%. (The mortgage was taken out on May 1.)
5. Two-thirds of the unearned rent revenue has been earned.
6. Salaries of $750 are accrued and unpaid at May 31.

Instructions

(a) Journalize the adjusting entries on May 31.

(c) Adj. trial balance $101,305
(d) Net income $4,645
Ending capital $46,025
Total assets $93,075

(b) Prepare a ledger using the three-column form of account. Enter the trial balance amounts and post the adjusting entries. (Use J1 as the posting reference.)
(c) Prepare an adjusted trial balance on May 31.
(d) Prepare an income statement and an owner's equity statement for the month of May and a balance sheet at May 31.

Prepare adjusting entries and financial statements.

(LO 2, 3, 4)

P3-3A Alena Co. was organized on July 1, 2017. Quarterly financial statements are prepared. The unadjusted and adjusted trial balances as of September 30 are shown below.

ALENA CO.
Trial Balance
September 30, 2017

	Unadjusted		Adjusted	
	Dr.	**Cr.**	**Dr.**	**Cr.**
Cash	$ 8,700		$ 8,700	
Accounts Receivable	10,400		11,500	
Supplies	1,500		650	
Prepaid Rent	2,200		500	
Equipment	18,000		18,000	
Accumulated Depreciation—Equipment		$ –0–		$ 700
Notes Payable		10,000		10,000
Accounts Payable		2,500		2,500
Salaries and Wages Payable		–0–		725
Interest Payable		–0–		100
Unearned Rent Revenue		1,900		450
Owner's Capital		22,000		22,000
Owner's Drawings	1,600		1,600	
Service Revenue		16,000		17,100
Rent Revenue		1,410		2,860
Salaries and Wages Expense	8,000		8,725	
Rent Expense	1,900		3,600	
Depreciation Expense			700	
Supplies Expense			850	
Utilities Expense	1,510		1,510	
Interest Expense			100	
	$53,810	$53,810	$56,435	$56,435

Instructions

(a) Journalize the adjusting entries that were made.

(b) Net income $4,475
Ending capital $24,875
Total assets $38,650

(b) Prepare an income statement and an owner's equity statement for the 3 months ending September 30 and a balance sheet at September 30.
(c) If the note bears interest at 12%, how many months has it been outstanding?

Prepare adjusting entries.

(LO 2, 3)

P3-4A A review of the ledger of Remina Company at December 31, 2017, produces the following data pertaining to the preparation of annual adjusting entries.

1. Insurance expense $4,890

1. Prepaid Insurance $10,440. The company has separate insurance policies on its buildings and its motor vehicles. Policy B4564 on the building was purchased on April 1, 2016, for $7,920. The policy has a term of 3 years. Policy A2958 on the vehicles was purchased on January 1, 2017, for $4,500. This policy has a term of 2 years.

2. Rent revenue $84,000

2. Unearned Rent Revenue $429,000. The company began subleasing office space in its new building on November 1. At December 31, the company had the following rental contracts that are paid in full for the entire term of the lease.

Date	Term (in months)	Monthly Rent	Number of Leases
Nov. 1	9	$5,000	5
Dec. 1	6	$8,500	4

3. Notes Payable $120,000. This balance consists of a note for 9 months at an annual interest rate of 9%, dated November 1.
4. Salaries and Wages Payable $0. There are eight salaried employees. Salaries are paid every Friday for the current week. Five employees receive a salary of $700 each per week, and three employees earn $500 each per week. Assume December 31 is a Tuesday. Employees do not work weekends. All employees worked the last 2 days of December.

3. Interest expense $1,800

4. Salaries and wages expense $2,000

Instructions

Prepare the adjusting entries at December 31, 2017.

P3-5A On November 1, 2017, the account balances of Hamm Equipment Repair were as follows.

Journalize transactions and follow through accounting cycle to preparation of financial statements.

(LO 2, 3, 4)

GLS

No.		Debit	No.		Credit
101	Cash	$ 2,400	154	Accumulated Depreciation—Equipment	$ 2,000
112	Accounts Receivable	4,250	201	Accounts Payable	2,600
126	Supplies	1,800	209	Unearned Service Revenue	1,200
153	Equipment	12,000	212	Salaries and Wages Payable	700
			301	Owner's Capital	13,950
		$20,450			$20,450

During November, the following summary transactions were completed.

Nov.	8	Paid $1,700 for salaries due employees, of which $700 is for October salaries.
	10	Received $3,620 cash from customers on account.
	12	Received $3,100 cash for services performed in November.
	15	Purchased equipment on account $2,000.
	17	Purchased supplies on account $700.
	20	Paid creditors on account $2,700.
	22	Paid November rent $400.
	25	Paid salaries $1,700.
	27	Performed services on account and billed customers for these services $2,200.
	29	Received $600 from customers for future service.

Adjustment data consist of:

1. Supplies on hand $1,400.
2. Accrued salaries payable $350.
3. Depreciation for the month is $200.
4. Services related to unearned service revenue of $1,220 were performed.

Instructions

(a) Enter the November 1 balances in the ledger accounts.
(b) Journalize the November transactions.
(c) Post to the ledger accounts. Use J1 for the posting reference. Use the following additional accounts: No. 407 Service Revenue, No. 615 Depreciation Expense, No. 631 Supplies Expense, No. 726 Salaries and Wages Expense, and No. 729 Rent Expense.
(d) Prepare a trial balance at November 30.
(e) Journalize and post adjusting entries.
(f) Prepare an adjusted trial balance.
(g) Prepare an income statement and an owner's equity statement for November and a balance sheet at November 30.

(d) Trial balance $25,650
(f) Adj. trial balance $26,200
(g) Net income $1,770; Ending capital $15,720 Total assets $19,250

***P3-6A** Johnson Graphics Company was organized on January 1, 2017, by Cameron Johnson. At the end of the first 6 months of operations, the trial balance contained the accounts shown on page 142.

Prepare adjusting entries, adjusted trial balance, and financial statements using appendix.

(LO 2, 3, 4, 5)

	Debit		Credit
Cash	$ 8,600	Notes Payable	$ 20,000
Accounts Receivable	14,000	Accounts Payable	9,000
Equipment	45,000	Owner's Capital	22,000
Insurance Expense	2,700	Sales Revenue	52,100
Salaries and Wages Expense	30,000	Service Revenue	6,000
Supplies Expense	3,700		
Advertising Expense	1,900		
Rent Expense	1,500		
Utilities Expense	1,700		
	$109,100		$109,100

Analysis reveals the following additional data.

1. The $3,700 balance in Supplies Expense represents supplies purchased in January. At June 30, $1,500 of supplies are on hand.
2. The note payable was issued on February 1. It is a 9%, 6-month note.
3. The balance in Insurance Expense is the premium on a one-year policy, dated March 1, 2017.
4. Service revenues are credited to revenue when received. At June 30, services revenue of $1,300 are unearned.
5. Revenue for services performed but unrecorded at June 30 totals $2,000.
6. Depreciation is $2,250 per year.

(b) Adj. trial balance $112,975
(c) Net income $18,725
Ending capital $40,725
Total assets $71,775

Instructions

(a) Journalize the adjusting entries at June 30. (Assume adjustments are recorded every 6 months.)
(b) Prepare an adjusted trial balance.
(c) Prepare an income statement and owner's equity statement for the 6 months ended June 30 and a balance sheet at June 30.

PROBLEMS: SET B AND SET C

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Problems: Set B and Set C.

CONTINUING PROBLEM

COOKIE CREATIONS: AN ENTREPRENEURIAL JOURNEY

(*Note:* This is a continuation of the Cookie Creations problem from Chapters 1 and 2. Use the information from the previous chapters and follow the instructions below using the general ledger accounts you have already prepared.)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CC3 It is the end of November and Natalie has been in touch with her grandmother. Her grandmother asked Natalie how well things went in her first month of business. Natalie, too, would like to know if she has been profitable or not during November. Natalie realizes that in order to determine Cookie Creations' income, she must first make adjustments.

Natalie puts together the following additional information.

1. A count reveals that $35 of baking supplies were used during November.
2. Natalie estimates that all of her baking equipment will have a useful life of 5 years or 60 months. (Assume Natalie decides to record a full month's worth of depreciation, regardless of when the equipment was obtained by the business.)
3. Natalie's grandmother has decided to charge interest of 6% on the note payable extended on November 16. The loan plus interest is to be repaid in 24 months. (Assume that half a month of interest accrued during November.)
4. On November 30, a friend of Natalie's asks her to teach a class at the neighborhood school. Natalie agrees and teaches a group of 35 first-grade students how to make gingerbread cookies. The next day, Natalie prepares an invoice for $300 and leaves it with the school principal. The principal says that he will pass the invoice along to the head office, and it will be paid sometime in December.

5. Natalie receives a utilities bill for $45. The bill is for utilities consumed by Natalie's business during November and is due December 15.

Instructions

Using the information that you have gathered through Chapter 2, and based on the new information above, do the following.

(a) Prepare and post the adjusting journal entries.
(b) Prepare an adjusted trial balance.
(c) Using the adjusted trial balance, calculate Cookie Creations' net income or net loss for the month of November. Do not prepare an income statement.

BROADENING YOUR PERSPECTIVE

FINANCIAL REPORTING AND ANALYSIS

Financial Reporting Problem: Apple Inc.

BYP3-1 The financial statements of Apple Inc. are presented in Appendix A at the end of this textbook. Instructions for accessing and using the company's complete annual report, including the notes to the financial statements, are also provided in Appendix A.

Instructions

(a) Using the consolidated financial statements and related information, identify items that may result in adjusting entries for prepayments.
(b) Using the consolidated financial statements and related information, identify items that may result in adjusting entries for accruals.
(c) What has been the trend since 2011 for net income?

Comparative Analysis Problem: PepsiCo, Inc. vs. The Coca-Cola Company

BYP3-2 PepsiCo, Inc.'s financial statements are presented in Appendix B. Financial statements of The Coca-Cola Company are presented in Appendix C. Instructions for accessing and using the complete annual reports of PepsiCo and Coca-Cola, including the notes to the financial statements, are also provided in Appendices B and C, respectively.

Instructions

Based on information contained in these financial statements, determine the following for each company.

(a) Net increase (decrease) in property, plant, and equipment (net) from 2012 to 2013.
(b) Increase (decrease) in selling, general, and administrative expenses from 2012 to 2013.
(c) Increase (decrease) in long-term debt (obligations) from 2012 to 2013.
(d) Increase (decrease) in net income from 2012 to 2013.
(e) Increase (decrease) in cash and cash equivalents from 2012 to 2013.

Comparative Analysis Problem: Amazon.com, Inc. vs. Wal-Mart Stores, Inc.

BYP3-3 Amazon.com, Inc.'s financial statements are presented in Appendix D. Financial statements of Wal-Mart Stores, Inc. are presented in Appendix E. Instructions for accessing and using the complete annual reports of Amazon and Wal-Mart, including the notes to the financial statements, are also provided in Appendices D and E, respectively.

Instructions

Based on information contained in these financial statements, determine the following for each company.

1. (a) Increase (decrease) in interest expense from 2012 to 2013.
   (b) Increase (decrease) in net income from 2012 to 2013.
   (c) Increase (decrease) in cash flow from operations from 2012 to 2013.
2. Cash flow from operations and net income for each company is different. What are some possible reasons for these differences?

Real-World Focus

BYP3-4 No financial decision-maker should ever rely solely on the financial information reported in the annual report to make decisions. It is important to keep abreast of financial news. This activity demonstrates how to search for financial news on the Internet.

Address: **http://biz.yahoo.com/i**, or go to **www.wiley.com/college/weygandt**

Steps:
1. Type in either Wal-Mart, Target Corp., or Kmart.
2. Choose **News**.
3. Select an article that sounds interesting to you and that would be relevant to an investor in these companies.

Instructions
(a) What was the source of the article (e.g., Reuters, Businesswire, Prnewswire)?
(b) Assume that you are a personal financial planner and that one of your clients owns stock in the company. Write a brief memo to your client summarizing the article and explaining the implications of the article for his or her investment.

CRITICAL THINKING

Decision-Making Across the Organization

BYP3-5 Happy Camper Park was organized on April 1, 2016, by Erica Hatt. Erica is a good manager but a poor accountant. From the trial balance prepared by a part-time bookkeeper, Erica prepared the following income statement for the quarter that ended March 31, 2017.

HAPPY CAMPER PARK
Income Statement
For the Quarter Ended March 31, 2017

Revenues		
Rent revenue		$90,000
Operating expenses		
Advertising	$ 5,200	
Salaries and wages	29,800	
Utilities	900	
Depreciation	800	
Maintenance and repairs	4,000	
Total operating expenses		40,700
Net income		$49,300

Erica thought that something was wrong with the statement because net income had never exceeded $20,000 in any one quarter. Knowing that you are an experienced accountant, she asks you to review the income statement and other data.

You first look at the trial balance. In addition to the account balances reported above in the income statement, the ledger contains the following additional selected balances at March 31, 2017.

Supplies	$ 6,200
Prepaid Insurance	7,200
Notes Payable	12,000

You then make inquiries and discover the following.

1. Rent revenues include advanced rentals for summer occupancy $15,000.
2. There were $1,700 of supplies on hand at March 31.
3. Prepaid insurance resulted from the payment of a one-year policy on January 1, 2017.
4. The mail on April 1, 2017, brought the following bills: advertising for week of March 24, $110; repairs made March 10, $260; and utilities, $180.
5. There are four employees who receive wages totaling $300 per day. At March 31, 2 days' salaries and wages have been incurred but not paid.
6. The note payable is a 3-month, 10% note dated January 1, 2017.

Instructions
With the class divided into groups, answer the following.
(a) Prepare a correct income statement for the quarter ended March 31, 2017.
(b) Explain to Erica the generally accepted accounting principles that she did not recognize in preparing her income statement and their effect on her results.

Communication Activity

BYP3-6 In reviewing the accounts of Kelli Taylor Co. at the end of the year, you discover that adjusting entries have not been made.

Instructions
Write a memo to Kelli Taylor, the owner of Kelli Taylor Co., that explains the following: the nature and purpose of adjusting entries, why adjusting entries are needed, and the types of adjusting entries that may be made.

Ethics Case

BYP3-7 Russell Company is a pesticide manufacturer. Its sales declined greatly this year due to the passage of legislation outlawing the sale of several of Russell's chemical pesticides. In the coming year, Russell will have environmentally safe and competitive chemicals to replace these discontinued products. Sales in the next year are expected to greatly exceed any prior year's. The decline in sales and profits appears to be a one-year aberration. But even so, the company president fears a large dip in the current year's profits. He believes that such a dip could cause a significant drop in the market price of Russell's stock and make the company a takeover target.

To avoid this possibility, the company president calls in Zoe Baas, controller, to discuss this period's year-end adjusting entries. He urges her to accrue every possible revenue and to defer as many expenses as possible. He says to Zoe, "We need the revenues this year, and next year can easily absorb expenses deferred from this year. We can't let our stock price be hammered down!" Zoe didn't get around to recording the adjusting entries until January 17, but she dated the entries December 31 as if they were recorded then. Zoe also made every effort to comply with the president's request.

Instructions
(a) Who are the stakeholders in this situation?
(b) What are the ethical considerations of (1) the president's request and (2) Zoe dating the adjusting entries December 31?
(c) Can Zoe accrue revenues and defer expenses and still be ethical?

All About You

BYP3-8 Companies must report or disclose in their financial statement information about all liabilities, including potential liabilities related to environmental cleanup. There are many situations in which you will be asked to provide personal financial information about your assets, liabilities, revenue, and expenses. Sometimes you will face difficult decisions regarding what to disclose and how to disclose it.

Instructions
Suppose that you are putting together a loan application to purchase a home. Based on your income and assets, you qualify for the mortgage loan, but just barely. How would you address each of the following situations in reporting your financial position for the loan application? Provide responses for each of the following situations.

(a) You signed a guarantee for a bank loan that a friend took out for $20,000. If your friend doesn't pay, you will have to pay. Your friend has made all of the payments so far, and it appears he will be able to pay in the future.
(b) You were involved in an auto accident in which you were at fault. There is the possibility that you may have to pay as much as $50,000 as part of a settlement. The issue will not be resolved before the bank processes your mortgage request.
(c) The company for which you work isn't doing very well, and it has recently laid off employees. You are still employed, but it is quite possible that you will lose your job in the next few months.

Considering People, Planet, and Profit

BYP3-9 Many companies have potential pollution or environmental-disposal problems—not only for electronic gadgets, but also for the lead paint or asbestos they sold. How do we fit these issues into the accounting equation? Are these costs and related liabilities that companies should report?

> **YES:** As more states impose laws holding companies responsible, and as more courts levy pollution-related fines, it becomes increasingly likely that companies will have to pay large amounts in the future.
> **NO:** The amounts still are too difficult to estimate. Putting inaccurate estimates on the financial statements reduces their usefulness. Instead, why not charge the costs later, when the actual environmental cleanup or disposal occurs, at which time the company knows the actual cost?

Instructions
Write a response indicating your position regarding this situation. Provide support for your view.

FASB Codification Activity

BYP3-10 If your school has a subscription to the FASB Codification, go to **http://aaahq.org/asclogin.cfm** to log in and prepare responses to the following.

Instructions
Access the glossary ("Master Glossary") to answer the following.

(a) What is the definition of revenue?
(b) What is the definition of compensation?

A Look at IFRS

LEARNING OBJECTIVE 7 **Compare the procedures for adjusting entries under GAAP and IFRS.**

It is often difficult for companies to determine in what time period they should report particular revenues and expenses. Both the IASB and FASB are working on a joint project to develop a common conceptual framework that will enable companies to better use the same principles to record transactions consistently over time.

Key Points

Following are the key similarities and differences between GAAP and IFRS as related to accrual accounting.

Similarities

- In this chapter, you learned accrual-basis accounting applied under GAAP. Companies applying IFRS also use accrual-basis accounting to ensure that they record transactions that change a company's financial statements in the period in which events occur.
- Similar to GAAP, cash-basis accounting is not in accordance with IFRS.
- IFRS also divides the economic life of companies into artificial time periods. Under both GAAP and IFRS, this is referred to as the **time period assumption**.
- The **general** revenue recognition principle required by GAAP that is used in this textbook is similar to that used under IFRS.
- Revenue recognition fraud is a major issue in U.S. financial reporting. The same situation occurs in other countries, as evidenced by revenue recognition breakdowns at Dutch software company Baan NV, Japanese electronics giant NEC, and Dutch grocer Ahold NV.

Differences

- Under IFRS, revaluation (using fair value) of items such as land and buildings is permitted. IFRS allows depreciation based on revaluation of assets, which is not permitted under GAAP.
- The terminology used for revenues and gains, and expenses and losses, differs somewhat between IFRS and GAAP. For example, income under IFRS includes both revenues, which arise during the normal course of operating activities, and gains, which arise from activities outside of the normal sales of goods and services. The term income is not used this way under GAAP. Instead, under GAAP income refers to the net difference between revenues and expenses.
- Under IFRS, expenses include both those costs incurred in the normal course of operations as well as losses that are not part of normal operations. This is in contrast to GAAP, which defines each separately.

Looking to the Future

The IASB and FASB are completing a joint project on revenue recognition. The purpose of this project is to develop comprehensive guidance on when to recognize revenue. It is hoped that this approach will lead to more consistent accounting in this area. For more on this topic, see **www.fasb.org/project/revenue_recognition.shtml**.

IFRS Practice

IFRS Self-Test Questions

1. IFRS:
   (a) uses accrual accounting.
   (b) uses cash-basis accounting.
   (c) allows revenue to be recognized when a customer makes an order.
   (d) requires that revenue not be recognized until cash is received.
2. Which of the following statements is **false**?
   (a) IFRS employs the time period assumption.
   (b) IFRS employs accrual accounting.
   (c) IFRS requires that revenues and costs must be capable of being measured reliably.
   (d) IFRS uses the cash basis of accounting.
3. As a result of the revenue recognition project by the FASB and IASB:
   (a) revenue recognition places more emphasis on when the performance obligation is satisfied.
   (b) revenue recognition places more emphasis on when revenue is realized.
   (c) revenue recognition places more emphasis on when expenses are incurred.
   (d) revenue is no longer recorded unless cash has been received.
4. Which of the following is **false**?
   (a) Under IFRS, the term income describes both revenues and gains.
   (b) Under IFRS, the term expenses includes losses.
   (c) Under IFRS, companies do not engage in the adjusting process.
   (d) Under IFRS, revenue recognition fraud is a major issue.
5. Accrual-basis accounting:
   (a) is optional under IFRS.
   (b) results in companies recording transactions that change a company's financial statements in the period in which events occur.
   (c) has been eliminated as a result of the IASB/FASB joint project on revenue recognition.
   (d) is not consistent with the IASB conceptual framework.

International Financial Reporting Problem: Louis Vuitton

IFRS3-1 The financial statements of Louis Vuitton are presented in Appendix F. Instructions for accessing and using the company's complete annual report, including the notes to its financial statements, are also provided in Appendix F.

Instructions
Visit Louis Vuitton's corporate website and answer the following questions from Louis Vuitton's 2013 annual report.

(a) From the notes to the financial statements, how does the company determine the amount of revenue to record at the time of a sale?
(b) From the notes to the financial statements, how does the company determine the provision for product returns?
(c) Using the consolidated income statement and consolidated statement of financial position, identify items that may result in adjusting entries for deferrals.
(d) Using the consolidated income statement, identify two items that may result in adjusting entries for accruals.

Answers to IFRS Self-Test Questions

1. a **2.** d **3.** a **4.** c **5.** b

4 Completing the Accounting Cycle

CHAPTER PREVIEW As the Feature Story below highlights, at Rhino Foods, Inc., financial statements help employees understand what is happening in the business. In Chapter 3, we prepared financial statements directly from the adjusted trial balance. However, with so many details involved in the end-of-period accounting procedures, it is easy to make errors. One way to minimize errors in the records and to simplify the end-of-period procedures is to use a worksheet.

In this chapter, we will explain the role of the worksheet in accounting. We also will study the remaining steps in the accounting cycle, especially the closing process, again using Pioneer Advertising as an example. Then, we will consider correcting entries and classified balance sheets.

FEATURE STORY

Everyone Likes to Win

When Ted Castle was a hockey coach at the University of Vermont, his players were self-motivated by their desire to win. Hockey was a game you usually either won or lost. But at Rhino Foods, Inc., a bakery-foods company he founded in Burlington, Vermont, he discovered that manufacturing-line workers were not so self-motivated. Ted thought, what if he turned the food-making business into a game, with rules, strategies, and trophies?

In a game, knowing the score is all-important. Ted felt that only if the employees know the score—know exactly how the business is doing daily, weekly, monthly—could he turn food-making into a game. But Rhino is a closely held, family-owned business, and its financial statements and profits were confidential. Ted wondered, should he open Rhino's books to the employees?

A consultant put Ted's concerns in perspective when he said, "Imagine you're playing touch football. You play for an hour or two, and the whole time I'm sitting there with a book, keeping score. All of a sudden I blow the whistle, and I say, 'OK, that's it. Everybody go home.' I close my book and walk away. How would you feel?" Ted opened his books and revealed the financial statements to his employees.

The next step was to teach employees the rules and strategies of how to "win" at making food. The first lesson: "Your opponent at Rhino is expenses. You must cut and control expenses." Ted and his staff distilled those lessons into daily scorecards—production reports and income statements—that keep Rhino's employees up-to-date on the game. At noon each day, Ted posts the previous day's results at the entrance to the production room. Everyone checks whether they made or lost money on what they produced the day before. And it's not just an academic exercise: There's a bonus check for each employee at the end of every four-week "game" that meets profitability guidelines.

Rhino has flourished since the first game. Employment has increased from 20 to 130 people, while both revenues and profits have grown dramatically.

Comstock/Getty Images, Inc.

CHAPTER OUTLINE

Learning Objectives

	Learning Objective	Topics	Do It!
1	Prepare a worksheet.	• Steps in preparing a worksheet • Preparing financial statements from a worksheet • Preparing adjusting entries from a worksheet	DO IT! 1 Worksheet
2	Prepare closing entries and a post-closing trial balance.	• Preparing closing entries • Posting closing entries • Preparing a post-closing trial balance	DO IT! 2 Closing Entries
3	Explain the steps in the accounting cycle and how to prepare correcting entries.	• Summary of the accounting cycle • Reversing entries • Correcting entries	DO IT! 3 Correcting Entries
4	Identify the sections of a classified balance sheet.	• Current assets • Long-term investments • Property, plant, and equipment • Intangible assets • Current liabilities • Long-term liabilities • Owner's equity	DO IT! 4 Balance Sheet Classifications

Go to the ***REVIEW AND PRACTICE*** section at the end of the chapter for a review of key concepts and practice applications with solutions.

Visit **WileyPLUS with ORION** for additional tutorials and practice opportunities.

LEARNING OBJECTIVE 1

Prepare a worksheet.

A **worksheet** is a multiple-column form used in the adjustment process and in preparing financial statements. As its name suggests, the worksheet is a working tool. **It is not a permanent accounting record.** It is neither a journal nor a part of the general ledger. The worksheet is merely a device used in preparing adjusting entries and the financial statements. Companies generally computerize worksheets using an electronic spreadsheet program such as Excel.

Illustration 4-1 shows the basic form of a worksheet and the five steps for preparing it. Each step is performed in sequence. **The use of a worksheet is optional.** When a company chooses to use one, it prepares financial statements directly from the worksheet. It enters the adjustments in the worksheet columns and then journalizes and posts the adjustments after it has prepared the financial statements. Thus, worksheets make it possible to provide the financial statements to management and other interested parties at an earlier date.

Steps in Preparing a Worksheet

We will use the October 31 trial balance and adjustment data of Pioneer Advertising from Chapter 3 to illustrate how to prepare a worksheet. In the following pages, we describe and then demonstrate each step of the process.

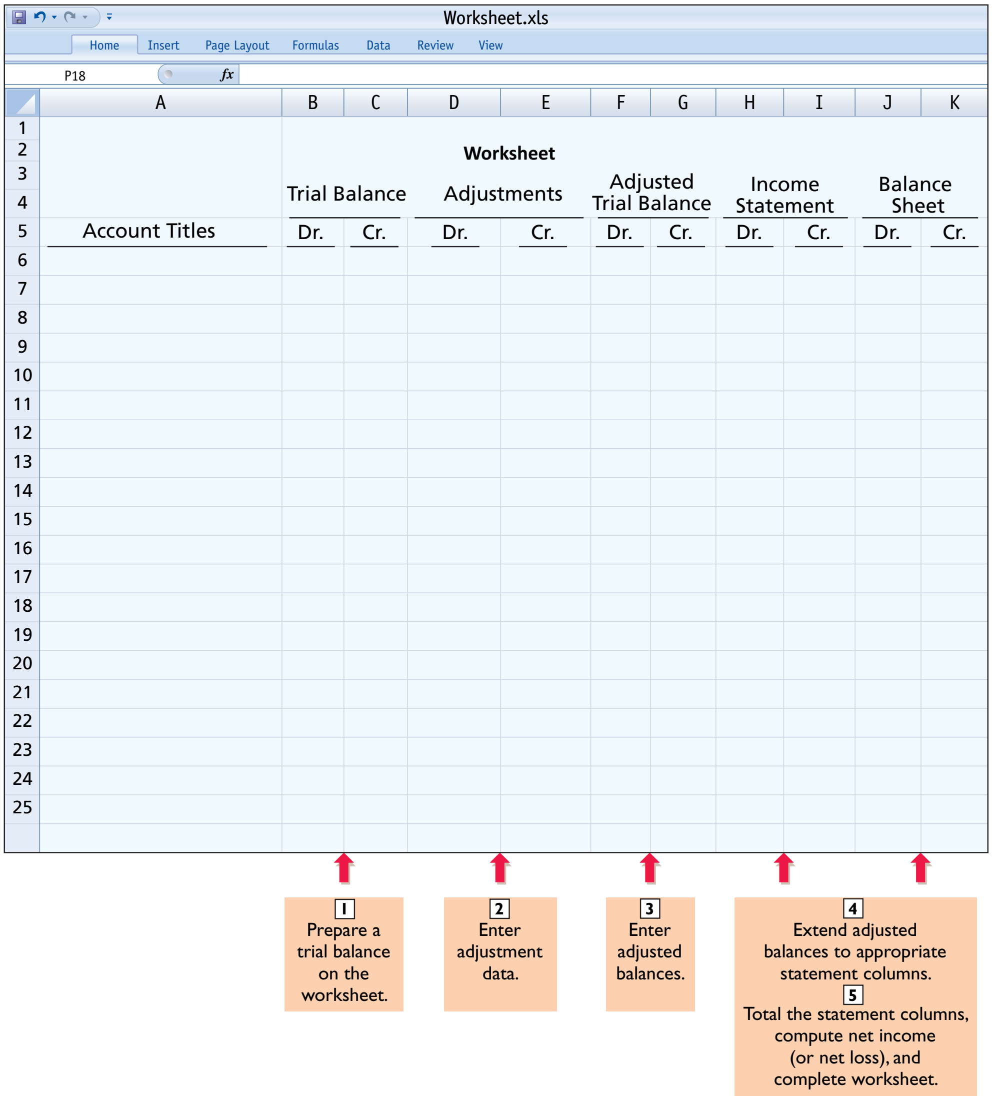

Illustration 4-1
Form and procedure for a worksheet

STEP 1: PREPARE A TRIAL BALANCE ON THE WORKSHEET

The first step in preparing a worksheet is to enter all ledger accounts with balances in the account titles column and then enter debit and credit amounts from the ledger in the trial balance columns. Illustration 4-2 shows the worksheet trial balance for Pioneer Advertising. This trial balance is the same one that appears in Illustration 2-31 (page 68) and Illustration 3-3 (page 97).

Illustration 4-2
Preparing a trial balance

Pioneer Advertising.xls

PIONEER ADVERTISING
Worksheet
For the Month Ended October 31, 2017

Account Titles	Trial Balance Dr.	Trial Balance Cr.	Adjustments Dr.	Adjustments Cr.	Adjusted Trial Balance Dr.	Adjusted Trial Balance Cr.	Income Statement Dr.	Income Statement Cr.	Balance Sheet Dr.	Balance Sheet Cr.
Cash	15,200									
Supplies	2,500									
Prepaid Insurance	600									
Equipment	5,000									
Notes Payable		5,000								
Accounts Payable		2,500								
Unearned Service Revenue		1,200								
Owner's Capital		10,000								
Owner's Drawings	500									
Service Revenue		10,000								
Salaries and Wages Expense	4,000									
Rent Expense	900									
Totals	28,700	28,700								

Include all accounts with balances from ledger.

Trial balance amounts come directly from ledger accounts.

STEP 2: ENTER THE ADJUSTMENTS IN THE ADJUSTMENTS COLUMNS

As shown in Illustration 4-3, the second step when using a worksheet is to enter all adjustments in the adjustments columns. In entering the adjustments, use applicable trial balance accounts. If additional accounts are needed, insert them on the lines immediately below the trial balance totals. A different letter identifies the debit and credit for each adjusting entry. The term used to describe this process is **keying**. **Companies do not journalize the adjustments until after they complete the worksheet and prepare the financial statements.**

The adjustments for Pioneer Advertising are the same as the adjustments in Illustration 3-23 (page 109). They are keyed in the adjustments columns of the worksheet as follows.

(a) Pioneer debits an additional account, Supplies Expense, $1,500 for the cost of supplies used, and credits Supplies $1,500.

(b) Pioneer debits an additional account, Insurance Expense, $50 for the insurance that has expired, and credits Prepaid Insurance $50.

(c) The company needs two additional depreciation accounts. It debits Depreciation Expense $40 for the month's depreciation, and credits Accumulated Depreciation—Equipment $40.

(d) Pioneer debits Unearned Service Revenue $400 for services performed, and credits Service Revenue $400.

(e) Pioneer debits an additional account, Accounts Receivable, $200 for services performed but not billed, and credits Service Revenue $200.

(f) The company needs two additional accounts relating to interest. It debits Interest Expense $50 for accrued interest, and credits Interest Payable $50.

(g) Pioneer debits Salaries and Wages Expense $1,200 for accrued salaries, and credits an additional account, Salaries and Wages Payable, $1,200.

After Pioneer has entered all the adjustments, the adjustments columns are totaled to prove their equality.

Illustration 4-3A

Entering the adjustments in the adjustments columns

Pioneer Advertising.xls

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P18 fx

PIONEER ADVERTISING
Worksheet
For the Month Ended October 31, 2017

	A	B	C	D	E	F	G	H	I	J	K
5–6		Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
7	Account Titles	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
8	Cash	15,200									
9	Supplies	2,500			(a) 1,500						
10	Prepaid Insurance	600			(b) 50						
11	Equipment	5,000									
12	Notes Payable		5,000								
13	Accounts Payable		2,500								
14	Unearned Service Revenue		1,200	(d) 400							
15	Owner's Capital		10,000								
16	Owner's Drawings	500									
17	Service Revenue		10,000		(d) 400						
18					(e) 200						
19	Salaries and Wages Expense	4,000		(g) 1,200							
20	Rent Expense	900									
21	Totals	28,700	28,700								
22											
23											
24	Supplies Expense			(a) 1,500							
25	Insurance Expense			(b) 50							
26	Accum. Depreciation—										
27	Equipment				(c) 40						
28	Depreciation Expense			(c) 40							
29	Accounts Receivable			(e) 200							
30	Interest Expense			(f) 50							
31	Interest Payable				(f) 50						
32	Salaries and Wages Payable				(g) 1,200						
33	Totals			3,440	3,440						
34											
35											
36											

Add additional accounts as needed to complete the adjustments:
(a) Supplies Used.
(b) Insurance Expired.
(c) Depreciation Expensed.
(d) Service Revenue Recognized.
(e) Service Revenue Accrued.
(f) Interest Accrued.
(g) Salaries Accrued.

Enter adjustment amounts in appropriate columns, and use letters to cross-reference the debit and credit adjustments.

Total adjustments columns and check for equality.

STEP 3: ENTER ADJUSTED BALANCES IN THE ADJUSTED TRIAL BALANCE COLUMNS

As shown in Illustration 4-4, Pioneer Advertising next determines the adjusted balance of an account by combining the amounts entered in the first four columns of the worksheet for each account. For example, the Prepaid Insurance account in the trial balance columns has a $600 debit balance and a $50 credit in the adjustments columns. The result is a $550 debit balance recorded in the adjusted trial balance columns. **For each account, the amount in the adjusted trial balance columns is the balance that will appear in the ledger after journalizing and posting the adjusting entries.** The balances in these columns are the same as those in the adjusted trial balance in Illustration 3-25 (page 112).

After Pioneer has entered all account balances in the adjusted trial balance columns, the columns are totaled to prove their equality. If the column totals do not agree, the financial statement columns will not balance and the financial statements will be incorrect.

Illustration 4-4
Entering adjusted balances in the adjusted trial balance columns

Pioneer Advertising.xls

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P18 *fx*

PIONEER ADVERTISING
Worksheet
For the Month Ended October 31, 2017

	A	B	C	D	E	F	G	H	I	J	K
5–6		Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
7	Account Titles	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
8	Cash	15,200				15,200					
9	Supplies	2,500			(a) 1,500	1,000					
10	Prepaid Insurance	600			(b) 50	550					
11	Equipment	5,000				5,000					
12	Notes Payable		5,000				5,000				
13	Accounts Payable		2,500				2,500				
14	Unearned Service Revenue		1,200	(d) 400			800				
15	Owner's Capital		10,000				10,000				
16	Owner's Drawings	500				500					
17	Service Revenue		10,000		(d) 400		10,600				
18					(e) 200						
19	Salaries and Wages Expense	4,000		(g) 1,200		5,200					
20	Rent Expense	900				900					
21	Totals	28,700	28,700								
22											
23											
24	Supplies Expense			(a) 1,500		1,500					
25	Insurance Expense			(b) 50		50					
26	Accum. Depreciation—										
27	Equipment				(c) 40		40				
28	Depreciation Expense			(c) 40		40					
29	Accounts Receivable			(e) 200		200					
30	Interest Expense			(f) 50		50					
31	Interest Payable				(f) 50		50				
32	Salaries and Wages Payable				(g) 1,200		1,200				
33	Totals			3,440	3,440	30,190	30,190				
34											
35											
36											

Combine trial balance amounts with adjustment amounts to obtain the adjusted trial balance.

Total adjusted trial balance columns and check for equality.

STEP 4: EXTEND ADJUSTED TRIAL BALANCE AMOUNTS TO APPROPRIATE FINANCIAL STATEMENT COLUMNS

As shown in Illustration 4-5, the fourth step is to extend adjusted trial balance amounts to the income statement and balance sheet columns of the worksheet. Pioneer Advertising enters balance sheet accounts in the appropriate balance sheet debit and credit columns. For instance, it enters Cash in the balance sheet debit column, and Notes Payable in the balance sheet credit column. Pioneer extends Accumulated Depreciation—Equipment to the balance sheet credit column. The reason is that accumulated depreciation is a contra asset account with a credit balance.

Helpful Hint Every adjusted trial balance amount must be extended to one of the four statement columns.

Because the worksheet does not have columns for the owner's equity statement, Pioneer extends the balance in owner's capital to the balance sheet credit column. In addition, it extends the balance in owner's drawings to the balance sheet debit column because it is an owner's equity account with a debit balance.

The company enters the expense and revenue accounts such as Salaries and Wages Expense and Service Revenue in the appropriate income statement columns.

Illustration 4-5

Extending the adjusted trial balance amounts to appropriate financial statement columns

Pioneer Advertising.xls

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P18 fx

	A	B	C	D	E	F	G	H	I	J	K
1											
2		**PIONEER ADVERTISING**									
3		**Worksheet**									
4		**For the Month Ended October 31, 2017**									
5						Adjusted		Income		Balance	
6		Trial Balance		Adjustments		Trial Balance		Statement		Sheet	
7	Account Titles	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
8	Cash	15,200				15,200				15,200	
9	Supplies	2,500			(a) 1,500	1,000				1,000	
10	Prepaid Insurance	600			(b) 50	550				550	
11	Equipment	5,000				5,000				5,000	
12	Notes Payable		5,000				5,000				5,000
13	Accounts Payable		2,500				2,500				2,500
14	Unearned Service Revenue		1,200	(d) 400			800				800
15	Owner's Capital		10,000				10,000				10,000
16	Owner's Drawings	500				500				500	
17	Service Revenue		10,000		(d) 400		10,600		10,600		
18					(e) 200						
19	Salaries and Wages Expense	4,000		(g) 1,200		5,200		5,200			
20	Rent Expense	900				900		900			
21	Totals	28,700	28,700								
22											
23											
24	Supplies Expense			(a) 1,500		1,500		1,500			
25	Insurance Expense			(b) 50		50		50			
26	Accum. Depreciation—										
27	Equipment				(c) 40		40				40
28	Depreciation Expense			(c) 40		40		40			
29	Accounts Receivable			(e) 200		200				200	
30	Interest Expense			(f) 50		50		50			
31	Interest Payable				(f) 50		50				50
32	Salaries and Wages Payable				(g) 1,200		1,200				1,200
33	Totals			3,440	3,440	30,190	30,190				
34											
35											
36											

Extend all revenue and expense account balances to the income statement columns.

Extend all asset and liability account balances, as well as owner's capital and drawings account balances, to the balance sheet columns.

STEP 5: TOTAL THE STATEMENT COLUMNS, COMPUTE THE NET INCOME (OR NET LOSS), AND COMPLETE THE WORKSHEET

As shown in Illustration 4-6, Pioneer Advertising must now total each of the financial statement columns. The net income or loss for the period is the difference between the totals of the two income statement columns. If total credits exceed total debits, the result is net income. In such a case, the company inserts the words "Net Income" in the account titles space. It then enters the amount in the income statement debit column and the balance sheet credit column. **The debit amount balances the income statement columns; the credit amount balances the balance sheet columns.** In addition, the credit in the balance sheet column indicates the increase in owner's equity resulting from net income.

What if total debits in the income statement columns exceed total credits? In that case, Pioneer has a net loss. It enters the amount of the net loss in the income statement credit column and the balance sheet debit column.

After entering the net income or net loss, Pioneer determines new column totals. The totals shown in the debit and credit income statement columns will match. So will the totals shown in the debit and credit balance sheet columns. If either the income statement columns or the balance sheet columns are not equal after the net income or net loss has been entered, there is an error in the worksheet.

Illustration 4-6 Computing net income or net loss and completing the worksheet

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PIONEER ADVERTISING
Worksheet
For the Month Ended October 31, 2017

	A	B	C	D	E	F	G	H	I	J	K
5–6		Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
7	Account Titles	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
8	Cash	15,200				15,200				15,200	
9	Supplies	2,500			(a) 1,500	1,000				1,000	
10	Prepaid Insurance	600			(b) 50	550				550	
11	Equipment	5,000				5,000				5,000	
12	Notes Payable		5,000				5,000				5,000
13	Accounts Payable		2,500				2,500				2,500
14	Unearned Service Revenue		1,200	(d) 400			800				800
15	Owner's Capital		10,000				10,000				10,000
16	Owner's Drawings	500				500				500	
17	Service Revenue		10,000		(d) 400		10,600		10,600		
18					(e) 200						
19	Salaries and Wages Expense	4,000		(g) 1,200		5,200		5,200			
20	Rent Expense	900				900		900			
21	Totals	28,700	28,700								
22											
23											
24	Supplies Expense			(a) 1,500		1,500		1,500			
25	Insurance Expense			(b) 50		50		50			
26	Accum. Depreciation—										
27	Equipment				(c) 40		40				40
28	Depreciation Expense			(c) 40		40		40			
29	Accounts Receivable			(e) 200		200				200	
30	Interest Expense			(f) 50		50		50			
31	Interest Payable				(f) 50		50				50
32	Salaries and Wages Payable				(g) 1,200		1,200				1,200
33	Totals			3,440	3,440	30,190	30,190	7,740	10,600	22,450	19,590
34											
35	Net Income							2,860			2,860
36	Totals							10,600	10,600	22,450	22,450

The difference between the totals of the two income statement columns determines net income or net loss.

Net income is extended to the credit column of the balance sheet columns. (Net loss would be extended to the debit column.)

Preparing Financial Statements from a Worksheet

After a company has completed a worksheet, it has at hand all the data required for preparation of financial statements. The income statement is prepared from the income statement columns. The balance sheet and owner's equity statement are prepared from the balance sheet columns. Illustration 4-7 shows the financial

Illustration 4-7
Financial statements from a worksheet

PIONEER ADVERTISING
Income Statement
For the Month Ended October 31, 2017

Revenues		
Service revenue		$10,600
Expenses		
Salaries and wages expense	$5,200	
Supplies expense	1,500	
Rent expense	900	
Insurance expense	50	
Interest expense	50	
Depreciation expense	40	
Total expenses		7,740
Net income		$ 2,860

PIONEER ADVERTISING
Owner's Equity Statement
For the Month Ended October 31, 2017

Owner's capital, October 1		$ –0–
Add: Investments	$10,000	
Net income	2,860	12,860
		12,860
Less: Drawings		500
Owner's capital, October 31		$12,360

PIONEER ADVERTISING
Balance Sheet
October 31, 2017

Assets		
Cash		$15,200
Accounts receivable		200
Supplies		1,000
Prepaid insurance		550
Equipment	$5,000	
Less: Accumulated depreciation—equipment	40	4,960
Total assets		$21,910
Liabilities and Owner's Equity		
Liabilities		
Notes payable	$5,000	
Accounts payable	2,500	
Interest payable	50	
Unearned service revenue	800	
Salaries and wages payable	1,200	
Total liabilities		$ 9,550
Owner's equity		
Owner's capital		12,360
Total liabilities and owner's equity		$21,910

statements prepared from Pioneer Advertising's worksheet. At this point, the company has not journalized or posted adjusting entries. Therefore, ledger balances for some accounts are not the same as the financial statement amounts.

The amount shown for owner's capital on the worksheet is the account balance **before considering drawings and net income (or loss)**. When the owner has made no additional investments of capital during the period, this worksheet amount for owner's capital is the balance at the beginning of the period.

Using a worksheet, companies can prepare financial statements before they journalize and post adjusting entries. **However, the completed worksheet is not a substitute for formal financial statements.** The format of the data in the financial statement columns of the worksheet is not the same as the format of the financial statements. **A worksheet is essentially a working tool of the accountant**; companies do not distribute it to management and other parties.

Preparing Adjusting Entries from a Worksheet

A worksheet is not a journal, and it cannot be used as a basis for posting to ledger accounts. To adjust the accounts, the company must journalize the adjustments and post them to the ledger. **The adjusting entries are prepared from the adjustments columns of the worksheet.** The reference letters in the adjustments columns and the explanations of the adjustments at the bottom of the worksheet help identify the adjusting entries. The journalizing and posting of adjusting entries **follows** the preparation of financial statements when a worksheet is used. The adjusting entries on October 31 for Pioneer Advertising are the same as those shown in Illustration 3-23 (page 109).

Helpful Hint
Note that writing the explanation to the adjustment at the bottom of the worksheet is not required.

DO IT! 1 Worksheet

Susan Elbe is preparing a worksheet. Explain to Susan how she should extend the following adjusted trial balance accounts to the financial statement columns of the worksheet.

Cash	Owner's Drawings
Accumulated Depreciation—Equipment	Service Revenue
Accounts Payable	Salaries and Wages Expense

Action Plan
- ✔ Balance sheet: Extend assets to debit column. Extend liabilities to credit column. Extend contra assets to credit column. Extend drawings account to debit column.
- ✔ Income statement: Extend expenses to debit column. Extend revenues to credit column.

Solution

Income statement debit column—Salaries and Wages Expense
Income statement credit column—Service Revenue
Balance sheet debit column—Cash; Owner's Drawings
Balance sheet credit column—Accumulated Depreciation—Equipment; Accounts Payable

Related exercise material: **BE4-1, BE4-2, BE4-3, E4-1, E4-2, E4-5, E4-6, and DO IT! 4-1.**

LEARNING OBJECTIVE 2 Prepare closing entries and a post-closing trial balance.

At the end of the accounting period, the company makes the accounts ready for the next period. This is called **closing the books**. In closing the books, the company distinguishes between temporary and permanent accounts.

Temporary accounts relate only to a given accounting period. They include all income statement accounts and the owner's drawings account. **The company closes all temporary accounts at the end of the period.**

In contrast, **permanent accounts** relate to one or more future accounting periods. They consist of all balance sheet accounts, including the owner's capital account. **Permanent accounts are not closed from period to period.** Instead, the company carries forward the balances of permanent accounts into the next accounting period. Illustration 4-8 identifies the accounts in each category.

Alternative Terminology
Temporary accounts are sometimes called *nominal accounts*, and permanent accounts are sometimes called *real accounts*.

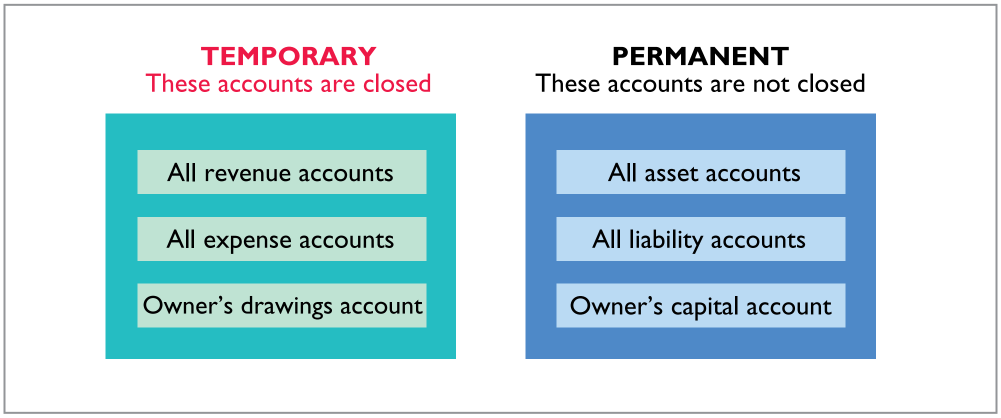

Illustration 4-8
Temporary versus permanent accounts

Preparing Closing Entries

At the end of the accounting period, the company transfers temporary account balances to the permanent owner's equity account, Owner's Capital, by means of closing entries.[1]

Closing entries formally recognize in the ledger the transfer of net income (or net loss) and owner's drawings to owner's capital. The owner's equity statement shows the results of these entries. **Closing entries also produce a zero balance in each temporary account.** The temporary accounts are then ready to accumulate data in the next accounting period separate from the data of prior periods. Permanent accounts are not closed.

Journalizing and posting closing entries is a required step in the accounting cycle. (See Illustration 4-15 on page 166.) The company performs this step after it has prepared financial statements. In contrast to the steps in the cycle that you have already studied, companies generally journalize and post closing entries **only at the end of the annual accounting period**. Thus, all temporary accounts will contain data for the entire year.

In preparing closing entries, companies could close each income statement account directly to owner's capital. However, to do so would result in excessive detail in the permanent Owner's Capital account. Instead, companies close the revenue and expense accounts to another temporary account, **Income Summary**, and they transfer the resulting net income or net loss from this account to owner's capital.

Companies **record closing entries in the general journal**. A center caption, Closing Entries, inserted in the journal between the last adjusting entry and the first closing entry, identifies these entries. Then the company posts the closing entries to the ledger accounts.

Companies generally prepare closing entries directly from the adjusted balances in the ledger. They could prepare separate closing entries for each nominal account, but the following four entries accomplish the desired result more efficiently:

1. Debit each revenue account for its balance, and credit Income Summary for total revenues.
2. Debit Income Summary for total expenses, and credit each expense account for its balance.

[1]We explain closing entries for a partnership and for a corporation in Chapters 12 and 13, respectively.

Helpful Hint
Owner's Drawings is closed directly to Owner's Capital and not to Income Summary. Owner's Drawings is not an expense.

3. Debit Income Summary and credit Owner's Capital for the amount of net income.
4. Debit Owner's Capital for the balance in the Owner's Drawings account, and credit Owner's Drawings for the same amount.

Illustration 4-9 presents a diagram of the closing process. In it, the boxed numbers refer to the four entries required in the closing process.

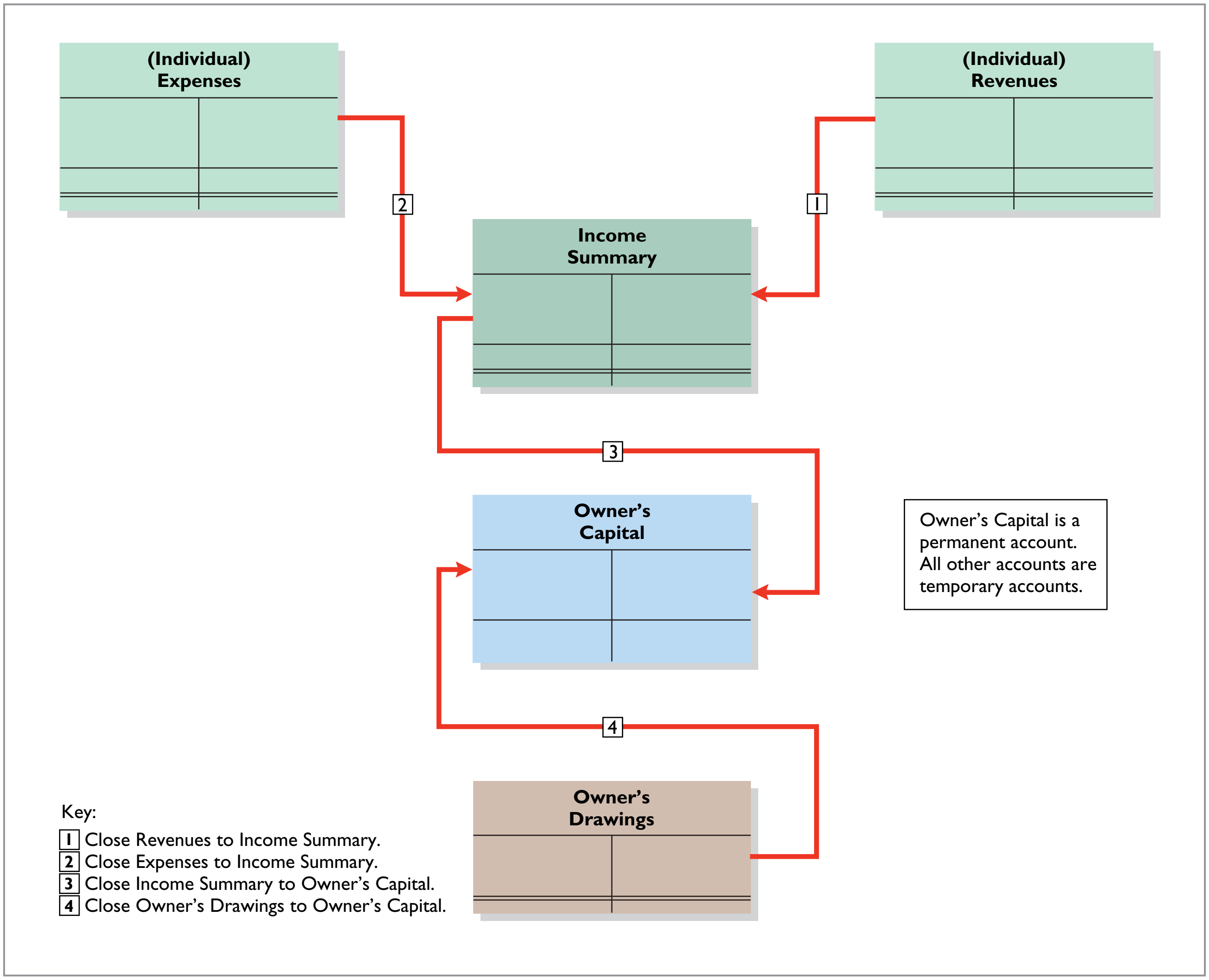

Illustration 4-9
Diagram of closing process—proprietorship

If there were a net loss (because expenses exceeded revenues), entry 3 in Illustration 4-9 would be reversed: there would be a credit to Income Summary and a debit to Owner's Capital.

CLOSING ENTRIES ILLUSTRATED

In practice, companies generally prepare closing entries only at the end of the annual accounting period. However, to illustrate the journalizing and posting of closing entries, we will assume that Pioneer Advertising closes its books monthly. Illustration 4-10 shows the closing entries at October 31. (The numbers in parentheses before each entry correspond to the four entries diagrammed in Illustration 4-9.)

Illustration 4-10
Closing entries journalized

GENERAL JOURNAL J3

Date	Account Titles and Explanation	Ref.	Debit	Credit
	Closing Entries			
2017	(1)			
Oct. 31	Service Revenue	400	10,600	
	Income Summary	350		10,600
	(To close revenue account)			
	(2)			
31	Income Summary	350	7,740	
	Supplies Expense	631		1,500
	Depreciation Expense	711		40
	Insurance Expense	722		50
	Salaries and Wages Expense	726		5,200
	Rent Expense	729		900
	Interest Expense	905		50
	(To close expense accounts)			
	(3)			
31	Income Summary	350	2,860	
	Owner's Capital	301		2,860
	(To close net income to capital)			
	(4)			
31	Owner's Capital	301	500	
	Owner's Drawings	306		500
	(To close drawings to capital)			

Note that the amounts for Income Summary in entries (1) and (2) are the totals of the income statement credit and debit columns, respectively, in the worksheet.

A couple of cautions in preparing closing entries. (1) Avoid unintentionally doubling the revenue and expense balances rather than zeroing them. (2) Do not close Owner's Drawings through the Income Summary account. **Owner's Drawings is not an expense, and it is not a factor in determining net income.**

Posting Closing Entries

Illustration 4-11 shows the posting of the closing entries and the underlining (ruling) of the accounts. Note that all temporary accounts have zero balances after posting the closing entries. In addition, notice that the balance in owner's capital (Owner's Capital) represents the total equity of the owner at the end of the accounting period. This balance is shown on the balance sheet and is the ending capital reported on the owner's equity statement, as shown in Illustration 4-7 (page 157). Pioneer Advertising uses the Income Summary account only in closing. It does not journalize and post entries to this account during the year.

Helpful Hint
The balance in Income Summary before it is closed must equal the net income or net loss for the period.

As part of the closing process, Pioneer totals, balances, and double-underlines its temporary accounts—revenues, expenses, and Owner's Drawings, as shown in T-account form in Illustration 4-11 (page 162). It does not close its permanent accounts—assets, liabilities, and Owner's Capital. Instead, Pioneer draws a single underline beneath the current-period entries for the permanent accounts. The account balance is then entered below the single underline and is carried forward to the next period (for example, see Owner's Capital).

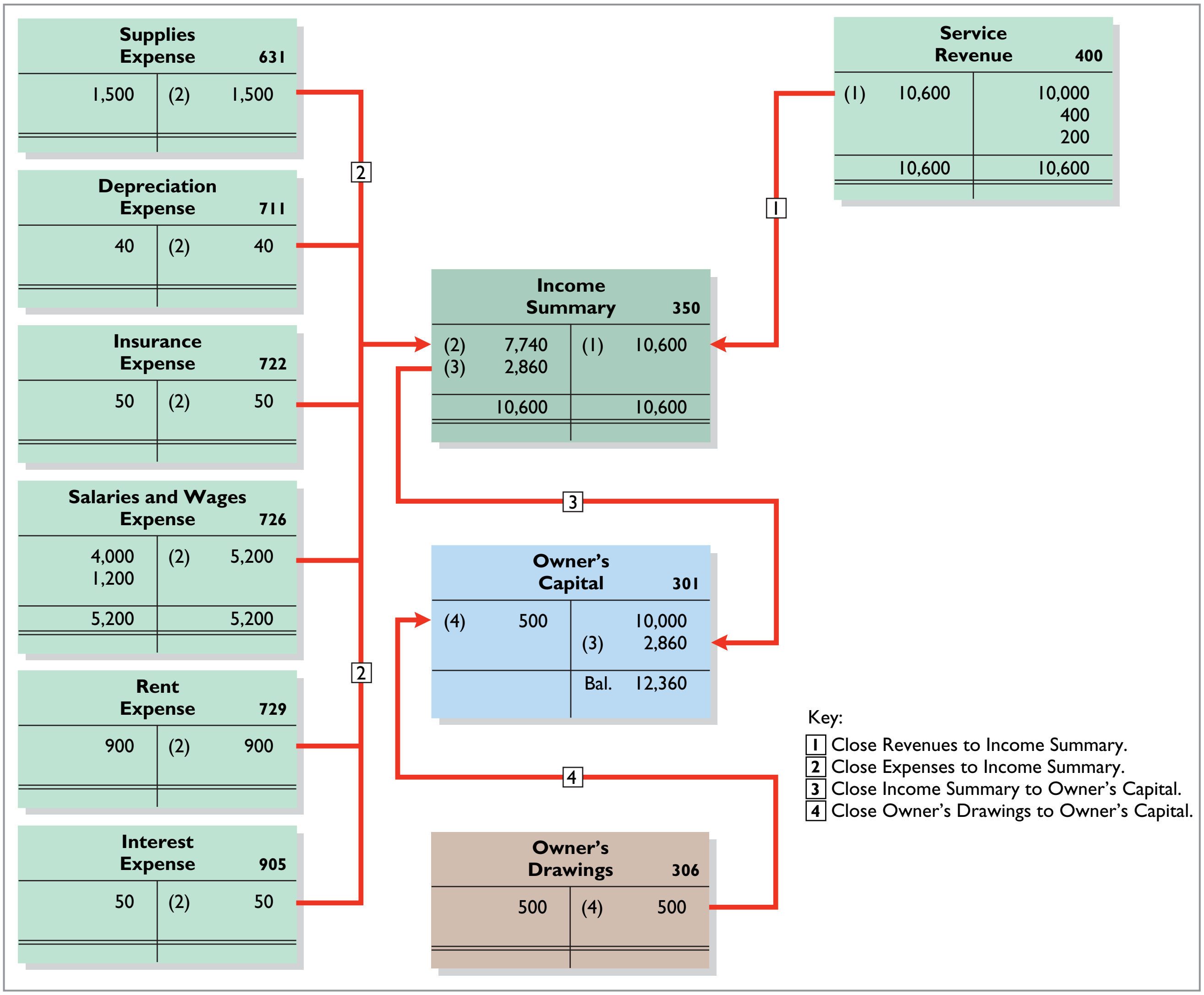

Illustration 4-11
Posting of closing entries

Accounting Across the Organization — Cisco Systems


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Cisco Performs the Virtual Close

Technology has dramatically shortened the closing process. Recent surveys have reported that the average company now takes only six to seven days to close, rather than the previous 20 days. But a few companies do much better. Cisco Systems can perform a "virtual close"—closing within 24 hours on any day in the quarter. The same is true at Lockheed Martin Corp., which improved its closing time by 85% in just the last few years. Not very long ago, it took 14 to 16 days. Managers at these companies emphasize that this increased speed has not reduced the accuracy and completeness of the data.

This is not just showing off. Knowing exactly where you are financially all of the time allows the company to respond faster than its competitors. It also means that the hundreds of people who used to spend 10 to 20 days a quarter tracking transactions can now be more usefully employed on things such as mining data for business intelligence to find new business opportunities.

Source: "Reporting Practices: Few Do It All," *Financial Executive* (November 2003), p. 11.

Who else benefits from a shorter closing process? (Go to **WileyPLUS** for this answer and additional questions.)

Preparing a Post-Closing Trial Balance

After Pioneer Advertising has journalized and posted all closing entries, it prepares another trial balance, called a **post-closing trial balance**, from the ledger. The post-closing trial balance lists permanent accounts and their balances after the journalizing and posting of closing entries. The purpose of the post-closing trial balance is **to prove the equality of the permanent account balances carried forward into the next accounting period**. Since all temporary accounts will have zero balances, **the post-closing trial balance will contain only permanent—balance sheet—accounts**.

Illustration 4-12 shows the post-closing trial balance for Pioneer Advertising.

Illustration 4-12
Post-closing trial balance

PIONEER ADVERTISING
Post-Closing Trial Balance
October 31, 2017

	Debit	Credit
Cash	$ 15,200	
Accounts Receivable	200	
Supplies	1,000	
Prepaid Insurance	550	
Equipment	5,000	
Accumulated Depreciation—Equipment		$ 40
Notes Payable		5,000
Accounts Payable		2,500
Unearned Service Revenue		800
Salaries and Wages Payable		1,200
Interest Payable		50
Owner's Capital		12,360
	$21,950	$21,950

Pioneer prepares the post-closing trial balance from the permanent accounts in the ledger. Illustration 4-13 (page 164) shows the permanent accounts in Pioneer's general ledger.

(Permanent Accounts Only)

GENERAL LEDGER

Cash — No. 101

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1	10,000		10,000
2		J1	1,200		11,200
3		J1		900	10,300
4		J1		600	9,700
20		J1		500	9,200
26		J1		4,000	5,200
31		J1	10,000		**15,200**

Accounts Receivable — No. 112

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	Adj. entry	J2	**200**		**200**

Supplies — No. 126

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 5		J1	2,500		2,500
31	Adj. entry	J2		**1,500**	**1,000**

Prepaid Insurance — No. 130

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 4		J1	600		600
31	Adj. entry	J2		**50**	**550**

Equipment — No. 157

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1	5,000		**5,000**

Accumulated Depreciation—Equipment — No. 158

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	Adj. entry	J2		**40**	**40**

Notes Payable — No. 200

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1		5,000	**5,000**

Accounts Payable — No. 201

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 5		J1		2,500	**2,500**

Unearned Service Revenue — No. 209

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 2		J1		1,200	1,200
31	Adj. entry	J2	400		**800**

Salaries and Wages Payable — No. 212

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	Adj. entry	J2		**1,200**	**1,200**

Interest Payable — No. 230

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	Adj. entry	J2		**50**	**50**

Owner's Capital — No. 301

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 1		J1		10,000	10,000
31	**Closing entry**	**J3**		**2,860**	**12,860**
31	**Closing entry**	**J3**	**500**		**12,360**

Note: The permanent accounts for Pioneer Advertising are shown here. Illustration 4-14 (page 165) shows the temporary accounts. Both permanent and temporary accounts are part of the general ledger. They are segregated here to aid in learning.

Illustration 4-13
General ledger, permanent accounts

A post-closing trial balance provides evidence that the company has properly journalized and posted the closing entries. It also shows that the accounting equation is in balance at the end of the accounting period. However, like the trial balance, it does not prove that Pioneer has recorded all transactions or that the ledger is correct. For example, the post-closing trial balance still will balance even if a transaction is not journalized and posted or if a transaction is journalized and posted twice.

The remaining accounts in the general ledger are temporary accounts, shown in Illustration 4-14. After Pioneer correctly posts the closing entries, each temporary account has a zero balance. These accounts are double-underlined to finalize the closing process.

(Temporary Accounts Only)

GENERAL LEDGER

Owner's Drawings — No. 306

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 20		J1	500		500
31	**Closing entry**	**J3**		**500**	**–0–**

Income Summary — No. 350

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct.31	**Closing entry**	**J3**		**10,600**	**10,600**
31	**Closing entry**	**J3**	**7,740**		**2,860**
31	**Closing entry**	**J3**	**2,860**		**–0–**

Service Revenue — No. 400

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31		J1		10,000	10,000
31	Adj. entry	J2		400	10,400
31	Adj. entry	J2		200	10,600
31	**Closing entry**	**J3**	**10,600**		**–0–**

Supplies Expense — No. 631

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	Adj. entry	J2	1,500		1,500
31	**Closing entry**	**J3**		**1,500**	**–0–**

Depreciation Expense — No. 711

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	Adj. entry	J2	**40**		40
31	**Closing entry**	**J3**		**40**	**–0–**

Insurance Expense — No. 722

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	Adj. entry	J2	**50**		50
31	**Closing entry**	**J3**		**50**	**–0–**

Salaries and Wages Expense — No. 726

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 26		J1	4,000		4,000
31	Adj. entry	J2	**1,200**		5,200
31	**Closing entry**	**J3**		**5,200**	**–0–**

Rent Expense — No. 729

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 3		J1	900		900
31	**Closing entry**	**J3**		**900**	**–0–**

Interest Expense — No. 905

Date	Explanation	Ref.	Debit	Credit	Balance
2017					
Oct. 31	Adj. entry	J2	**50**		50
31	**Closing entry**	**J3**		**50**	**–0–**

Note: The temporary accounts for Pioneer Advertising are shown here. Illustration 4-13 (page 164) shows the permanent accounts. Both permanent and temporary accounts are part of the general ledger. They are segregated here to aid in learning.

Illustration 4-14
General ledger, temporary accounts

DO IT! 2 Closing Entries

The worksheet for Hancock Company shows the following in the financial statement columns:

Owner's drawings $15,000
Owner's capital $42,000
Net income $18,000

Prepare the closing entries at December 31 that affect owner's capital.

Solution

Dec. 31	Income Summary	18,000	
	Owner's Capital		18,000
	(To close net income to capital)		
31	Owner's Capital	15,000	
	Owner's Drawings		15,000
	(To close drawings to capital)		

Action Plan

✔ Close Income Summary to Owner's Capital.

✔ Close Owner's Drawings to Owner's Capital.

Related exercise material: **BE4-4, BE4-5, BE4-6, E4-4, E4-7, E4-8, E4-11, and DO IT! 4-2.**

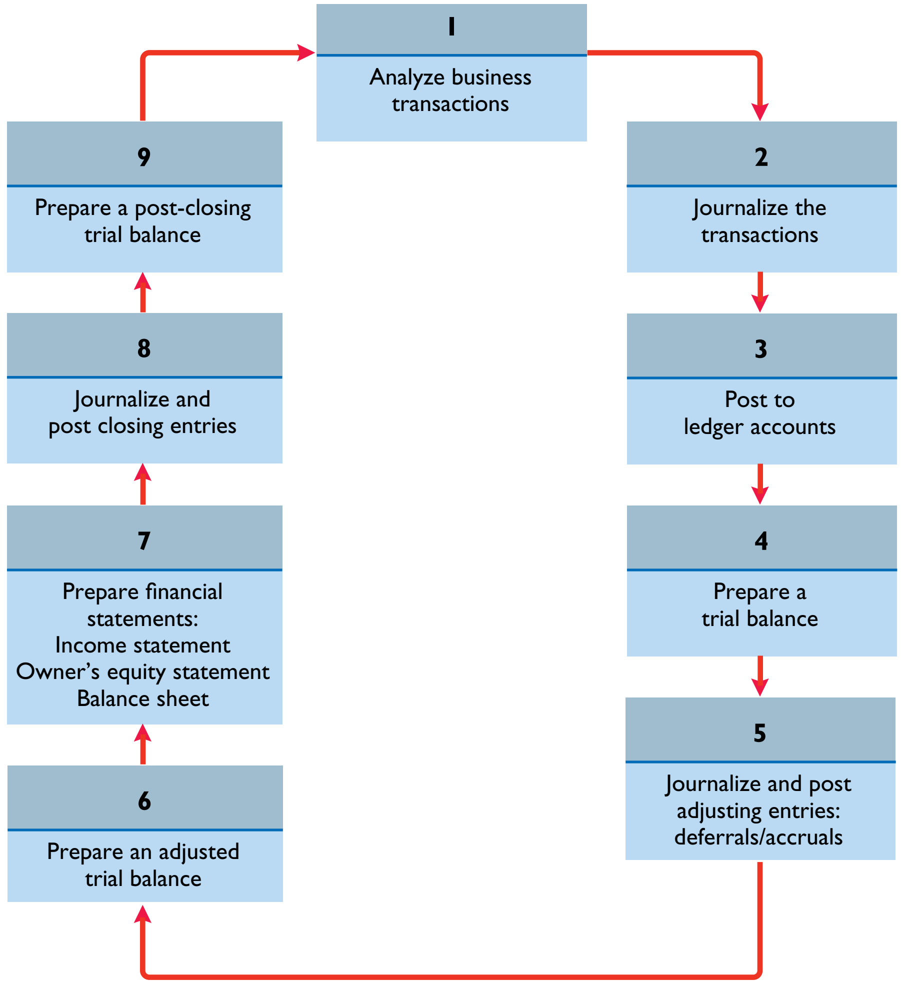
LEARNING OBJECTIVE 3

Explain the steps in the accounting cycle and how to prepare correcting entries.

Summary of the Accounting Cycle

Illustration 4-15 summarizes the steps in the accounting cycle. You can see that the cycle begins with the analysis of business transactions and ends with the preparation of a post-closing trial balance.

Illustration 4-15
Steps in the accounting cycle



Optional steps: If a worksheet is prepared, Steps 4, 5, and 6 are incorporated in the worksheet. If reversing entries are prepared, they occur between Steps 9 and 1 as discussed below.

Steps 1–3 may occur daily during the accounting period. Companies perform Steps 4–7 on a periodic basis, such as monthly, quarterly, or annually. Steps 8 and 9—closing entries and a post-closing trial balance—usually take place only at the end of a company's **annual** accounting period.

There are also two **optional steps** in the accounting cycle. As you have seen, companies may use a worksheet in preparing adjusting entries and financial statements. In addition, they may use reversing entries, as explained below.

Reversing Entries—An Optional Step

Some accountants prefer to reverse certain adjusting entries by making a **reversing entry** at the beginning of the next accounting period. A reversing entry is the exact opposite of the adjusting entry made in the previous period. **Use of reversing**

entries is an optional bookkeeping procedure; it is not a required step in the accounting cycle. Accordingly, we have chosen to cover this topic in an appendix at the end of the chapter.

Correcting Entries—An Avoidable Step

Unfortunately, errors may occur in the recording process. Companies should correct errors, **as soon as they discover them**, by journalizing and posting **correcting entries**. If the accounting records are free of errors, no correcting entries are needed.

You should recognize several differences between correcting entries and adjusting entries. First, adjusting entries are an integral part of the accounting cycle. Correcting entries, on the other hand, are unnecessary if the records are error-free. Second, companies journalize and post adjustments **only at the end of an accounting period**. In contrast, companies make correcting entries **whenever they discover an error**. Finally, adjusting entries always affect at least one balance sheet account and one income statement account. In contrast, correcting entries may involve any combination of accounts in need of correction. **Correcting entries must be posted before closing entries.**

ETHICS NOTE

When companies find errors in previously released income statements, they restate those numbers. Perhaps because of the increased scrutiny caused by Sarbanes-Oxley, in a recent year companies filed a record 1,195 restatements.

To determine the correcting entry, it is useful to compare the incorrect entry with the correct entry. Doing so helps identify the accounts and amounts that should—and should not—be corrected. After comparison, the accountant makes an entry to correct the accounts. The following two cases for Mercato Co. illustrate this approach.

CASE 1

On May 10, Mercato Co. journalized and posted a $50 cash collection on account from a customer as a debit to Cash $50 and a credit to Service Revenue $50. The company discovered the error on May 20, when the customer paid the remaining balance in full.

Illustration 4-16
Comparison of entries

Incorrect Entry (May 10)			Correct Entry (May 10)		
Cash	50		Cash	50	
Service Revenue		50	Accounts Receivable		50

Comparison of the incorrect entry with the correct entry reveals that the debit to Cash $50 is correct. However, the $50 credit to Service Revenue should have been credited to Accounts Receivable. As a result, both Service Revenue and Accounts Receivable are overstated in the ledger. Mercato makes the following correcting entry.

Illustration 4-17
Correcting entry

Correcting Entry

May 20	Service Revenue	50	
	Accounts Receivable		50
	(To correct entry of May 10)		

A	=	L	+	OE
				−50 Rev
−50				

Cash Flows
no effect

CASE 2

On May 18, Mercato purchased on account equipment costing $450. The transaction was journalized and posted as a debit to Equipment $45 and a credit to Accounts Payable $45. The error was discovered on June 3, when Mercato received the monthly statement for May from the creditor.

Illustration 4-18
Comparison of entries

Incorrect Entry (May 18)			Correct Entry (May 18)		
Equipment	45		Equipment	450	
Accounts Payable		45	Accounts Payable		450

Comparison of the two entries shows that two accounts are incorrect. Equipment is understated $405, and Accounts Payable is understated $405. Mercato makes the correcting entry shown in Illustration 4-19 (page 168).

A	=	L	+	OE
+405				
		+405		

Cash Flows
no effect

Illustration 4-19
Correcting entry

Correcting Entry

June 3	Equipment	405	
	Accounts Payable		405
	(To correct entry of May 18)		

Instead of preparing a correcting entry, **it is possible to reverse the incorrect entry and then prepare the correct entry**. This approach will result in more entries and postings than a correcting entry, but it will accomplish the desired result.

Accounting Across the Organization — Yale Express

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Lost in Transportation

Yale Express, a short-haul trucking firm, turned over much of its cargo to local truckers to complete deliveries. Yale collected the entire delivery charge. When billed by the local trucker, Yale sent payment for the final phase to the local trucker. Yale used a cutoff period of 20 days into the next accounting period in making its adjusting entries for accrued liabilities. That is, it waited 20 days to receive the local truckers' bills to determine the amount of the unpaid but incurred delivery charges as of the balance sheet date.

On the other hand, Republic Carloading, a nationwide, long-distance freight forwarder, frequently did not receive transportation bills from truckers to whom it passed on cargo until months after the year-end. In making its year-end adjusting entries, Republic waited for months in order to include all of these outstanding transportation bills.

When Yale Express merged with Republic Carloading, Yale's vice president employed the 20-day cutoff procedure for both firms. As a result, millions of dollars of Republic's accrued transportation bills went unrecorded. When the company detected the error and made correcting entries, these and other errors changed a reported profit of $1.14 million into a loss of $1.88 million!

What might Yale Express's vice president have done to produce more accurate financial statements without waiting months for Republic's outstanding transportation bills? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 3 Correcting Entries

Sanchez Company discovered the following errors made in January 2017.

1. A payment of Salaries and Wages Expense of $600 was debited to Supplies and credited to Cash, both for $600.
2. A collection of $3,000 from a client on account was debited to Cash $200 and credited to Service Revenue $200.
3. The purchase of supplies on account for $860 was debited to Supplies $680 and credited to Accounts Payable $680.

Correct the errors without reversing the incorrect entry.

Action Plan
✔ Compare the incorrect entry with correct entry.
✔ After comparison, make an entry to correct the accounts.

Solution

1. Salaries and Wages Expense	600	
Supplies		600
2. Service Revenue	200	
Cash	2,800	
Accounts Receivable		3,000
3. Supplies ($860 − $680)	180	
Accounts Payable		180

Related exercise material: **BE4-9, E4-12, E4-13, and DO IT! 4-3.**

LEARNING OBJECTIVE 4

Identify the sections of a classified balance sheet.

The balance sheet presents a snapshot of a company's financial position at a point in time. To improve users' understanding of a company's financial position, companies often use a classified balance sheet. A **classified balance sheet** groups together similar assets and similar liabilities, using a number of standard classifications and sections. This is useful because items within a group have similar economic characteristics. A classified balance sheet generally contains the standard classifications listed in Illustration 4-20.

Assets	Liabilities and Owner's Equity
Current assets	Current liabilities
Long-term investments	Long-term liabilities
Property, plant, and equipment	Owner's (Stockholders') equity
Intangible assets	

Illustration 4-20
Standard balance sheet classifications

These groupings help financial statement readers determine such things as (1) whether the company has enough assets to pay its debts as they come due, and (2) the claims of short- and long-term creditors on the company's total assets. Many of these groupings can be seen in the balance sheet of Franklin Company shown in Illustration 4-21 below and on the next page. In the sections that follow, we explain each of these groupings.

Illustration 4-21
Classified balance sheet

FRANKLIN COMPANY
Balance Sheet
October 31, 2017

Assets			
Current assets			
Cash		$ 6,600	
Debt investments		2,000	
Accounts receivable		7,000	
Notes receivable		1,000	
Inventory		3,000	
Supplies		2,100	
Prepaid insurance		400	
Total current assets			$22,100
Long-term investments			
Stock investments		5,200	
Investment in real estate		2,000	7,200
Property, plant, and equipment			
Land		10,000	
Equipment	$24,000		
Less: Accumulated depreciation—equipment	5,000	19,000	29,000
Intangible assets			
Patents			3,100
Total assets			$61,400

Illustration 4-21
(*continued*)

Helpful Hint
Recall that the basic accounting equation is Assets = Liabilities + Owner's Equity.

Liabilities and Owner's Equity		
Current liabilities		
Notes payable	$11,000	
Accounts payable	2,100	
Unearned service revenue	900	
Salaries and wages payable	1,600	
Interest payable	450	
Total current liabilities		$16,050
Long-term liabilities		
Mortgage payable	10,000	
Notes payable	1,300	
Total long-term liabilities		11,300
Total liabilities		27,350
Owner's equity		
Owner's capital		34,050
Total liabilities and owner's equity		$61,400

Current Assets

Current assets are assets that a company expects to convert to cash or use up within one year or its operating cycle, whichever is longer. In Illustration 4-21, Franklin Company had current assets of $22,100. For most businesses, the cutoff for classification as current assets is one year from the balance sheet date. For example, accounts receivable are current assets because the company will collect them and convert them to cash within one year. Supplies is a current asset because the company expects to use them up in operations within one year.

Some companies use a period longer than one year to classify assets and liabilities as current because they have an operating cycle longer than one year. The **operating cycle** of a company is the average time that it takes to purchase inventory, sell it on account, and then collect cash from customers. For most businesses, this cycle takes less than a year so they use a one-year cutoff. But for some businesses, such as vineyards or airplane manufacturers, this period may be longer than a year. **Except where noted, we will assume that companies use one year to determine whether an asset or liability is current or long-term.**

Common types of current assets are (1) cash, (2) investments (such as short-term U.S. government securities), (3) receivables (notes receivable, accounts receivable, and interest receivable), (4) inventories, and (5) prepaid expenses (supplies and insurance). **On the balance sheet, companies usually list these items in the order in which they expect to convert them into cash.**

Illustration 4-22 presents the current assets of Southwest Airlines Co.

Illustration 4-22
Current assets section

Real World

SOUTHWEST AIRLINES CO.
Balance Sheet (partial)
(in millions)

Current assets	
Cash and cash equivalents	$1,390
Short-term investments	369
Accounts receivable	241
Inventories	181
Prepaid expenses and other current assets	420
Total current assets	$2,601

As we explain later in the chapter, a company's current assets are important in assessing its short-term debt-paying ability.

Long-Term Investments

Long-term investments are generally (1) investments in stocks and bonds of other companies that are normally held for many years, (2) long-term assets such as land or buildings that a company is not currently using in its operating activities, and (3) long-term notes receivable. In Illustration 4-21, Franklin Company reported total long-term investments of $7,200 on its balance sheet.

Yahoo! Inc. reported long-term investments in its balance sheet, as shown in Illustration 4-23.

Alternative Terminology
Long-term investments are often referred to simply as *investments*.

Illustration 4-23
Long-term investments section

Real World

YAHOO! INC. Balance Sheet (partial) (in thousands)	
Long-term investments	
Investments in securities	$90,266

Property, Plant, and Equipment

Property, plant, and equipment are assets with relatively long useful lives that a company is currently using in operating the business. This category includes land, buildings, machinery and equipment, delivery equipment, and furniture. In Illustration 4-21, Franklin Company reported property, plant, and equipment of $29,000.

Depreciation is the practice of allocating the cost of assets to a number of years. Companies do this by systematically assigning a portion of an asset's cost as an expense each year (rather than expensing the full purchase price in the year of purchase). The assets that the company depreciates are reported on the balance sheet at cost less accumulated depreciation. The **accumulated depreciation** account shows the total amount of depreciation that the company has expensed thus far in the asset's life. In Illustration 4-21, Franklin Company reported accumulated depreciation of $5,000.

Illustration 4-24 presents the property, plant, and equipment of Cooper Tire & Rubber Company.

Alternative Terminology
Property, plant, and equipment is sometimes called *fixed assets* or *plant assets*.

International Note
Recently, China adopted International Financial Reporting Standards (IFRS). This was done in an effort to reduce fraud and increase investor confidence in financial reports. Under these standards, many items, such as property, plant, and equipment, may be reported at current fair values rather than historical cost.

Illustration 4-24
Property, plant, and equipment section

Real World

COOPER TIRE & RUBBER COMPANY Balance Sheet (partial) (in thousands)		
Property, plant, and equipment		
Land and land improvements	$ 41,553	
Buildings	298,706	
Machinery and equipment	1,636,091	
Molds, cores, and rings	268,158	$2,244,508
Less: Accumulated depreciation		1,252,692
		$ 991,816

Intangible Assets

Many companies have long-lived assets that do not have physical substance yet often are very valuable. We call these assets **intangible assets**. One significant intangible asset is goodwill. Others include patents, copyrights, and trademarks

Helpful Hint
Sometimes intangible assets are reported under a broader heading called *"Other assets."*

or trade names that give the company **exclusive right** of use for a specified period of time. In Illustration 4-21, Franklin Company reported intangible assets of $3,100.

Illustration 4-25 shows the intangible assets of media giant Time Warner, Inc.

Illustration 4-25
Intangible assets section

Real World

TIME WARNER, INC.
Balance Sheet (partial)
(in millions)

Intangible assets	
Goodwill	$40,953
Film library	2,690
Customer lists	2,540
Cable television franchises	38,048
Sports franchises	262
Brands, trademarks, and other intangible assets	8,313
	$92,806

People, Planet, and Profit Insight

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Regaining Goodwill

After falling to unforeseen lows amidst scandals, recalls, and economic crises, the American public's positive perception of the reputation of corporate America is on the rise. Overall corporate reputation is experiencing rehabilitation as the American public gives high marks overall to corporate America, specific industries, and the largest number of individual companies in a dozen years. This is according to the findings of the *2011 Harris Interactive RQ Study,* which measures the reputations of the 60 most visible companies in the United States.

The survey focuses on six reputational dimensions that influence reputation and consumer behavior. Four of these dimensions, along with the five corporations that ranked highest within each, are as follows.

- **Social Responsibility**: (1) Whole Foods Market, (2) Johnson & Johnson, (3) Google, (4) The Walt Disney Company, (5) Procter & Gamble Co.
- **Emotional Appeal**: (1) Johnson & Johnson, (2) Amazon.com, (3) UPS, (4) General Mills, (5) Kraft Foods
- **Financial Performance**: (1) Google, (2) Berkshire Hathaway, (3) Apple, (4) Intel, (5) The Walt Disney Company
- **Products and Services**: (1) Intel Corporation, (2) 3M Company, (3) Johnson & Johnson, (4) Google, (5) Procter & Gamble Co.

Source: www.harrisinteractive.com.

Name two industries today which are probably rated low on the reputational characteristics of "being trusted" and "having high ethical standards." (Go to **WileyPLUS** for this answer and additional questions.)

ETHICS NOTE

A company that has more current assets than current liabilities can increase the ratio of current assets to current liabilities by using cash to pay off some current liabilities. This gives the appearance of being more liquid. Do you think this move is ethical?

Current Liabilities

In the liabilities and owner's equity section of the balance sheet, the first grouping is current liabilities. **Current liabilities** are obligations that the company is to pay within the coming year or its operating cycle, whichever is longer. Common examples are accounts payable, salaries and wages payable, notes payable, interest payable, and income taxes payable. Also included as current liabilities are current maturities of long-term obligations—payments to be made within the next year on long-term obligations. In Illustration 4-21, Franklin Company reported five different types of current liabilities, for a total of $16,050.

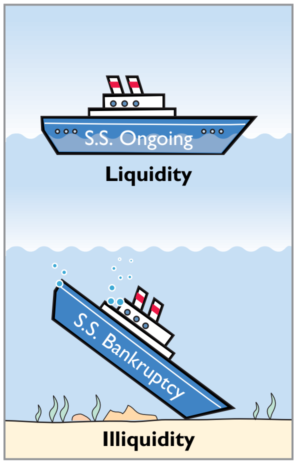
Illustration 4-26 shows the current liabilities section adapted from the balance sheet of Marcus Corporation.

Illustration 4-26
Current liabilities section

Real World

MARCUS CORPORATION
Balance Sheet (partial)
(in thousands)

Current liabilities	
Notes payable	$ 239
Accounts payable	24,242
Current maturities of long-term debt	57,250
Other current liabilities	27,477
Income taxes payable	11,215
Salaries and wages payable	6,720
Total current liabilities	$127,143



Users of financial statements look closely at the relationship between current assets and current liabilities. This relationship is important in evaluating a company's **liquidity**—its ability to pay obligations expected to be due within the next year. When current assets exceed current liabilities, the likelihood for paying the liabilities is favorable. When the reverse is true, short-term creditors may not be paid, and the company may ultimately be forced into bankruptcy.

Accounting Across the Organization — REL Consultancy Group

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Can a Company Be Too Liquid?

There actually is a point where a company can be too liquid—that is, it can have too much working capital (current assets less current liabilities). While it is important to be liquid enough to be able to pay short-term bills as they come due, a company does not want to tie up its cash in extra inventory or receivables that are not earning the company money.

By one estimate from the REL Consultancy Group, the thousand largest U.S. companies have on their books cumulative excess working capital of $764 billion. Based on this figure, companies could have reduced debt by 36% or increased net income by 9%. Given that managers throughout a company are interested in improving profitability, it is clear that they should have an eye toward managing working capital. They need to aim for a "Goldilocks solution"—not too much, not too little, but just right.

Source: K. Richardson, "Companies Fall Behind in Cash Management," *Wall Street Journal* (June 19, 2007).

What can various company managers do to ensure that working capital is managed efficiently to maximize net income? (Go to **WileyPLUS** for this answer and additional questions.)

Long-Term Liabilities

Long-term liabilities are obligations that a company expects to pay **after** one year. Liabilities in this category include bonds payable, mortgages payable, long-term notes payable, lease liabilities, and pension liabilities. Many companies report long-term debt maturing after one year as a single amount in the balance sheet and show the details of the debt in notes that accompany the financial statements. Others list the various types of long-term liabilities. In Illustration 4-21, Franklin Company reported long-term liabilities of $11,300.

Illustration 4-27 (page 174) shows the long-term liabilities that The Procter & Gamble Company reported in its balance sheet.

Illustration 4-27
Long-term liabilities section

Real World

THE PROCTER & GAMBLE COMPANY
Balance Sheet (partial)
(in millions)

Long-term liabilities	
Long-term debt	$23,375
Deferred income taxes	12,015
Other noncurrent liabilities	5,147
Total long-term liabilities	$40,537

Owner's Equity

Alternative Terminology
Common stock is sometimes called *capital stock*.

The content of the owner's equity section varies with the form of business organization. In a proprietorship, there is one capital account. In a partnership, there is a capital account for each partner. Corporations divide owners' equity into two accounts—Common Stock (sometimes referred to as Capital Stock) and Retained Earnings. Corporations record stockholders' investments in the company by debiting an asset account and crediting the Common Stock account. They record in the Retained Earnings account income retained for use in the business. Corporations combine the Common Stock and Retained Earnings accounts and report them on the balance sheet as **stockholders' equity**. (We discuss these corporation accounts in later chapters.) Nordstrom, Inc. recently reported its stockholders' equity section as follows.

Illustration 4-28
Stockholders' equity section

Real World

NORDSTROM, INC.
Balance Sheet (partial)
(in thousands)

Stockholders' equity	
Common stock, 271,331 shares	$ 685,934
Retained earnings	1,406,747
Total stockholders' equity	$2,092,681

DO IT! 4 Balance Sheet Classifications

The following accounts were taken from the financial statements of Callahan Company.

________ Salaries and wages payable
________ Service revenue
________ Interest payable
________ Goodwill
________ Debt investments (short-term)
________ Mortgage payable (due in 3 years)
________ Stock investments (long-term)
________ Equipment
________ Accumulated depreciation—equipment
________ Depreciation expense
________ Owner's capital
________ Unearned service revenue

Match each of the following to its proper balance sheet classification, shown below. If the item would not appear on a balance sheet, use "NA."

Current assets (CA)
Long-term investments (LTI)
Property, plant, and equipment (PPE)
Intangible assets (IA)
Current liabilities (CL)
Long-term liabilities (LTL)
Owner's equity (OE)

Action Plan

✔ Analyze whether each financial statement item is an asset, liability, or owner's equity.

✔ Determine if asset and liability items are short-term or long-term.

Solution

__CL__	Salaries and wages payable	__LTI__	Stock investments (long-term)
__NA__	Service revenue	__PPE__	Equipment
__CL__	Interest payable	__PPE__	Accumulated depreciation—equipment
__IA__	Goodwill	__NA__	Depreciation expense
__CA__	Debt investments (short-term)	__OE__	Owner's capital
__LTL__	Mortgage payable (due in 3 years)	__CL__	Unearned service revenue

Related exercise material: **BE4-11, E4-14, E4-15, E4-16, E4-17, and DO IT! 4-4.**

LEARNING OBJECTIVE *5

APPENDIX 4A: Prepare reversing entries.

After preparing the financial statements and closing the books, it is often helpful to reverse some of the adjusting entries before recording the regular transactions of the next period. Such entries are **reversing entries**. Companies make **a reversing entry at the beginning of the next accounting period**. Each reversing entry **is the exact opposite of the adjusting entry made in the previous period**. The recording of reversing entries is an **optional step** in the accounting cycle.

The purpose of reversing entries is to simplify the recording of a subsequent transaction related to an adjusting entry. For example, in Chapter 3 (page 108), the payment of salaries after an adjusting entry resulted in two debits: one to Salaries and Wages Payable and the other to Salaries and Wages Expense. With reversing entries, the company can debit the entire subsequent payment to Salaries and Wages Expense. **The use of reversing entries does not change the amounts reported in the financial statements.** What it does is simplify the recording of subsequent transactions.

Reversing Entries Example

Companies most often use reversing entries to reverse two types of adjusting entries: accrued revenues and accrued expenses. To illustrate the optional use of reversing entries for accrued expenses, we will use the salaries expense transactions for Pioneer Advertising as illustrated in Chapters 2, 3, and 4. The transaction and adjustment data are as follows.

1. October 26 (initial salary entry): Pioneer pays $4,000 of salaries and wages earned between October 15 and October 26.
2. October 31 (adjusting entry): Salaries and wages earned between October 29 and October 31 are $1,200. The company will pay these in the November 9 payroll.
3. November 9 (subsequent salary entry): Salaries and wages paid are $4,000. Of this amount, $1,200 applied to accrued salaries and wages payable and $2,800 was earned between November 1 and November 9.

Illustration 4A-1 shows the entries with and without reversing entries.

Illustration 4A-1
Comparative entries—not reversing vs. reversing

Without Reversing Entries (per chapter)				With Reversing Entries (per appendix)			
	Initial Salary Entry				Initial Salary Entry		
Oct. 26	Salaries and Wages Expense	4,000		Oct. 26	(Same entry)		
	Cash		4,000				
	Adjusting Entry				Adjusting Entry		
Oct. 31	Salaries and Wages Expense	1,200		Oct. 31	(Same entry)		
	Salaries and Wages Payable		1,200				
	Closing Entry				Closing Entry		
Oct. 31	Income Summary	5,200		Oct. 31	(Same entry)		
	Salaries and Wages Expense		5,200				
	Reversing Entry				Reversing Entry		
Nov. 1	No reversing entry is made.			Nov. 1	**Salaries and Wages Payable**	**1,200**	
					Salaries and Wages Expense		**1,200**
	Subsequent Salary Entry				Subsequent Salary Entry		
Nov. 9	Salaries and Wages Payable	1,200		Nov. 9	**Salaries and Wages Expense**	**4,000**	
	Salaries and Wages Expense	2,800			**Cash**		**4,000**
	Cash		4,000				

The first three entries are the same whether or not Pioneer uses reversing entries. The last two entries are different. The November 1 **reversing entry** eliminates the $1,200 balance in Salaries and Wages Payable created by the October 31 adjusting entry. The reversing entry also creates a $1,200 credit balance in the Salaries and Wages Expense account. As you know, it is unusual for an expense account to have a credit balance. The balance is correct in this instance, though, because it anticipates that the entire amount of the first salaries and wages payment in the new accounting period will be debited to Salaries and Wages Expense. This debit will eliminate the credit balance. The resulting debit balance in the expense account will equal the salaries and wages expense incurred in the new accounting period ($2,800 in this example).

If Pioneer makes reversing entries, it can debit all cash payments of expenses to the expense account. This means that on November 9 (and every payday) Pioneer can debit Salaries and Wages Expense for the amount paid, without regard to any accrued salaries and wages payable. Being able to make the **same entry each time** simplifies the recording process. The company can record subsequent transactions as if the related adjusting entry had never been made.

Illustration 4A-2 shows the posting of the entries with reversing entries.

Salaries and Wages Expense

10/26	Paid	4,000	10/31	Closing	5,200
31	Adjusting	1,200			
		5,200			5,200
11/9	Paid	4,000	**11/1**	**Reversing**	**1,200**

Salaries and Wages Payable

11/1	**Reversing**	**1,200**	10/31	Adjusting	1,200

Illustration 4A-2
Postings with reversing entries

A company can also use reversing entries for accrued revenue adjusting entries. For Pioneer, the adjusting entry was Accounts Receivable (Dr.) $200 and Service Revenue (Cr.) $200. Thus, the reversing entry on November 1 is:

A	=	L	+	OE
				−200 Rev
+200				

Cash Flows
no effect

Nov. 1	Service Revenue	200	
	Accounts Receivable		200
	(To reverse October 31 adjusting entry)		

When Pioneer collects the accrued service revenue, it debits Cash and credits Service Revenue.

REVIEW AND PRACTICE

LEARNING OBJECTIVES REVIEW

1 **Prepare a worksheet.** The steps in preparing a worksheet are as follows. (a) Prepare a trial balance on the worksheet. (b) Enter the adjustments in the adjustments columns. (c) Enter adjusted balances in the adjusted trial balance columns. (d) Extend adjusted trial balance amounts to appropriate financial statement columns. (e) Total the statement columns, compute net income (or net loss), and complete the worksheet.

2 Prepare closing entries and a post-closing trial balance. Closing the books occurs at the end of an accounting period. The process is to journalize and post closing entries and then underline and balance all accounts. In closing the books, companies make separate entries to close revenues and expenses to Income Summary, Income Summary to Owner's Capital, and Owner's Drawings to Owner's Capital. Only temporary accounts are closed. A post-closing trial balance contains the balances in permanent accounts that are carried forward to the next accounting period. The purpose of this trial balance is to prove the equality of these balances.

3 Explain the steps in the accounting cycle and how to prepare correcting entries. The required steps in the accounting cycle are (1) analyze business transactions, (2) journalize the transactions, (3) post to ledger accounts, (4) prepare a trial balance, (5) journalize and post adjusting entries, (6) prepare an adjusted trial balance, (7) prepare financial statements, (8) journalize and post closing entries, and (9) prepare a post-closing trial balance.

One way to determine the correcting entry is to compare the incorrect entry with the correct entry. After comparison, the company makes a correcting entry to correct the accounts. An alternative to a correcting entry is to reverse the incorrect entry and then prepare the correct entry.

4 Identify the sections of a classified balance sheet. A classified balance sheet categorizes assets as current assets; long-term investments; property, plant, and equipment; and intangibles. Liabilities are classified as either current or long-term. There is also an owner's (owners') equity section, which varies with the form of business organization.

***5 Prepare reversing entries.** Reversing entries are the opposite of the adjusting entries made in the preceding period. Some companies choose to make reversing entries at the beginning of a new accounting period to simplify the recording of later transactions related to the adjusting entries. In most cases, only accrued adjusting entries are reversed.

GLOSSARY REVIEW

Classified balance sheet A balance sheet that contains standard classifications or sections. (p. 169).

Closing entries Entries made at the end of an accounting period to transfer the balances of temporary accounts to a permanent owner's equity account, Owner's Capital. (p. 159).

Correcting entries Entries to correct errors made in recording transactions. (p. 167).

Current assets Assets that a company expects to convert to cash or use up within one year. (p. 170).

Current liabilities Obligations that a company expects to pay within the coming year or its operating cycle, whichever is longer. (p. 172).

Income Summary A temporary account used in closing revenue and expense accounts. (p. 159).

Intangible assets Noncurrent assets that do not have physical substance. (p. 171).

Liquidity The ability of a company to pay obligations expected to be due within the next year. (p. 173).

Long-term investments Generally, (1) investments in stocks and bonds of other companies that companies normally hold for many years, and (2) long-term assets, such as land and buildings, not currently being used in operations. (p. 171).

Long-term liabilities Obligations that a company expects to pay after one year. (p. 173).

Operating cycle The average time that it takes to purchase inventory, sell it on account, and then collect cash from customers. (p. 170).

Permanent (real) accounts Accounts that relate to one or more future accounting periods. Consist of all balance sheet accounts. Balances are carried forward to the next accounting period. (p. 159).

Post-closing trial balance A list of permanent accounts and their balances after a company has journalized and posted closing entries. (p. 163).

Property, plant, and equipment Assets with relatively long useful lives and currently being used in operations. (p. 171).

Reversing entry An entry, made at the beginning of the next accounting period that is the exact opposite of the adjusting entry made in the previous period. (p. 166).

Stockholders' equity The ownership claim of shareholders on total assets. It is to a corporation what owner's equity is to a proprietorship. (p. 174).

Temporary (nominal) accounts Accounts that relate only to a given accounting period. Consist of all income statement accounts and owner's drawings account. All temporary accounts are closed at end of the accounting period. (p. 158).

Worksheet A multiple-column form that may be used in making adjusting entries and in preparing financial statements. (p. 150).

PRACTICE MULTIPLE-CHOICE QUESTIONS

(LO 1) **1.** Which of the following statements is **incorrect** concerning the worksheet?
(a) The worksheet is essentially a working tool of the accountant.
(b) The worksheet is distributed to management and other interested parties.
(c) The worksheet cannot be used as a basis for posting to ledger accounts.
(d) Financial statements can be prepared directly from the worksheet before journalizing and posting the adjusting entries.

(LO 1) **2.** In a worksheet, net income is entered in the following columns:
(a) income statement (Dr) and balance sheet (Dr).
(b) income statement (Cr) and balance sheet (Dr).
(c) income statement (Dr) and balance sheet (Cr).
(d) income statement (Cr) and balance sheet (Cr).

(LO 1) **3.** In the unadjusted trial balance of its worksheet for the year ended December 31, 2017, Knox Company reported Equipment of $120,000. The year-end adjusting entries require an adjustment of $15,000 for depreciation expense for the equipment. After the adjusted trial balance is completed, what amount should be shown in the financial statement columns?
(a) A debit of $105,000 for Equipment in the balance sheet column.
(b) A credit of $15,000 for Depreciation Expense—Equipment in the income statement column.
(c) A debit of $120,000 for Equipment in the balance sheet column.
(d) A debit of $15,000 for Accumulated Depreciation—Equipment in the balance sheet column.

(LO 2) **4.** An account that will have a zero balance after closing entries have been journalized and posted is:
(a) Service Revenue.
(b) Supplies.
(c) Prepaid Insurance.
(d) Accumulated Depreciation—Equipment.

(LO 2) **5.** When a net loss has occurred, Income Summary is:
(a) debited and Owner's Capital is credited.
(b) credited and Owner's Capital is debited.
(c) debited and Owner's Drawings is credited.
(d) credited and Owner's Drawings is debited.

(LO 2) **6.** The closing process involves separate entries to close (1) expenses, (2) drawings, (3) revenues, and (4) income summary. The correct sequencing of the entries is:
(a) (4), (3), (2), (1).
(b) (1), (2), (3), (4).
(c) (3), (1), (4), (2).
(d) (3), (2), (1), (4).

(LO 2) **7.** Which types of accounts will appear in the post-closing trial balance?
(a) Permanent (real) accounts.
(b) Temporary (nominal) accounts.
(c) Accounts shown in the income statement columns of a worksheet.
(d) None of these answer choices is correct.

(LO 3) **8.** All of the following are required steps in the accounting cycle **except**:
(a) journalizing and posting closing entries.
(b) preparing financial statements.
(c) journalizing the transactions.
(d) preparing a worksheet.

9. The proper order of the following steps in the accounting cycle is: (LO 3)
(a) prepare unadjusted trial balance, journalize transactions, post to ledger accounts, journalize and post adjusting entries.
(b) journalize transactions, prepare unadjusted trial balance, post to ledger accounts, journalize and post adjusting entries.
(c) journalize transactions, post to ledger accounts, prepare unadjusted trial balance, journalize and post adjusting entries.
(d) prepare unadjusted trial balance, journalize and post adjusting entries, journalize transactions, post to ledger accounts.

10. When Ramirez Company purchased supplies worth $500, it incorrectly recorded a credit to Supplies for $5,000 and a debit to Cash for $5,000. Before correcting this error: (LO 3)
(a) Cash is overstated and Supplies is overstated.
(b) Cash is understated and Supplies is understated.
(c) Cash is understated and Supplies is overstated.
(d) Cash is overstated and Supplies is understated.

11. Cash of $100 received at the time the service was performed was journalized and posted as a debit to Cash $100 and a credit to Accounts Receivable $100. Assuming the incorrect entry is not reversed, the correcting entry is: (LO 3)
(a) debit Service Revenue $100 and credit Accounts Receivable $100.
(b) debit Accounts Receivable $100 and credit Service Revenue $100.
(c) debit Cash $100 and credit Service Revenue $100.
(d) debit Accounts Receivable $100 and credit Cash $100.

12. The correct order of presentation in a classified balance sheet for the following current assets is: (LO 4)
(a) accounts receivable, cash, prepaid insurance, inventory.
(b) cash, inventory, accounts receivable, prepaid insurance.
(c) cash, accounts receivable, inventory, prepaid insurance.
(d) inventory, cash, accounts receivable, prepaid insurance.

13. A company has purchased a tract of land. It expects to build a production plant on the land in approximately 5 years. During the 5 years before construction, the land will be idle. The land should be reported as: (LO 4)
(a) property, plant, and equipment.
(b) land expense.
(c) a long-term investment.
(d) an intangible asset.

14. In a classified balance sheet, assets are usually classified using the following categories: (LO 4)
(a) current assets; long-term assets; property, plant, and equipment; and intangible assets.
(b) current assets; long-term investments; property, plant, and equipment; and tangible assets.

(c) current assets; long-term investments; tangible assets; and intangible assets.
(d) current assets; long-term investments; property, plant, and equipment; and intangible assets.

(LO 4) **15.** Current assets are listed:
(a) by expected conversion to cash.
(b) by importance.
(c) by longevity.
(d) alphabetically.

(LO 5)***16.** On December 31, Kevin Hartman Company correctly made an adjusting entry to recognize $2,000 of accrued salaries payable. On January 8 of the next year, total salaries of $3,400 were paid. Assuming the correct reversing entry was made on January 1, the entry on January 8 will result in a credit to Cash $3,400 and the following debit(s):
(a) Salaries and Wages Payable $1,400 and Salaries and Wages Expense $2,000.
(b) Salaries and Wages Payable $2,000 and Salaries and Wages Expense $1,400.
(c) Salaries and Wages Expense $3,400.
(d) Salaries and Wages Payable $3,400.

Solutions

1. (b) The worksheet is a working tool of the accountant; it is not distributed to management and other interested parties. The other choices are all true statements.

2. (c) Net income is entered in the Dr column of the income statement and the Cr column of the balance sheet. The other choices are incorrect because net income is entered in the (a) Cr (not Dr) column of the balance sheet, (b) Dr (not Cr) column of the income statement and in the Cr (not Dr) column of the balance sheet, and (d) Dr (not Cr) column of the income statement.

3. (c) A debit of $120,000 for Equipment would appear in the balance sheet column. The other choices are incorrect because (a) Equipment, less accumulated depreciation of $15,000, would total $105,000 under assets on the balance sheet, not on the worksheet; (b) a debit, not credit, for Depreciation Expense would appear in the income statement column; and (d) a credit, not debit, of $15,000 for Accumulated Depreciation—Equipment would appear in the balance sheet column.

4. (a) The Service Revenue account will have a zero balance after closing entries have been journalized and posted because it is a temporary account. The other choices are incorrect because (b) Supplies, (c) Prepaid Insurance, and (d) Accumulation Depreciation—Equipment are all permanent accounts and therefore not closed in the closing process.

5. (b) The effect of a net loss is a credit to Income Summary and a debit to Owner's Capital. The other choices are incorrect because (a) Income Summary is credited, not debited, and Owner's Capital is debited, not credited; (c) Income Summary is credited, not debited, and Owner's Drawings is not affected; and (d) Owner's Capital, not Owner's Drawings, is debited.

6. (c) The correct order is (3) revenues, (1) expenses, (4) income summary, and (2) drawings. Therefore, choices (a), (b), and (d) are incorrect.

7. (a) Permanent accounts appear in the post-closing trial balance. The other choices are incorrect because (b) temporary accounts and (c) income statement accounts are closed to a zero balance and are therefore not included in the post-closing trial balance. Choice (d) is wrong as there is only one correct answer for this question.

8. (d) Preparing a worksheet is not a required step in the accounting cycle. The other choices are all required steps in the accounting cycle.

9. (c) The proper order of the steps in the accounting cycle is (1) journalize transactions, (2) post to ledger accounts, (3) prepare unadjusted trial balance, and (4) journalize and post adjusting entries. Therefore, choices (a), (b), and (d) are incorrect.

10. (d) This entry causes Cash to be overstated and Supplies to be understated. Supplies should have been debited (increasing supplies) and Cash should have been credited (decreasing cash). The other choices are incorrect because (a) Supplies is understated, not overstated; (b) Cash is overstated, not understated; and (c) Cash is overstated, not understated, and Supplies is understated, not overstated.

11. (b) The correcting entry is to debit Accounts Receivable $100 and credit Service Revenue $100. The other choices are incorrect because (a) Service Revenue should be credited, not debited, and Accounts Receivable should be debited, not credited; (c) Service Revenue should be credited for $100, and Cash should not be included in the correcting entry as it was recorded properly; and (d) Accounts Receivable should be debited for $100 and Cash should not be included in the correcting entry as it was recorded properly.

12. (c) Companies list current assets on balance sheet in the order of liquidity: cash, accounts receivable, inventory, and prepaid insurance. Therefore, choices (a), (b), and (d) are incorrect.

13. (c) Long-term investments include long-term assets such as land that a company is not currently using in its operating activities. The other choices are incorrect because (a) land would be reported as property, plant, and equipment only if it is being currently used in the business; (b) land is an asset, not an expense; and (d) land has physical substance and thus is a tangible property.

14. (d) These are the categories usually used in a classified balance sheet. The other choices are incorrect because the categories (a) "long-term assets" and (b) and (c) "tangible assets" are generally not used.

15. (a) Current assets are listed in order of their liquidity, not (b) by importance, (c) by longevity, or (d) alphabetically.

***16. (c)** The use of reversing entries simplifies the recording of the first payroll following the end of the year by eliminating the need to make an entry to the Salaries and Wages Payable account. The other choices are incorrect because (a) Salaries and Wages Payable is not part of the payroll entry on January 8, and the debit to Salaries and Wages Expense should be for $3,400, not $2,000; and (b) and (d) the Salaries and Wages Expense account, not the Salaries and Wages Payable account, should be debited.

PRACTICE EXERCISES

Journalize and post closing entries, and prepare a post-closing trial balance.

(LO 2)

1. Hercules Company ended its fiscal year on August 31, 2017. The company's adjusted trial balance as of the end of its fiscal year is as shown below.

HERCULES COMPANY
Adjusted Trial Balance
August 31, 2017

No.	Account Titles	Debit	Credit
101	Cash	$10,900	
112	Accounts Receivable	6,200	
157	Equipment	10,600	
167	Accumulated Depr.—Equip.		$ 5,400
201	Accounts Payable		2,800
208	Unearned Rent Revenue		1,200
301	Owner's Capital		31,700
306	Owner's Drawings	12,000	
404	Service Revenue		42,400
429	Rent Revenue		6,100
711	Depreciation Expense	2,700	
720	Salaries and Wages Expense	37,100	
732	Utilities Expense	10,100	
		$89,600	$89,600

Instructions

(a) Prepare the closing entries using page J15 in a general journal.

(b) Post to Owner's Capital and No. 350 Income Summary accounts. (Use the three-column form.)

(c) Prepare a post-closing trial balance at August 31, 2017.

Solution

1. (a)

GENERAL JOURNAL J15

Date	Account Titles	Ref.	Debit	Credit
Aug. 31	Service Revenue	404	42,400	
	Rent Revenue	429	6,100	
	Income Summary	350		48,500
	(To close revenue accounts)			
31	Income Summary	350	49,900	
	Salaries and Wages Expense	720		37,100
	Utilities Expense	732		10,100
	Depreciation Expense	711		2,700
	(To close expense accounts)			
31	Owner's Capital	301	1,400	
	Income Summary	350		1,400
	(To close net loss to capital)			
31	Owner's Capital	301	12,000	
	Owner's Drawings	306		12,000
	(To close drawings to capital)			

(b)

Owner's Capital No. 301

Date	Explanation	Ref.	Debit	Credit	Balance
Aug. 31	Balance				31,700
31	Close net loss	J15	1,400		30,300
31	Close drawings	J15	12,000		18,300

Income Summary No. 350

Date	Explanation	Ref.	Debit	Credit	Balance
Aug. 31	Close revenue	J15		48,500	48,500
31	Close expenses	J15	49,000		(1,400)
31	Close net loss	J15		1,400	0

(c)

HERCULES COMPANY
Post-Closing Trial Balance
August 31, 2017

	Debit	Credit
Cash	$10,900	
Accounts Receivable	6,200	
Equipment	10,600	
Accumulated Depreciation—Equipment		$ 5,400
Accounts Payable		2,800
Unearned Rent Revenue		1,200
Owner's Capital		18,300
	$27,700	$27,700

2. The adjusted trial balance for Hercules Company is presented in Practice Exercise 1.

Prepare financial statements.
(LO 4)

Instructions

(a) Prepare an income statement and an owner's equity statement for the year ended August 31, 2017. Hercules did not make any capital investments during the year.

(b) Prepare a classified balance sheet at August 31, 2017.

Solution

2. (a)

HERCULES COMPANY
Income Statement
For the Year Ended August 31, 2017

Revenues		
Service revenue	$42,400	
Rent revenue	6,100	
Total revenues		$48,500
Expenses		
Salaries and wages expense	37,100	
Utilities expense	10,100	
Depreciation expense	2,700	
Total expenses		49,900
Net loss		$ (1,400)

HERCULES COMPANY
Owner's Equity Statement
For the Year Ended August 31, 2017

Owner's capital, September 1, 2016		$31,700
Less: Net loss	$ 1,400	
Owner's drawings	12,000	13,400
Owner's capital, August 31, 2017		$18,300

(b)

HERCULES COMPANY
Balance Sheet
August 31, 2017

Assets		
Current assets		
Cash	$10,900	
Accounts receivable	6,200	
Total current assets		$17,100
Property, plant, and equipment		
Equipment	10,600	
Less: Accumulated depreciation—equip.	5,400	5,200
Total assets		$22,300
Liabilities and Owner's Equity		
Current liabilities		
Accounts payable	$2,800	
Unearned rent revenue	1,200	
Total current liabilities		$ 4,000
Owner's equity		
Owner's capital		18,300
Total liabilities and owner's equity		$22,300

PRACTICE PROBLEM

Prepare worksheet and classified balance sheet, and journalize closing entries.
(LO 1, 2, 4)

At the end of its first month of operations, Pampered Pet Service has the following unadjusted trial balance.

PAMPERED PET SERVICE
August 31, 2017
Trial Balance

	Debit	Credit
Cash	$ 5,400	
Accounts Receivable	2,800	
Supplies	1,300	
Prepaid Insurance	2,400	
Equipment	60,000	
Notes Payable		$40,000
Accounts Payable		2,400
Owner's Capital		30,000
Owner's Drawings	1,000	
Service Revenue		4,900
Salaries and Wages Expense	3,200	
Utilities Expense	800	
Advertising Expense	400	
	$77,300	$77,300

Other data:

1. Insurance expires at the rate of $200 per month.
2. $1,000 of supplies are on hand at August 31.
3. Monthly depreciation on the equipment is $900.
4. Interest of $500 on the notes payable has accrued during August.

Instructions

(a) Prepare a worksheet.

(b) Prepare a classified balance sheet assuming $35,000 of the notes payable are long-term.

(c) Journalize the closing entries.

Solution

(a)

PAMPERED PET SERVICE
Worksheet for the Month Ended August 31, 2017

Account Titles	Trial Balance Dr.	Trial Balance Cr.	Adjustments Dr.	Adjustments Cr.	Adjusted Trial Balance Dr.	Adjusted Trial Balance Cr.	Income Statement Dr.	Income Statement Cr.	Balance Sheet Dr.	Balance Sheet Cr.
Cash	5,400				5,400				5,400	
Accounts Receivable	2,800				2,800				2,800	
Supplies	1,300			(b) 300	1,000				1,000	
Prepaid Insurance	2,400			(a) 200	2,200				2,200	
Equipment	60,000				60,000				60,000	
Notes Payable		40,000				40,000				40,000
Accounts Payable		2,400				2,400				2,400
Owner's Capital		30,000				30,000				30,000
Owner's Drawings	1,000				1,000				1,000	
Service Revenue		4,900				4,900		4,900		
Salaries and Wages Expense	3,200				3,200		3,200			
Utilities Expense	800				800		800			
Advertising Expense	400				400		400			
Totals	77,300	77,300								
Insurance Expense			(a) 200		200		200			
Supplies Expense			(b) 300		300		300			
Depreciation Expense			(c) 900		900		900			
Accumulated Depreciation—Equipment				(c) 900		900				900
Interest Expense			(d) 500		500		500			
Interest Payable				(d) 500		500				500
Totals			1,900	1,900	78,700	78,700	6,300	4,900	72,400	73,800
Net Loss								1,400	1,400	
Totals							6,300	6,300	73,800	73,800

Explanation: (a) insurance expired, (b) supplies used, (c) depreciation expensed, and (d) interest accrued.

(b)

PAMPERED PET SERVICE
Balance Sheet
August 31, 2017

Assets		
Current assets		
Cash	$ 5,400	
Accounts receivable	2,800	
Supplies	1,000	
Prepaid insurance	2,200	
Total current assets		$11,400
Property, plant, and equipment		
Equipment	60,000	
Less: Accumulated depreciation—equipment	900	59,100
Total assets		$70,500
Liabilities and Owner's Equity		
Current liabilities		
Notes payable	$ 5,000	
Accounts payable	2,400	
Interest payable	500	
Total current liabilities		$ 7,900
Long-term liabilities		
Notes payable		35,000
Total liabilities		42,900
Owner's equity		
Owner's capital		27,600*
Total liabilities and owner's equity		$70,500

*Owner's capital $30,000 less drawings $1,000 and net loss $1,400.

(c)

Aug. 31	Service Revenue	4,900	
	Income Summary		4,900
	(To close revenue account)		
31	Income Summary	6,300	
	Salaries and Wages Expense		3,200
	Depreciation Expense		900
	Utilities Expense		800
	Interest Expense		500
	Advertising Expense		400
	Supplies Expense		300
	Insurance Expense		200
	(To close expense accounts)		
31	Owner's Capital	1,400	
	Income Summary		1,400
	(To close net loss to capital)		
31	Owner's Capital	1,000	
	Owner's Drawings		1,000
	(To close drawings to capital)		

NOTE: All asterisked Questions, Exercises, and Problems relate to material in the appendix to the chapter.

QUESTIONS

1. "A worksheet is a permanent accounting record and its use is required in the accounting cycle." Do you agree? Explain.
2. Explain the purpose of the worksheet.
3. What is the relationship, if any, between the amount shown in the adjusted trial balance column for an account and that account's ledger balance?
4. If a company's revenues are $125,000 and its expenses are $113,000, in which financial statement columns of the worksheet will the net income of $12,000 appear? When expenses exceed revenues, in which columns will the difference appear?
5. Why is it necessary to prepare formal financial statements if all of the data are in the statement columns of the worksheet?
6. Identify the account(s) debited and credited in each of the four closing entries, assuming the company has net income for the year.
7. Describe the nature of the Income Summary account and identify the types of summary data that may be posted to this account.
8. What are the content and purpose of a post-closing trial balance?
9. Which of the following accounts would not appear in the post-closing trial balance? Interest Payable, Equipment, Depreciation Expense, Owner's Drawings, Unearned Service Revenue, Accumulated Depreciation—Equipment, and Service Revenue.
10. Distinguish between a reversing entry and an adjusting entry. Are reversing entries required?
11. Indicate, in the sequence in which they are made, the three required steps in the accounting cycle that involve journalizing.
12. Identify, in the sequence in which they are prepared, the three trial balances that are often used to report financial information about a company.
13. How do correcting entries differ from adjusting entries?
14. What standard classifications are used in preparing a classified balance sheet?
15. What is meant by the term "operating cycle?"
16. Define current assets. What basis is used for arranging individual items within the current assets section?
17. Distinguish between long-term investments and property, plant, and equipment.
18. (a) What is the term used to describe the owner's equity section of a corporation? (b) Identify the two owners' equity accounts in a corporation and indicate the purpose of each.
19. Using Apple's annual report, determine its current liabilities at September 29, 2012, and September 28, 2013. Were current liabilities higher or lower than current assets in these two years?

*20. Cigale Company prepares reversing entries. If the adjusting entry for interest payable is reversed, what type of an account balance, if any, will there be in Interest Payable and Interest Expense after the reversing entry is posted?

*21. At December 31, accrued salaries payable totaled $3,500. On January 10, total salaries of $8,000 are paid. (a) Assume that reversing entries are made at January 1. Give the January 10 entry, and indicate the Salaries and Wages Expense account balance after the entry is posted. (b) Repeat part (a) assuming reversing entries are not made.

BRIEF EXERCISES

List the steps in preparing a worksheet. (LO 1)

BE4-1 The steps in using a worksheet are presented in random order below. List the steps in the proper order by placing numbers 1–5 in the blank spaces.

(a) _____ Prepare a trial balance on the worksheet.
(b) _____ Enter adjusted balances.
(c) _____ Extend adjusted balances to appropriate statement columns.
(d) _____ Total the statement columns, compute net income (loss), and complete the worksheet.
(e) _____ Enter adjustment data.

Prepare partial worksheet. (LO 1)

BE4-2 The ledger of Lentz Company includes the following unadjusted balances: Prepaid Insurance $3,000, Service Revenue $58,000, and Salaries and Wages Expense $25,000. Adjusting entries are required for (a) expired insurance $1,800; (b) services performed $1,100, but unbilled and uncollected; and (c) accrued salaries payable $800. Enter the unadjusted balances and adjustments into a worksheet and complete the worksheet for all accounts. (*Note:* You will need to add the following accounts: Accounts Receivable, Salaries and Wages Payable, and Insurance Expense.)

Identify worksheet columns for selected accounts.
(LO 1)

BE4-3 The following selected accounts appear in the adjusted trial balance columns of the worksheet for Ashram Company: Accumulated Depreciation, Depreciation Expense, Owner's Capital, Owner's Drawings, Service Revenue, Supplies, and Accounts Payable. Indicate the financial statement column (income statement Dr., balance sheet Cr., etc.) to which each balance should be extended.

Prepare closing entries from ledger balances.
(LO 2)

BE4-4 The ledger of Duston Company contains the following balances: Owner's Capital $30,000, Owner's Drawings $2,000, Service Revenue $50,000, Salaries and Wages Expense $29,000, and Supplies Expense $7,000. Prepare the closing entries at December 31.

Post closing entries; underline and balance T-accounts.
(LO 2)

BE4-5 Using the data in BE4-4, enter the balances in T-accounts, post the closing entries, and underline and balance the accounts.

Journalize and post closing entries using the three-column form of account.
(LO 2)

BE4-6 The income statement for Arbor Vitae Golf Club for the month ending July 31 shows Service Revenue $16,400, Salaries and Wages Expense $8,400, Maintenance and Repairs Expense $2,500, and Net Income $5,700. Prepare the entries to close the revenue and expense accounts. Post the entries to the revenue and expense accounts, and complete the closing process for these accounts using the three-column form of account.

Identify post-closing trial balance accounts.
(LO 2)

BE4-7 Using the data in BE4-3, identify the accounts that would be included in a post-closing trial balance.

List the required steps in the accounting cycle in sequence.
(LO 3)

BE4-8 The steps in the accounting cycle are listed in random order below. List the steps in proper sequence, assuming no worksheet is prepared, by placing numbers 1–9 in the blank spaces.

(a) ________ Prepare a trial balance.
(b) ________ Journalize the transactions.
(c) ________ Journalize and post closing entries.
(d) ________ Prepare financial statements.
(e) ________ Journalize and post adjusting entries.
(f) ________ Post to ledger accounts.
(g) ________ Prepare a post-closing trial balance.
(h) ________ Prepare an adjusted trial balance.
(i) ________ Analyze business transactions.

Prepare correcting entries.
(LO 3)

BE4-9 At Raymond Company, the following errors were discovered after the transactions had been journalized and posted. Prepare the correcting entries.

1. A collection on account from a customer for $870 was recorded as a debit to Cash $870 and a credit to Service Revenue $870.
2. The purchase of store supplies on account for $1,510 was recorded as a debit to Supplies $1,150 and a credit to Accounts Payable $1,150.

Prepare the current assets section of a balance sheet.
(LO 4)

BE4-10 The balance sheet debit column of the worksheet for Mrotet Company includes the following accounts: Accounts Receivable $12,500, Prepaid Insurance $3,600, Cash $4,100, Supplies $5,200, and Debt Investments (short-term) $6,700. Prepare the current assets section of the balance sheet, listing the accounts in proper sequence.

Classify accounts on balance sheet.
(LO 4)

BE4-11 The following are the major balance sheet classifications:

Current assets (CA)	Current liabilities (CL)
Long-term investments (LTI)	Long-term liabilities (LTL)
Property, plant, and equipment (PPE)	Owner's equity (OE)
Intangible assets (IA)	

Match each of the following accounts to its proper balance sheet classification.

________ Accounts payable	________ Income taxes payable
________ Accounts receivable	________ Debt investments (long-term)
________ Accumulated depreciation—buildings	________ Land
________ Buildings	________ Inventory
________ Cash	________ Patents
________ Copyrights	________ Supplies

***BE4-12** At October 31, Zanskas Company made an accrued expense adjusting entry of $2,100 for salaries. Prepare the reversing entry on November 1, and indicate the balances in Salaries and Wages Payable and Salaries and Wages Expense after posting the reversing entry.

Prepare reversing entries.
(LO 5)

DO IT! Exercises

DO IT! 4-1 Jordan Carr is preparing a worksheet. Explain to Jordan how he should extend the following adjusted trial balance accounts to the financial statement columns of the worksheet.

Prepare a worksheet.
(LO 1)

Service Revenue	Accounts Receivable
Notes Payable	Accumulated Depreciation
Owner's Capital	Utilities Expense

DO IT! 4-2 The worksheet for Ajeeb Company shows the following in the financial statement columns.

Prepare closing entries.
(LO 2)

Owner's drawings	$22,000
Owner's capital	70,000
Net income	41,000

Prepare the closing entries at December 31 that affect owner's capital.

DO IT! 4-3 Hanson Company has an inexperienced accountant. During the first month on the job, the accountant made the following errors in journalizing transactions. All entries were posted as made.

Prepare correcting entries.
(LO 3)

1. The purchase of supplies for $650 cash was debited to Equipment $210 and credited to Cash $210.
2. A $500 withdrawal of cash for B. Hanson's personal use was debited to Salaries and Wages Expense $900 and credited to Cash $900.
3. A payment on account of $820 to a creditor was debited to Accounts Payable $280 and credited to Cash $280.

Prepare the correcting entries.

DO IT! 4-4 The following accounts were taken from the financial statements of Giles Company.

Match accounts to balance sheet classifications.
(LO 4)

________ Interest revenue	________ Owner's capital
________ Utilities payable	________ Accumulated depreciation—equipment
________ Accounts payable	________ Equipment
________ Supplies	________ Salaries and wages expense
________ Bonds payable	________ Debt investments (long-term)
________ Goodwill	________ Unearned rent revenue

Match each of the accounts to its proper balance sheet classification, as shown below. If the item would not appear on a balance sheet, use "NA."

Current assets (CA)	Current liabilities (CL)
Long-term investments (LTI)	Long-term liabilities (LTL)
Property, plant, and equipment (PPE)	Owner's equity (OE)
Intangible assets (IA)	

EXERCISES

E4-1 The trial balance columns of the worksheet for Dixon Company at June 30, 2017, are as follows.

Complete the worksheet.
(LO 1)

DIXON COMPANY
Worksheet
For the Month Ended June 30, 2017

Account Titles	Trial Balance Dr.	Trial Balance Cr.
Cash	2,320	
Accounts Receivable	2,440	
Supplies	1,880	
Accounts Payable		1,120
Unearned Service Revenue		240
Owner's Capital		3,600
Service Revenue		2,400
Salaries and Wages Expense	560	
Miscellaneous Expense	160	
	7,360	7,360

Other data:

1. A physical count reveals $500 of supplies on hand.
2. $100 of the unearned revenue is still unearned at month-end.
3. Accrued salaries are $210.

Instructions
Enter the trial balance on a worksheet and complete the worksheet.

Complete the worksheet.
(LO 1)

XLS

E4-2 The adjusted trial balance columns of the worksheet for Savaglia Company are as follows.

SAVAGLIA COMPANY
Worksheet (partial)
For the Month Ended April 30, 2017

Account Titles	Adjusted Trial Balance Dr.	Adjusted Trial Balance Cr.	Income Statement Dr.	Income Statement Cr.	Balance Sheet Dr.	Balance Sheet Cr.
Cash	10,000					
Accounts Receivable	7,840					
Prepaid Rent	2,280					
Equipment	23,050					
Accumulated Depreciation—Equip.		4,900				
Notes Payable		5,700				
Accounts Payable		4,920				
Owner's Capital		27,960				
Owner's Drawings	3,650					
Service Revenue		15,590				
Salaries and Wages Expense	10,840					
Rent Expense	760					
Depreciation Expense	650					
Interest Expense	57					
Interest Payable		57				
Totals	59,127	59,127				

Instructions
Complete the worksheet.

Prepare financial statements from worksheet.
(LO 1, 4)

XLS

E4-3 Worksheet data for Savaglia Company are presented in E4-2. The owner did not make any additional investments in the business in April.

Instructions
Prepare an income statement, an owner's equity statement, and a classified balance sheet.

E4-4 Worksheet data for Savaglia Company are presented in E4-2.

Journalize and post closing entries and prepare a post-closing trial balance.

(LO 2)

Instructions
(a) Journalize the closing entries at April 30.
(b) Post the closing entries to Income Summary and Owner's Capital. Use T-accounts.
(c) Prepare a post-closing trial balance at April 30.

E4-5 The adjustments columns of the worksheet for Becker Company are shown below.

Prepare adjusting entries from a worksheet, and extend balances to worksheet columns.

(LO 1)

	Adjustments	
Account Titles	**Debit**	**Credit**
Accounts Receivable	1,100	
Prepaid Insurance		300
Accumulated Depreciation—Equipment		900
Salaries and Wages Payable		500
Service Revenue		1,100
Salaries and Wages Expense	500	
Insurance Expense	300	
Depreciation Expense	900	
	2,800	2,800

Instructions
(a) Prepare the adjusting entries.
(b) Assuming the adjusted trial balance amount for each account is normal, indicate the financial statement column to which each balance should be extended.

E4-6 Selected worksheet data for Rosa Company are presented below.

Derive adjusting entries from worksheet data.

(LO 1)

Account Titles	**Trial Balance**		**Adjusted Trial Balance**	
	Dr.	**Cr.**	**Dr.**	**Cr.**
Accounts Receivable	?		34,000	
Prepaid Insurance	26,000		20,000	
Supplies	7,000		?	
Accumulated Depreciation—Equipment		12,000		?
Salaries and Wages Payable		?		5,600
Service Revenue		88,000		97,000
Insurance Expense			?	
Depreciation Expense			10,000	
Supplies Expense			4,500	
Salaries and Wages Expense	?		49,000	

Instructions
(a) Fill in the missing amounts.
(b) Prepare the adjusting entries that were made.

E4-7 Victoria Lee Company had the following adjusted trial balance.

Prepare closing entries, and prepare a post-closing trial balance.

(LO 2)

VICTORIA LEE COMPANY
Adjusted Trial Balance
For the Month Ended June 30, 2017

	Adjusted Trial Balance	
Account Titles	**Debit**	**Credit**
Cash	$ 3,712	
Accounts Receivable	3,904	
Supplies	480	
Accounts Payable		$ 1,382
Unearned Service Revenue		160
Owner's Capital		5,760
Owner's Drawings	550	
Service Revenue		4,300
Salaries and Wages Expense	1,260	
Miscellaneous Expense	256	
Supplies Expense	1,900	
Salaries and Wages Payable		460
	$12,062	$12,062

Instructions

(a) Prepare closing entries at June 30, 2017.
(b) Prepare a post-closing trial balance.

Journalize and post closing entries, and prepare a post-closing trial balance.
(LO 2)

E4-8 Okabe Company ended its fiscal year on July 31, 2017. The company's adjusted trial balance as of the end of its fiscal year is shown below.

OKABE COMPANY
Adjusted Trial Balance
July 31, 2017

No.	Account Titles	Debit	Credit
101	Cash	$ 9,840	
112	Accounts Receivable	8,780	
157	Equipment	15,900	
158	Accumulated Depreciation—Equip.		$ 7,400
201	Accounts Payable		4,220
208	Unearned Rent Revenue		1,800
301	Owner's Capital		45,200
306	Owner's Drawings	16,000	
400	Service Revenue		64,000
429	Rent Revenue		6,500
711	Depreciation Expense	8,000	
726	Salaries and Wages Expense	55,700	
732	Utilities Expense	14,900	
		$129,120	$129,120

Instructions

(a) Prepare the closing entries using page J15.
(b) Post to Owner's Capital and No. 350 Income Summary accounts. (Use the three-column form.)
(c) Prepare a post-closing trial balance at July 31.

Prepare financial statements.
(LO 4)

E4-9 The adjusted trial balance for Okabe Company is presented in E4-8.

Instructions

(a) Prepare an income statement and an owner's equity statement for the year. Okabe did not make any capital investments during the year.
(b) Prepare a classified balance sheet at July 31.

Answer questions related to the accounting cycle.
(LO 3)

E4-10 Renee Davis has prepared the following list of statements about the accounting cycle.

1. "Journalize the transactions" is the first step in the accounting cycle.
2. Reversing entries are a required step in the accounting cycle.
3. Correcting entries do not have to be part of the accounting cycle.
4. If a worksheet is prepared, some steps of the accounting cycle are incorporated into the worksheet.
5. The accounting cycle begins with the analysis of business transactions and ends with the preparation of a post-closing trial balance.
6. All steps of the accounting cycle occur daily during the accounting period.
7. The step of "post to the ledger accounts" occurs before the step of "journalize the transactions."
8. Closing entries must be prepared before financial statements can be prepared.

Instructions
Identify each statement as true or false. If false, indicate how to correct the statement.

Prepare closing entries.
(LO 2)

E4-11 Selected accounts for Tamora's Salon are presented below. All June 30 postings are from closing entries.

Salaries and Wages Expense

6/10	3,200	6/30	8,800
6/28	5,600		

Service Revenue

6/30	18,100	6/15	9,700
		6/24	8,400

Owner's Capital

6/30	2,100	6/1	12,000
		6/30	5,000
		Bal.	14,900

Supplies Expense

6/12	600	6/30	1,300
6/24	700		

Rent Expense

6/1	3,000	6/30	3,000

Owner's Drawings

6/13	1,000	6/30	2,100
6/25	1,100		

Instructions
(a) Prepare the closing entries that were made.
(b) Post the closing entries to Income Summary.

Prepare correcting entries.
(LO 3)

E4-12 Noah Bahr Company discovered the following errors made in January 2017.

1. A payment of Salaries and Wages Expense of $700 was debited to Equipment and credited to Cash, both for $700.
2. A collection of $1,000 from a client on account was debited to Cash $100 and credited to Service Revenue $100.
3. The purchase of equipment on account for $760 was debited to Equipment $670 and credited to Accounts Payable $670.

Instructions
(a) Correct the errors by reversing the incorrect entry and preparing the correct entry.
(b) Correct the errors without reversing the incorrect entry.

Prepare correcting entries.
(LO 3)

E4-13 Patel Company has an inexperienced accountant. During the first 2 weeks on the job, the accountant made the following errors in journalizing transactions. All entries were posted as made.

1. A payment on account of $750 to a creditor was debited to Accounts Payable $570 and credited to Cash $570.
2. The purchase of supplies on account for $560 was debited to Equipment $56 and credited to Accounts Payable $56.
3. A $500 withdrawal of cash for N. Patel's personal use was debited to Salaries and Wages Expense $500 and credited to Cash $500.

Instructions
Prepare the correcting entries.

Prepare a classified balance sheet.
(LO 4)

E4-14 The adjusted trial balance for McCoy Bowling Alley at December 31, 2017, contains the following accounts.

	Debit		Credit
Buildings	$128,800	Owner's Capital	$115,000
Accounts Receivable	14,520	Accumulated Depreciation—Buildings	42,600
Prepaid Insurance	4,680	Accounts Payable	12,300
Cash	18,040	Notes Payable	97,780
Equipment	62,400	Accumulated Depreciation—Equipment	18,720
Land	67,000	Interest Payable	3,800
Insurance Expense	780	Service Revenue	17,180
Depreciation Expense	7,360		$307,380
Interest Expense	3,800		
	$307,380		

Instructions

(a) Prepare a classified balance sheet; assume that $20,000 of the note payable will be paid in 2018.

(b) Comment on the liquidity of the company.

Classify accounts on balance sheet.

(LO 4)

E4-15 The following are the major balance sheet classifications.

Current assets (CA)
Long-term investments (LTI)
Property, plant, and equipment (PPE)
Intangible assets (IA)
Current liabilities (CL)
Long-term liabilities (LTL)
Owner's equity (OE)

Instructions

Classify each of the following accounts taken from Faust Company's balance sheet.

________ Accounts payable
________ Accounts receivable
________ Cash
________ Owner's capital
________ Patents
________ Salaries and wages payable
________ Inventory
________ Stock investments (to be sold in 7 months)
________ Accumulated depreciation—equipment
________ Buildings
________ Land (in use)
________ Notes payable (due in 2 years)
________ Supplies
________ Equipment
________ Prepaid expenses

Prepare a classified balance sheet.

(LO 4)

E4-16 The following items were taken from the financial statements of J. Pineda Company. (All amounts are in thousands.)

Long-term debt	$ 1,000	Accumulated depreciation—equipment	$ 5,655
Prepaid insurance	880	Accounts payable	1,444
Equipment	11,500	Notes payable (due after 2018)	400
Stock investments (long-term)	264	Owner's capital	12,955
Debt investments (short-term)	3,690	Accounts receivable	1,696
Notes payable (due in 2018)	500	Inventory	1,256
Cash	2,668		

Instructions

Prepare a classified balance sheet in good form as of December 31, 2017.

Prepare financial statements.

(LO 4)

E4-17 These financial statement items are for Basten Company at year-end, July 31, 2017.

Salaries and wages payable	$ 2,080	Notes payable (long-term)	$ 1,800
Salaries and wages expense	48,700	Cash	14,200
Utilities expense	22,600	Accounts receivable	9,780
Equipment	34,400	Accumulated depreciation—equipment	6,000
Accounts payable	4,100	Owner's drawings	3,000
Service revenue	63,000	Depreciation expense	4,000
Rent revenue	8,500	Owner's capital (beginning of the year)	51,200

Instructions

(a) Prepare an income statement and an owner's equity statement for the year. The owner did not make any new investments during the year.

(b) Prepare a classified balance sheet at July 31.

***E4-18** Lovrek Company pays salaries of $12,000 every Monday for the preceding 5-day week (Monday through Friday). Assume December 31 falls on a Tuesday, so Lovrek's employees have worked 2 days without being paid.

Use reversing entries.

(LO 5)

Instructions

(a) Assume the company does not use reversing entries. Prepare the December 31 adjusting entry and the entry on Monday, January 6, when Lovrek pays the payroll.
(b) Assume the company does use reversing entries. Prepare the December 31 adjusting entry, the January 1 reversing entry, and the entry on Monday, January 6, when Lovrek pays the payroll.

***E4-19** On December 31, the adjusted trial balance of Shihata Employment Agency shows the following selected data.

Prepare closing and reversing entries.

(LO 2, 5)

Accounts Receivable	$24,500	Service Revenue	$92,500
Interest Expense	7,700	Interest Payable	2,200

Analysis shows that adjusting entries were made to (1) accrue $5,000 of service revenue and (2) accrue $2,200 interest expense.

Instructions

(a) Prepare the closing entries for the temporary accounts shown above at December 31.
(b) Prepare the reversing entries on January 1.
(c) Post the entries in (a) and (b). Underline and balance the accounts. (Use T-accounts.)
(d) Prepare the entries to record (1) the collection of the accrued revenue on January 10 and (2) the payment of all interest due ($3,000) on January 15.
(e) Post the entries in (d) to the temporary accounts.

EXERCISES: SET B AND CHALLENGE EXERCISES

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Exercises: Set B and Challenge Exercises.

PROBLEMS: SET A

P4-1A The trial balance columns of the worksheet for Warren Roofing at March 31, 2017, are as follows.

Prepare a worksheet, financial statements, and adjusting and closing entries.

(LO 1, 2, 4)

WARREN ROOFING
Worksheet
For the Month Ended March 31, 2017

	Trial Balance	
Account Titles	**Dr.**	**Cr.**
Cash	4,500	
Accounts Receivable	3,200	
Supplies	2,000	
Equipment	11,000	
Accumulated Depreciation—Equipment		1,250
Accounts Payable		2,500
Unearned Service Revenue		550
Owner's Capital		12,900
Owner's Drawings	1,100	
Service Revenue		6,300
Salaries and Wages Expense	1,300	
Miscellaneous Expense	400	
	23,500	23,500

Other data:

1. A physical count reveals only $480 of roofing supplies on hand.
2. Depreciation for March is $250.
3. Unearned revenue amounted to $260 at March 31.
4. Accrued salaries are $700.

(a) Adjusted trial balance $24,450
(b) Net income $2,420
Total assets $17,680

Instructions

(a) Enter the trial balance on a worksheet and complete the worksheet.
(b) Prepare an income statement and owner's equity statement for the month of March and a classified balance sheet at March 31. T. Warren made an additional investment in the business of $10,000 in March.
(c) Journalize the adjusting entries from the adjustments columns of the worksheet.
(d) Journalize the closing entries from the financial statement columns of the worksheet.

Complete worksheet; prepare financial statements, closing entries, and post-closing trial balance.

(LO 1, 2, 4)

GLS

P4-2A The adjusted trial balance columns of the worksheet for Thao Company, owned by D. Thao, are as follows.

THAO COMPANY
Worksheet
For the Year Ended December 31, 2017

Account No.	Account Titles	Adjusted Trial Balance Dr.	Adjusted Trial Balance Cr.
101	Cash	5,300	
112	Accounts Receivable	10,800	
126	Supplies	1,500	
130	Prepaid Insurance	2,000	
157	Equipment	27,000	
158	Accumulated Depreciation—Equipment		5,600
200	Notes Payable		15,000
201	Accounts Payable		6,100
212	Salaries and Wages Payable		2,400
230	Interest Payable		600
301	Owner's Capital		13,000
306	Owner's Drawings	7,000	
400	Service Revenue		61,000
610	Advertising Expense	8,400	
631	Supplies Expense	4,000	
711	Depreciation Expense	5,600	
722	Insurance Expense	3,500	
726	Salaries and Wages Expense	28,000	
905	Interest Expense	600	
	Totals	103,700	103,700

(a) Net income $10,900
(b) Current assets $19,600
Current liabilities $14,100
(e) Post-closing trial balance $46,600

Instructions

(a) Complete the worksheet by extending the balances to the financial statement columns.
(b) Prepare an income statement, owner's equity statement, and a classified balance sheet. (*Note:* $5,000 of the notes payable become due in 2018.) D. Thao did not make any additional investments in the business during the year.
(c) Prepare the closing entries. Use J14 for the journal page.
(d) Post the closing entries. Use the three-column form of account. Income Summary is No. 350.
(e) Prepare a post-closing trial balance.

Prepare financial statements, closing entries, and post-closing trial balance.

(LO 1, 2, 4)

P4-3A The completed financial statement columns of the worksheet for Bray Company are shown as follows.

BRAY COMPANY
Worksheet
For the Year Ended December 31, 2017

Account No.	Account Titles	Income Statement Dr.	Income Statement Cr.	Balance Sheet Dr.	Balance Sheet Cr.
101	Cash			8,800	
112	Accounts Receivable			10,800	
130	Prepaid Insurance			2,800	
157	Equipment			24,000	
158	Accumulated Depreciation—Equip.				4,200
201	Accounts Payable				9,000
212	Salaries and Wages Payable				2,400
301	Owner's Capital				19,500
306	Owner's Drawings			11,000	
400	Service Revenue		60,000		
622	Maintenance and Repairs Expense	1,700			
711	Depreciation Expense	2,800			
722	Insurance Expense	1,800			
726	Salaries and Wages Expense	30,000			
732	Utilities Expense	1,400			
	Totals	37,700	60,000	57,400	35,100
	Net Income	22,300			22,300
		60,000	60,000	57,400	57,400

Instructions

(a) Prepare an income statement, an owner's equity statement, and a classified balance sheet.

(b) Prepare the closing entries. L. Bray did not make any additional investments during the year.

(c) Post the closing entries and underline and balance the accounts. (Use T-accounts.) Income Summary is account No. 350.

(d) Prepare a post-closing trial balance.

(a) Ending capital $30,800
Total current assets $22,400

(d) Post-closing trial balance $46,400

P4-4A Vang Management Services began business on January 1, 2017, with a capital investment of $120,000. The company manages condominiums for owners (Service Revenue) and rents space in its own office building (Rent Revenue). The trial balance and adjusted trial balance columns of the worksheet at the end of the first year are as follows.

Complete worksheet; prepare classified balance sheet, entries, and post-closing trial balance.

(LO 1, 2, 4)

VANG MANAGEMENT SERVICES
Worksheet
For the Year Ended December 31, 2017

Account Titles	Trial Balance Dr.	Trial Balance Cr.	Adjusted Trial Balance Dr.	Adjusted Trial Balance Cr.
Cash	13,800		13,800	
Accounts Receivable	28,300		28,300	
Prepaid Insurance	3,600		2,400	
Land	67,000		67,000	
Buildings	127,000		127,000	
Equipment	59,000		59,000	
Accounts Payable		12,500		12,500
Unearned Rent Revenue		6,000		1,500
Mortgage Payable		120,000		120,000
Owner's Capital		144,000		144,000
Owner's Drawings	22,000		22,000	
Service Revenue		90,700		90,700
Rent Revenue		29,000		33,500
Salaries and Wages Expense	42,000		42,000	
Advertising Expense	20,500		20,500	
Utilities Expense	19,000		19,000	
Totals	402,200	402,200		

Account Titles	Trial Balance Dr.	Trial Balance Cr.	Adjusted Trial Balance Dr.	Adjusted Trial Balance Cr.
Insurance Expense			1,200	
Depreciation Expense			6,600	
Accumulated Depreciation—Buildings				3,000
Accumulated Depreciation—Equipment				3,600
Interest Expense			10,000	
Interest Payable				10,000
Totals			418,800	418,800

(a) Net income $24,900
(b) Total current assets $44,500
(e) Post-closing trial balance $297,500

Instructions

(a) Prepare a complete worksheet.
(b) Prepare a classified balance sheet. (*Note:* $30,000 of the mortgage note payable is due for payment next year.)
(c) Journalize the adjusting entries.
(d) Journalize the closing entries.
(e) Prepare a post-closing trial balance.

Complete all steps in accounting cycle.

(LO 1, 2, 4)

P4-5A Anya Clark opened Anya's Cleaning Service on July 1, 2017. During July, the following transactions were completed.

July	1	Anya invested $20,000 cash in the business.
	1	Purchased used truck for $12,000, paying $4,000 cash and the balance on account.
	3	Purchased cleaning supplies for $2,100 on account.
	5	Paid $1,800 cash on a 1-year insurance policy effective July 1.
	12	Billed customers $4,500 for cleaning services.
	18	Paid $1,500 cash on amount owed on truck and $1,400 on amount owed on cleaning supplies.
	20	Paid $2,800 cash for employee salaries.
	21	Collected $3,400 cash from customers billed on July 12.
	25	Billed customers $6,000 for cleaning services.
	31	Paid $350 for the monthly gasoline bill for the truck.
	31	Withdraw $5,600 cash for personal use.

The chart of accounts for Anya's Cleaning Service contains the following accounts: No. 101 Cash, No. 112 Accounts Receivable, No. 126 Supplies, No. 130 Prepaid Insurance, No. 157 Equipment, No. 158 Accumulated Depreciation—Equipment, No. 201 Accounts Payable, No. 212 Salaries and Wages Payable, No. 301 Owner's Capital, No. 306 Owner's Drawings, No. 350 Income Summary, No. 400 Service Revenue, No. 631 Supplies Expense, No. 633 Gasoline Expense, No. 711 Depreciation Expense, No. 722 Insurance Expense, and No. 726 Salaries and Wages Expense.

(b) Trial balance $37,700
(c) Adjusted trial balance $41,900
(d) Net income $6,900 Total assets $29,500
(g) Post-closing trial balance $30,000

Instructions

(a) Journalize and post the July transactions. Use page J1 for the journal and the three-column form of account.
(b) Prepare a trial balance at July 31 on a worksheet.
(c) Enter the following adjustments on the worksheet and complete the worksheet.
    (1) Unbilled and uncollected revenue for services performed at July 31 were $2,700.
    (2) Depreciation on equipment for the month was $500.
    (3) One-twelfth of the insurance expired.
    (4) An inventory count shows $600 of cleaning supplies on hand at July 31.
    (5) Accrued but unpaid employee salaries were $1,000.
(d) Prepare the income statement and owner's equity statement for July and a classified balance sheet at July 31.
(e) Journalize and post adjusting entries. Use page J2 for the journal.
(f) Journalize and post closing entries and complete the closing process. Use page J3 for the journal.
(g) Prepare a post-closing trial balance at July 31.

P4-6A Casey Hartwig, CPA, was retained by Global Cable to prepare financial statements for April 2017. Hartwig accumulated all the ledger balances per Global's records and found the following.

Analyze errors and prepare correcting entries and trial balance.

(LO 3)

GLOBAL CABLE
Trial Balance
April 30, 2017

	Debit	Credit
Cash	$ 4,100	
Accounts Receivable	3,200	
Supplies	800	
Equipment	10,600	
Accumulated Depreciation—Equip.		$ 1,350
Accounts Payable		2,100
Salaries and Wages Payable		700
Unearned Service Revenue		890
Owner's Capital		12,900
Service Revenue		5,450
Salaries and Wages Expense	3,300	
Advertising Expense	600	
Miscellaneous Expense	290	
Depreciation Expense	500	
	$23,390	$23,390

Casey Hartwig reviewed the records and found the following errors.

1. Cash received from a customer on account was recorded as $950 instead of $590.
2. A payment of $75 for advertising expense was entered as a debit to Miscellaneous Expense $75 and a credit to Cash $75.
3. The first salary payment this month was for $1,900, which included $700 of salaries payable on March 31. The payment was recorded as a debit to Salaries and Wages Expense $1,900 and a credit to Cash $1,900. (No reversing entries were made on April 1.)
4. The purchase on account of a printer costing $310 was recorded as a debit to Supplies and a credit to Accounts Payable for $310.
5. A cash payment of repair expense on equipment for $96 was recorded as a debit to Equipment $69 and a credit to Cash $69.

Instructions

(a) Prepare an analysis of each error showing (1) the incorrect entry, (2) the correct entry, and (3) the correcting entry. Items 4 and 5 occurred on April 30, 2017.
(b) Prepare a correct trial balance.

(b) Trial balance $22,690

PROBLEMS: SET B AND SET C

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Problems: Set B and Set C.

COMPREHENSIVE PROBLEM: CHAPTERS 2 TO 4

CP4 Ashley Williams opened Ashley's Maids Cleaning Service on July 1, 2017. During July, the company completed the following transactions.

July	1	Invested $14,000 cash in the business.
	1	Purchased a used truck for $10,000, paying $3,000 cash and the balance on account.
	3	Purchased cleaning supplies for $800 on account.
	5	Paid $2,160 on a 1-year insurance policy, effective July 1.
	12	Billed customers $3,800 for cleaning services.
	18	Paid $1,000 of amount owed on truck, and $400 of amount owed on cleaning supplies.
	20	Paid $1,600 for employee salaries.
	21	Collected $1,400 from customers billed on July 12.
	25	Billed customers $1,900 for cleaning services.

31 Paid gasoline for the month on the truck, $400.
31 Withdrew $700 cash for personal use.

The chart of accounts for Ashley's Maids Cleaning Service contains the following accounts: No. 101 Cash, No. 112 Accounts Receivable, No. 126 Supplies, No. 130 Prepaid Insurance, No. 157 Equipment, No. 158 Accumulated Depreciation—Equipment, No. 201 Accounts Payable, No. 212 Salaries and Wages Payable, No. 301 Owner's Capital, No. 306 Owner's Drawings, No. 350 Income Summary, No. 400 Service Revenue, No. 631 Supplies Expense, No. 633 Gasoline Expense, No. 711 Depreciation Expense, No. 722 Insurance Expense, and No. 726 Salaries and Wages Expense.

Instructions

(a) Journalize and post the July transactions. Use page J1 for the journal.

(b) Trial balance totals $26,100

(b) Prepare a trial balance at July 31 on a worksheet.

(c) Enter the following adjustments on the worksheet, and complete the worksheet.
  (1) Unbilled fees for services performed at July 31 were $1,300.
  (2) Depreciation on equipment for the month was $200.
  (3) One-twelfth of the insurance expired.
  (4) An inventory count shows $100 of cleaning supplies on hand at July 31.
  (5) Accrued but unpaid employee salaries were $500.

(d) Net income $3,420
Total assets $23,620

(d) Prepare the income statement and owner's equity statement for July, and a classified balance sheet at July 31, 2017.

(e) Journalize and post the adjusting entries. Use page J2 for the journal.

(f) Journalize and post the closing entries, and complete the closing process. Use page J3 for the journal.

(g) Trial balance totals $23,820

(g) Prepare a post-closing trial balance at July 31.

CONTINUING PROBLEM


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COOKIE CREATIONS: AN ENTREPRENEURIAL JOURNEY

(*Note:* This is a continuation of the Cookie Creations problem from Chapters 1 through 3.)

CC4 Natalie had a very busy December. At the end of the month, after journalizing and posting the December transactions and adjusting entries, Natalie prepared the following adjusted trial balance.

COOKIE CREATIONS
Adjusted Trial Balance
December 31, 2016

	Debit	Credit
Cash	$1,180	
Accounts Receivable	875	
Supplies	350	
Prepaid Insurance	1,210	
Equipment	1,200	
Accumulated Depreciation—Equipment		$ 40
Accounts Payable		75
Salaries and Wages Payable		56
Interest Payable		15
Unearned Service Revenue		300
Notes Payable		2,000
Owner's Capital		800
Owner's Drawings	500	
Service Revenue		4,515
Salaries and Wages Expense	1,006	
Utilities Expense	125	
Advertising Expense	165	
Supplies Expense	1,025	
Depreciation Expense	40	
Insurance Expense	110	
Interest Expense	15	
	$7,801	$7,801

Instructions
Using the information in the adjusted trial balance, do the following.

(a) Prepare an income statement and an owner's equity statement for the 2 months ended December 31, 2016, and a classified balance sheet at December 31, 2016. The note payable has a stated interest rate of 6%, and the principal and interest are due on November 16, 2018.
(b) Natalie has decided that her year-end will be December 31, 2016. Prepare and post closing entries as of December 31, 2016.
(c) Prepare a post-closing trial balance.

BROADENING YOUR PERSPECTIVE

FINANCIAL REPORTING AND ANALYSIS

Financial Reporting Problem: Apple Inc.

BYP4-1 The financial statements of Apple Inc. are presented in Appendix A at the end of this textbook. Instructions for accessing and using the company's complete annual report, including the notes to the financial statements, are also provided in Appendix A.

Instructions
Answer the questions below using Apple's Consolidated Balance Sheets.

(a) What were Apple's total current assets at September 28, 2013, and September 29, 2012?
(b) Are assets that Apple included under current assets listed in proper order? Explain.
(c) How are Apple's assets classified?
(d) What was Apple's "Cash and cash equivalents" at September 28, 2013?
(e) What were Apple's total current liabilities at September 28, 2013, and September 29, 2012?

Comparative Analysis Problem: PepsiCo, Inc. vs. The Coca-Cola Company

BYP4-2 PepsiCo, Inc.'s financial statements are presented in Appendix B. Financial statements of The Coca-Cola Company are presented in Appendix C. Instructions for accessing and using the complete annual reports of PepsiCo and Coca-Cola, including the notes to the financial statements, are also provided in Appendices B and C, respectively.

Instructions
(a) Based on the information contained in these financial statements, determine each of the following for PepsiCo at December 31, 2013, and for Coca-Cola at December 31, 2013.
    (1) Total current assets.
    (2) Net amount of property, plant, and equipment (land, buildings, and equipment).
    (3) Total current liabilities.
    (4) Total equity.
(b) What conclusions concerning the companies' respective financial positions can be drawn?

Comparative Analysis Problem: Amazon.com, Inc. vs. Wal-Mart Stores, Inc.

BYP4-3 Amazon.com, Inc.'s financial statements are presented in Appendix D. Financial statements of Wal-Mart Stores, Inc. are presented in Appendix E. Instructions for accessing and using the complete annual reports of Amazon and Wal-Mart, including the notes to the financial statements, are also provided in Appendices D and E, respectively.

Instructions
(a) Based on the information contained in these financial statements, determine the following for Amazon at December 31, 2013, and Wal-Mart at January 31, 2014.
    (1) Total current assets.
    (2) Net amount of property and equipment (fixed assets), net.
    (3) Total current liabilities.
    (4) Total equity.
(b) What conclusions concerning these two companies can be drawn from these data?

Real-World Focus

BYP4-4 Numerous companies have established home pages on the Internet, e.g., the soda companies Capt'n Eli Root Beer Company **(www.captneli.com/rootbeer.php)** and Cheerwine **(www.cheerwine.com)**.

Instructions

Examine the home pages of any two companies and answer the following questions.

(a) What type of information is available?
(b) Is any accounting-related information presented?
(c) Would you describe the home page as informative, promotional, or both? Why?

CRITICAL THINKING

Decision-Making Across the Organization

BYP4-5 Whitegloves Janitorial Service was started 2 years ago by Jenna Olson. Because business has been exceptionally good, Jenna decided on July 1, 2017, to expand operations by acquiring an additional truck and hiring two more assistants. To finance the expansion, Jenna obtained on July 1, 2017, a \$25,000, 10% bank loan, payable \$10,000 on July 1, 2018, and the balance on July 1, 2019. The terms of the loan require the borrower to have \$10,000 more current assets than current liabilities at December 31, 2017. If these terms are not met, the bank loan will be refinanced at 15% interest. At December 31, 2017, the accountant for Whitegloves Janitorial Service Inc. prepared the balance sheet shown below.

WHITEGLOVES JANITORIAL SERVICE
Balance Sheet
December 31, 2017

Assets		Liabilities and Owner's Equity	
Current assets		Current liabilities	
Cash	\$ 6,500	Notes payable	\$10,000
Accounts receivable	9,000	Accounts payable	2,500
Supplies	5,200	Total current liabilities	12,500
Prepaid insurance	4,800	Long-term liability	
Total current assets	25,500	Notes payable	15,000
Property, plant, and equipment		Total liabilities	27,500
Equipment (net)	22,000	Owner's equity	
Delivery trucks (net)	34,000	Owner's capital	54,000
Total property, plant, and equipment	56,000		
Total assets	\$81,500	Total liabilities and owner's equity	\$81,500

Jenna presented the balance sheet to the bank's loan officer on January 2, 2018, confident that the company had met the terms of the loan. The loan officer was not impressed. She said, "We need financial statements audited by a CPA." A CPA was hired and immediately realized that the balance sheet had been prepared from a trial balance and not from an adjusted trial balance. The adjustment data at the balance sheet date consisted of the following.

1. Unbilled janitorial services performed were \$3,700.
2. Janitorial supplies on hand were \$2,500.
3. Prepaid insurance was a 3-year policy dated January 1, 2017.
4. December expenses incurred but unpaid at December 31, \$500.
5. Interest on the bank loan was not recorded.
6. The amounts for property, plant, and equipment presented in the balance sheet were reported net of accumulated depreciation (cost less accumulated depreciation). These amounts were \$4,000 for cleaning equipment and \$5,000 for delivery trucks as of January 1, 2017. Depreciation for 2017 was \$2,000 for cleaning equipment and \$5,000 for delivery trucks.

Instructions

With the class divided into groups, answer the following.

(a) Prepare a correct balance sheet.
(b) Were the terms of the bank loan met? Explain.

Communication Activity

BYP4-6 The accounting cycle is important in understanding the accounting process.

Instructions
Write a memo to your instructor that lists the steps of the accounting cycle in the order they should be completed. End with a paragraph that explains the optional steps in the cycle.

Ethics Case

BYP4-7 As the controller of Take No Prisoners Perfume Company, you discover a misstatement that overstated net income in the prior year's financial statements. The misleading financial statements appear in the company's annual report which was issued to banks and other creditors less than a month ago. After much thought about the consequences of telling the president, Mike Flanary, about this misstatement, you gather your courage to inform him. Mike says, "Hey! What they don't know won't hurt them. But, just so we set the record straight, we'll adjust this year's financial statements for last year's misstatement. We can absorb that misstatement better in this year than in last year anyway! Just don't make such a mistake again."

Instructions
(a) Who are the stakeholders in this situation?
(b) What are the ethical issues in this situation?
(c) What would you do as a controller in this situation?

All About You

BYP4-8 Companies prepare balance sheets in order to know their financial position at a specific point in time. This enables them to make a comparison to their position at previous points in time, and gives them a basis for planning for the future. In order to evaluate your financial position, you need to prepare a personal balance sheet. Assume that you have compiled the following information regarding your finances. (*Note:* Some of the items might not be used in your personal balance sheet.)

Amount owed on student loan balance (long-term)	$ 5,000
Balance in checking account	1,200
Certificate of deposit (6-month)	3,000
Annual earnings from part-time job	11,300
Automobile	7,000
Balance on automobile loan (current portion)	1,500
Balance on automobile loan (long-term portion)	4,000
Home computer	800
Amount owed to you by younger brother	300
Balance in money market account	1,800
Annual tuition	6,400
Video and stereo equipment	1,250
Balance owed on credit card (current portion)	150
Balance owed on credit card (long-term portion)	1,650

Instructions
Prepare a personal balance sheet using the format you have learned for a classified balance sheet for a company. For the capital account, use Owner's Capital.

FASB Codification Activity

BYP4-9 If your school has a subscription to the FASB Codification, go to **http://aaahq.org/ascLogin.cfm** to log in and prepare responses to the following.

Instructions
(a) Access the glossary ("Master Glossary") at the FASB Codification website to answer the following.
  (1) What is the definition of current assets?
  (2) What is the definition of current liabilities?
(b) A company wants to offset its accounts payable against its cash account and show a cash amount net of accounts payable on its balance sheet. Identify the criteria (found in the FASB Codification) under which a company has the right of set off. Does the company have the right to offset accounts payable against the cash account?

A Look at IFRS

LEARNING OBJECTIVE 6

Compare the procedures for the closing process under GAAP and IFRS.

The classified balance sheet, although generally required internationally, contains certain variations in format when reporting under IFRS.

Key Points

Following are the key similarities and differences between GAAP and IFRS related to the closing process and the financial statements.

Similarities

- The procedures of the closing process are applicable to all companies, whether they are using IFRS or GAAP.
- IFRS generally requires a classified statement of financial position similar to the classified balance sheet under GAAP.
- IFRS follows the same guidelines as this textbook for distinguishing between current and noncurrent assets and liabilities.

Differences

- IFRS recommends but does not require the use of the title "statement of financial position" rather than balance sheet.
- The format of statement of financial position information is often presented differently under IFRS. Although no specific format is required, many companies that follow IFRS present statement of financial position information in this order:
  - ♦ Non-current assets
  - ♦ Current assets
  - ♦ Equity
  - ♦ Non-current liabilities
  - ♦ Current liabilities
- Under IFRS, current assets are usually listed in the reverse order of liquidity. For example, under GAAP cash is listed first, but under IFRS it is listed last.
- IFRS has many differences in terminology from what are shown in your textbook. For example, in the following sample statement of financial position, notice in the investment category that stock is called shares.

FRANKLIN COMPANY Statement of Financial Position October 31, 2017			
Assets			
Intangible assets			
Patents			$ 3,100
Property, plant, and equipment			
Land		$10,000	
Equipment	$24,000		
Less: Accumulated depreciation	5,000	19,000	29,000
Long-term investments			
Share investments		5,200	
Investment in real estate		2,000	7,200
Current assets			
Prepaid insurance		400	
Supplies		2,100	
Inventory		3,000	
Notes receivable		1,000	
Accounts receivable		7,000	
Debt investments		2,000	
Cash		6,600	22,100
Total assets			$61,400
Equity and Liabilities			
Equity			
Owner's capital			$34,050
Non-current liabilities			
Mortgage payable		$10,000	
Notes payable		1,300	11,300
Current liabilities			
Notes payable		11,000	
Accounts payable		2,100	
Salaries and wages payable		1,600	
Unearned service revenue		900	
Interest payable		450	16,050
Total equity and liabilities			$61,400

- Both GAAP and IFRS are increasing the use of fair value to report assets. However, at this point IFRS has adopted it more broadly. As examples, under IFRS, companies can apply fair value to property, plant, and equipment, and in some cases intangible assets.

Looking to the Future

The IASB and the FASB are working on a project to converge their standards related to financial statement presentation. A key feature of the proposed framework is that each of the statements will be organized in the same format, to separate an entity's financing activities from its operating and investing activities and, further, to separate financing activities into transactions with owners and creditors. Thus, the same classifications used in the statement of financial position would also be used in the income statement and the statement of cash flows. The project has three phases. You can follow the joint financial presentation project at the following link: **http://www.fasb.org/project/financial_statement_presentation.shtml**.

IFRS Practice

IFRS Self-Test Questions

1. A company has purchased a tract of land and expects to build a production plant on the land in approximately 5 years. During the 5 years before construction, the land will be idle. Under IFRS, the land should be reported as:
   (a) land expense.
   (b) property, plant, and equipment.
   (c) an intangible asset.
   (d) a long-term investment.
2. Current assets under IFRS are listed generally:
   (a) by importance.
   (b) in the reverse order of their expected conversion to cash.
   (c) by longevity.
   (d) alphabetically.
3. Companies that use IFRS:
   (a) may report all their assets on the statement of financial position at fair value.
   (b) may offset assets against liabilities and show net assets and net liabilities on their statements of financial position, rather than the underlying detailed line items.
   (c) may report noncurrent assets before current assets on the statement of financial position.
   (d) do not have any guidelines as to what should be reported on the statement of financial position.
4. Companies that follow IFRS to prepare a statement of financial position generally use the following order of classification:
   (a) current assets, current liabilities, noncurrent assets, noncurrent liabilities, equity.
   (b) noncurrent assets, noncurrent liabilities, current assets, current liabilities, equity.
   (c) noncurrent assets, current assets, equity, noncurrent liabilities, current liabilities.
   (d) equity, noncurrent assets, current assets, noncurrent liabilities, current liabilities.

IFRS Exercises

IFRS4-1 In what ways does the format of a statement of financial of position under IFRS often differ from a balance sheet presented under GAAP?

IFRS4-2 What term is commonly used under IFRS in reference to the balance sheet?

IFRS4-3 The statement of financial position for Wallby Company includes the following accounts (in British pounds): Accounts Receivable £12,500, Prepaid Insurance £3,600, Cash £15,400, Supplies £5,200, and Debt Investments (short-term) £6,700. Prepare the current assets section of the statement of financial position, listing the accounts in proper sequence.

IFRS4-4 The following information is available for Sutter Bowling Alley at December 31, 2017.

Buildings	$128,800	Owner's Capital	$115,000
Accounts Receivable	14,520	Accumulated Depreciation—Buildings	42,600
Prepaid Insurance	4,680	Accounts Payable	12,300
Cash	18,040	Notes Payable	97,780
Equipment	62,400	Accumulated Depreciation—Equipment	18,720
Land	64,000	Interest Payable	2,600
Insurance Expense	780	Bowling Revenues	14,180
Depreciation Expense	7,360		
Interest Expense	2,600		

Prepare a classified statement of financial position. Assume that $13,900 of the notes payable will be paid in 2018.

International Comparative Analysis Problem:
Apple vs. Louis Vuitton

IFRS4-5 The financial statements of Louis Vuitton are presented in Appendix F. Instructions for accessing and using the company's complete annual report, including the notes to its financial statements, are also provided in Appendix F.

Instructions

Identify five differences in the format of the statement of financial position used by Louis Vuitton compared to a company, such as Apple, that follows GAAP. (Apple's financial statements are available in Appendix A.)

Answers to IFRS Self-Test Questions

1. d **2.** b **3.** c **4.** c

5 Accounting for Merchandising Operations

CHAPTER PREVIEW Merchandising is one of the largest and most influential industries in the United States. It is likely that a number of you will work for a merchandiser. Therefore, understanding the financial statements of merchandising companies is important. In this chapter, you will learn the basics about reporting merchandising transactions. In addition, you will learn how to prepare and analyze a commonly used form of the income statement—the multiple-step income statement.

FEATURE STORY

Buy Now, Vote Later

Have you ever shopped for outdoor gear at an REI (Recreational Equipment Incorporated) store? If so, you might have been surprised if a salesclerk asked if you were a member. A member? What do you mean a member? You soon realize that REI might not be your typical store. In fact, there's a lot about REI that makes it different.

REI is a consumer cooperative, or "co-op" for short. To figure out what that means, consider this quote from the company's annual stewardship report:

> As a cooperative, the Company is owned by its members. Each member is entitled to one vote in the election of the Company's Board of Directors. Since January 1, 2008, the nonrefundable, nontransferable, one-time membership fee has been 20 dollars. As of December 31, 2010, there were approximately 10.8 million members.

Voting rights? Now that's something you don't get from shopping at Wal-Mart. REI members get other benefits as well, including sharing in the company's profits through a dividend at the end of the year, which can be used for purchases at REI stores during the next two years. The more you spend, the bigger your dividend.

Since REI is a co-op, you might also wonder whether management's incentives might be a little different than at other stores. For example, is management still concerned about making a profit? The answer is yes, as it ensures the long-term viability of the company. At the same time, REI's members want the company to be run efficiently, so that prices remain low. In order for its members to evaluate just how well management is doing, REI publishes an audited annual report, just like publicly traded companies do. So, while profit maximization might not be the ultimate goal for REI, the accounting and reporting issues are similar to those of a typical corporation.

How well is this business model working for REI? Well, it has consistently been rated as one of the best places to work in the United States by *Fortune* magazine. It is one of only five companies named each year since the list was created in 1998. Also, REI had sustainable business practices long before social responsibility became popular at other companies. The CEO's stewardship report states "we reduced the absolute amount of energy we use despite opening four new stores and growing our business; we grew the amount of FSC-certified paper we use to 58.4 percent of our total paper footprint—including our cash register receipt paper; we facilitated 2.2 million volunteer hours and we provided $3.7 million to more than 330 conservation and recreation nonprofits."

So, while REI, like other retailers, closely monitors its financial results, it also strives to succeed in other areas. And, with over 10 million votes at stake, REI's management knows that it has to deliver.

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CHAPTER OUTLINE

Learning Objectives

	Learning Objective	Topics	DO IT!
1	Describe merchandising operations and inventory systems.	• Operating cycles • Flow of costs	DO IT! 1 Merchandising Operations and Inventory Systems
2	Record purchases under a perpetual inventory system.	• Freight costs • Purchase returns and allowances • Purchase discounts • Summary of purchasing transactions	DO IT! 2 Purchase Transactions
3	Record sales under a perpetual inventory system.	• Sales returns and allowances • Sales discounts	DO IT! 3 Sales Transactions
4	Apply the steps in the accounting cycle to a merchandising company.	• Adjusting entries • Closing entries • Summary of merchandising entries	DO IT! 4 Closing Entries
5	Compare a multiple-step with a single-step income statement.	• Multiple-step income statement • Single-step income statement • Classified balance sheet	DO IT! 5 Financial Statement Classifications

Go to the ***REVIEW AND PRACTICE*** section at the end of the chapter for a review of key concepts and practice applications with solutions.

Visit **WileyPLUS with ORION** for additional tutorials and practice opportunities.

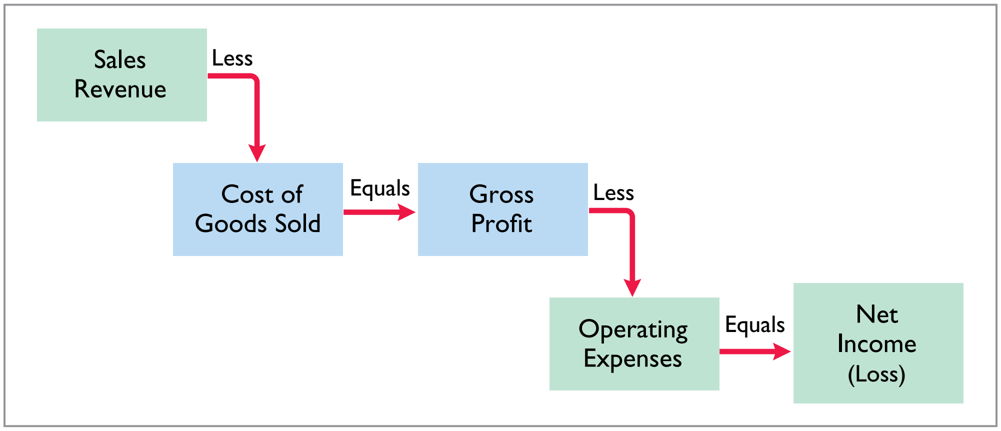
LEARNING OBJECTIVE 1

Describe merchandising operations and inventory systems.

REI, Wal-Mart, and Amazon.com are called merchandising companies because they buy and sell merchandise rather than perform services as their primary source of revenue. Merchandising companies that purchase and sell directly to consumers are called **retailers**. Merchandising companies that sell to retailers are known as **wholesalers**. For example, retailer Walgreens might buy goods from wholesaler McKesson. Retailer Office Depot might buy office supplies from wholesaler United Stationers. The primary source of revenues for merchandising companies is the sale of merchandise, often referred to simply as **sales revenue** or **sales**. A merchandising company has two categories of expenses: cost of goods sold and operating expenses.

Cost of goods sold is the total cost of merchandise sold during the period. This expense is directly related to the revenue recognized from the sale of goods. Illustration 5-1 shows the income measurement process for a merchandising company. The items in the two blue boxes are unique to a merchandising company; they are not used by a service company.

Illustration 5-1
Income measurement process for a merchandising company



Operating Cycles

The operating cycle of a merchandising company ordinarily is longer than that of a service company. The purchase of merchandise inventory and its eventual sale lengthen the cycle. Illustration 5-2 shows the operating cycle of a service company.

Illustration 5-2
Operating cycle for a service company

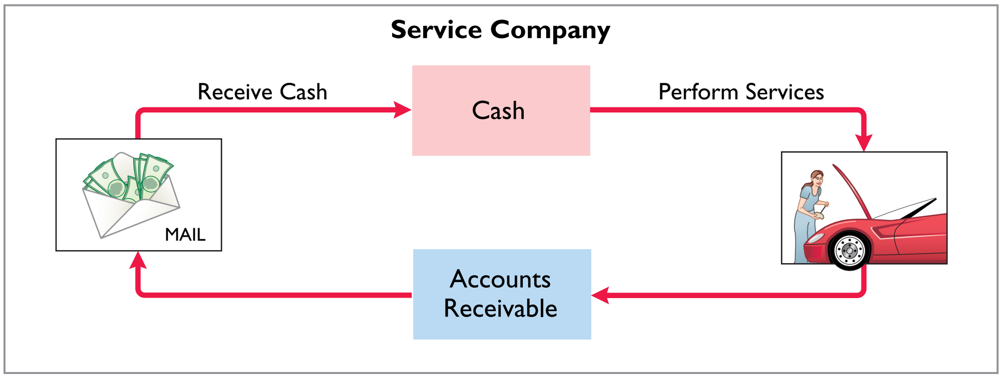


Illustration 5-3 shows the operating cycle of a merchandising company.

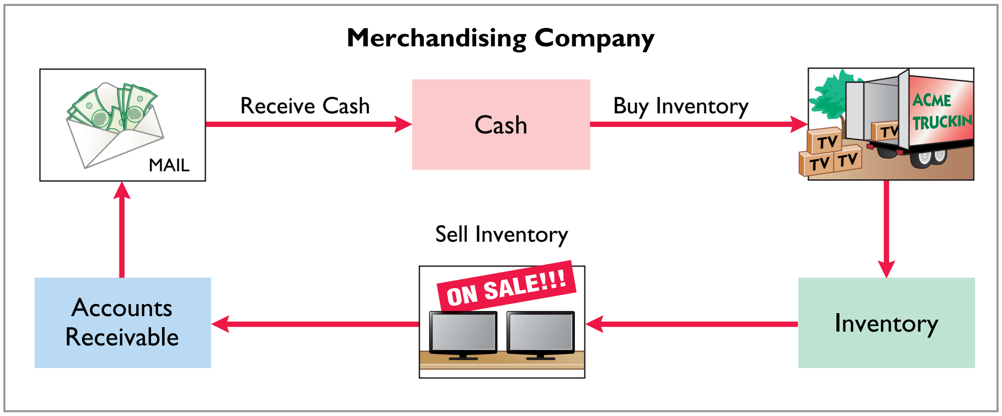


Illustration 5-3
Operating cycle for a merchandising company

Note that the added asset account for a merchandising company is the Inventory account. Companies report inventory as a current asset on the balance sheet.

Flow of Costs

The flow of costs for a merchandising company is as follows. Beginning inventory plus the cost of goods purchased is the cost of goods available for sale. As goods are sold, they are assigned to cost of goods sold. Those goods that are not sold by the end of the accounting period represent ending inventory. Illustration 5-4 describes these relationships. Companies use one of two systems to account for inventory: a **perpetual inventory system** or a **periodic inventory system**.

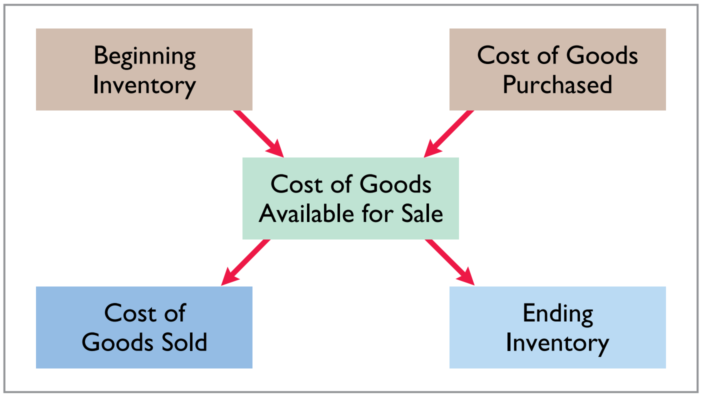


Illustration 5-4
Flow of costs

PERPETUAL SYSTEM

In a **perpetual inventory system**, companies keep detailed records of the cost of each inventory purchase and sale. These records continuously—perpetually—show the inventory that should be on hand for every item. For example, a Ford dealership has separate inventory records for each automobile, truck, and van on its lot and showroom floor. Similarly, a Kroger grocery store uses bar codes and optical scanners to keep a daily running record of every box of cereal and every jar of jelly that it buys and sells. Under a perpetual inventory system, a company determines the cost of goods sold **each time a sale occurs**.

Helpful Hint
For control purposes, companies take a physical inventory count under the perpetual system, even though it is not needed to determine cost of goods sold.

PERIODIC SYSTEM

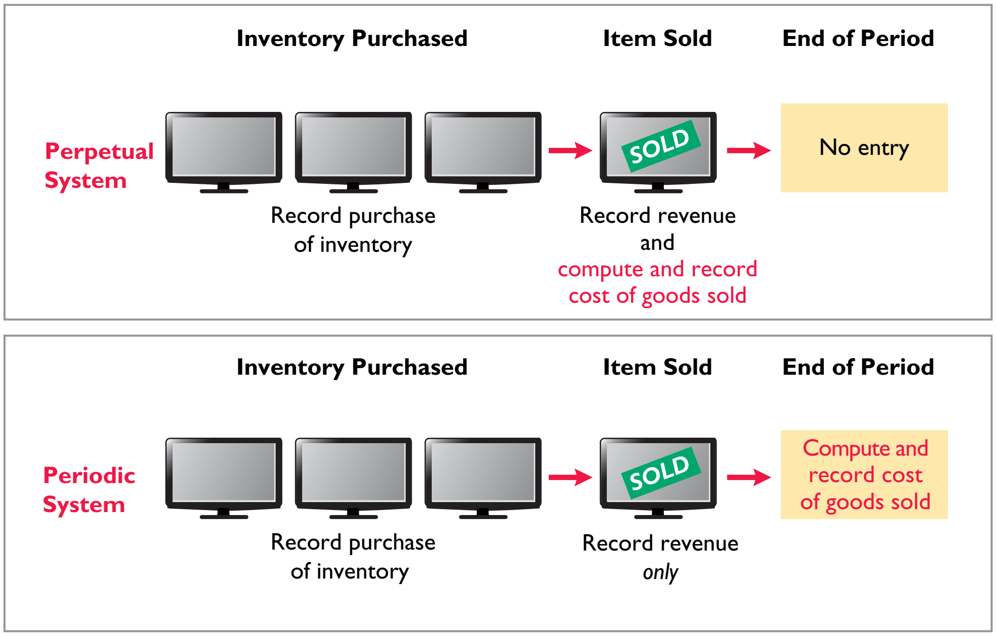
In a **periodic inventory system**, companies do not keep detailed inventory records of the goods on hand throughout the period. Instead, they determine the cost of goods sold **only at the end of the accounting period**—that is, periodically. At that point, the company takes a physical inventory count to determine the cost of goods on hand.

To determine the cost of goods sold under a periodic inventory system, the following steps are necessary:

1. Determine the cost of goods on hand at the beginning of the accounting period.
2. Add to it the cost of goods purchased.
3. Subtract the cost of goods on hand at the end of the accounting period.

Illustration 5-5 graphically compares the sequence of activities and the timing of the cost of goods sold computation under the two inventory systems.

Illustration 5-5
Comparing perpetual and periodic inventory systems



ADVANTAGES OF THE PERPETUAL SYSTEM

Companies that sell merchandise with high unit values, such as automobiles, furniture, and major home appliances, have traditionally used perpetual systems. The growing use of computers and electronic scanners has enabled many more companies to install perpetual inventory systems. The perpetual inventory system is so named because the accounting records continuously—perpetually—show the quantity and cost of the inventory that should be on hand at any time.

A perpetual inventory system provides better control over inventories than a periodic system. Since the inventory records show the quantities that should be on hand, the company can count the goods at any time to see whether the amount of goods actually on hand agrees with the inventory records. If shortages are uncovered, the company can investigate immediately. Although a perpetual inventory system requires both additional clerical work and expense to maintain the subsidiary records, a computerized system can minimize this cost. Much of Amazon.com's success is attributed to its sophisticated inventory system.

Some businesses find it either unnecessary or uneconomical to invest in a sophisticated, computerized perpetual inventory system such as Amazon's. Many small merchandising businesses find that basic accounting software provides some of the essential benefits of a perpetual inventory system. Also, managers of some small businesses still find that they can control their merchandise and manage day-to-day operations using a periodic inventory system.

Because of the widespread use of the perpetual inventory system, we illustrate it in this chapter. We discuss and illustrate the periodic system in Appendix 5B.

Investor Insight Morrow Snowboards, Inc.

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Morrow Snowboards Improves Its Stock Appeal

Investors are often eager to invest in a company that has a hot new product. However, when snowboard-maker Morrow Snowboards, Inc. issued shares of stock to the public for the first time, some investors expressed reluctance to invest in Morrow because of a number of accounting control problems. To reduce investor concerns, Morrow implemented a perpetual inventory system to improve its control over inventory. In addition, the company stated that it would perform a physical inventory count every quarter until it felt that its perpetual inventory system was reliable.

If a perpetual system keeps track of inventory on a daily basis, why do companies ever need to do a physical count? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 1 Merchandising Operations and Inventory Systems

Indicate whether the following statements are true or false.

1. The primary source of revenue for a merchandising company results from performing services for customers.
2. The operating cycle of a service company is usually shorter than that of a merchandising company.
3. Sales revenue less cost of goods sold equals gross profit.
4. Ending inventory plus the cost of goods purchased equals cost of goods available for sale.

Action Plan

✔ Review merchandising concepts.

✔ Understand the flow of costs in a merchandising company.

Solution

1. False. The primary source of revenue for a service company results from performing services for customers. **2.** True. **3.** True. **4.** False. Beginning inventory plus the cost of goods purchased equals cost of goods available for sale.

Related exercise material: **BE5-1, BE5-2, E5-1, and DO IT! 5-1.**

LEARNING OBJECTIVE 2 Record purchases under a perpetual inventory system.

Companies purchase inventory using cash or credit (on account). They normally record purchases when they receive the goods from the seller. Every purchase should be supported by business documents that provide written evidence of the transaction. Each cash purchase should be supported by a canceled check or a cash register receipt indicating the items purchased and amounts paid. Companies record cash purchases by an increase in Inventory and a decrease in Cash.

A **purchase invoice** should support each credit purchase. This invoice indicates the total purchase price and other relevant information. However, the purchaser does not prepare a separate purchase invoice. Instead, the purchaser uses as a purchase invoice a copy of the sales invoice sent by the seller. In Illustration 5-6, for example, Sauk Stereo (the buyer) uses as a purchase invoice the sales invoice prepared by PW Audio Supply (the seller).

Illustration 5-6
Sales invoice used as purchase invoice by Sauk Stereo

INVOICE NO. 731

PW AUDIO SUPPLY
27 CIRCLE DRIVE
HARDING, MICHIGAN 48281

SOLD TO
Firm Name: Sauk Stereo
Attention of: James Hoover, Purchasing Agent
Address: 125 Main Street
Chelsea (City) Illinois (State) 60915 (Zip)

Date 5/4/17	Salesperson Malone	Terms 2/10, n/30	FOB Shipping Point	
Catalog No.	**Description**	**Quantity**	**Price**	**Amount**
X572Y9820	Printed Circuit Board-prototype	1	2,300	$2,300
A2547Z45	Production Model Circuits	5	300	1,500
IMPORTANT: ALL RETURNS MUST BE MADE WITHIN 10 DAYS			TOTAL	$3,800

Helpful Hint
To better understand the contents of this invoice, identify these items:
1. Seller
2. Invoice date
3. Purchaser
4. Salesperson
5. Credit terms
6. Freight terms
7. Goods sold: catalog number, description, quantity, price per unit
8. Total invoice amount

Sauk Stereo makes the following journal entry to record its purchase from PW Audio Supply. The entry increases (debits) Inventory and increases (credits) Accounts Payable.

A	=	L	+	OE
+3,800				
		+3,800		

Cash Flows
no effect

May 4	Inventory	3,800	
	Accounts Payable		3,800
	(To record goods purchased on account from PW Audio Supply)		

Under the perpetual inventory system, companies record purchases of merchandise for sale in the Inventory account. Thus, REI would increase (debit) Inventory for clothing, sporting goods, and anything else purchased for resale to customers.

Not all purchases are debited to Inventory, however. Companies record purchases of assets acquired for use and not for resale, such as supplies, equipment, and similar items, as increases to specific asset accounts rather than to Inventory.

For example, to record the purchase of materials used to make shelf signs or for cash register receipt paper, REI would increase (debit) Supplies.

Freight Costs

The sales agreement should indicate who—the seller or the buyer—is to pay for transporting the goods to the buyer's place of business. When a common carrier such as a railroad, trucking company, or airline transports the goods, the carrier prepares a freight bill in accord with the sales agreement.

Freight terms are expressed as either FOB shipping point or FOB destination. The letters FOB mean **free on board**. Thus, **FOB shipping point** means that the seller places the goods free on board the carrier, and the buyer pays the freight costs. Conversely, **FOB destination** means that the seller places the goods free on board to the buyer's place of business, and the seller pays the freight. For example, the sales invoice in Illustration 5-6 indicates FOB shipping point. Thus, the buyer (Sauk Stereo) pays the freight charges. Illustration 5-7 illustrates these shipping terms.

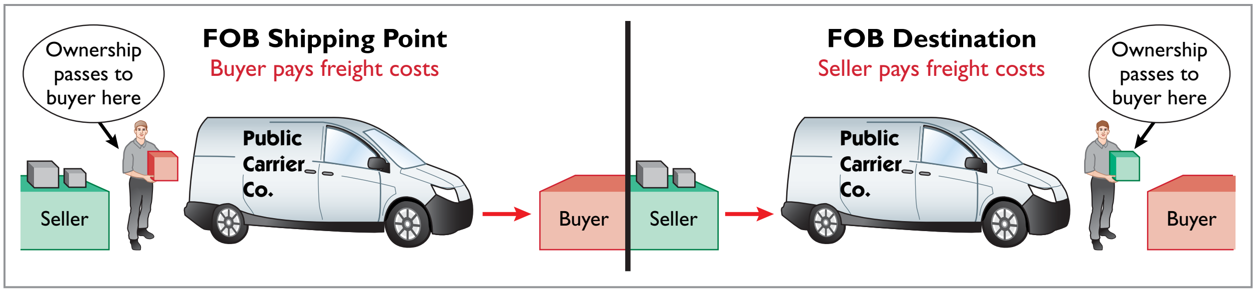

Illustration 5-7
Shipping terms

FREIGHT COSTS INCURRED BY THE BUYER

When the buyer incurs the transportation costs, these costs are considered part of the cost of purchasing inventory. Therefore, the buyer debits (increases) the Inventory account. For example, if Sauk Stereo (the buyer) pays Public Carrier Co. $150 for freight charges on May 6, the entry on Sauk Stereo's books is:

May 6	Inventory	150	
	Cash		150
	(To record payment of freight on goods purchased)		

A	=	L	+	OE
+150				
−150				

Cash Flows
−150

Thus, any freight costs incurred by the buyer are part of the cost of merchandise purchased. The reason: Inventory cost should include all costs to acquire the inventory, including freight necessary to deliver the goods to the buyer. Companies recognize these costs as cost of goods sold when inventory is sold.

FREIGHT COSTS INCURRED BY THE SELLER

In contrast, **freight costs incurred by the seller on outgoing merchandise are an operating expense to the seller**. These costs increase an expense account titled Freight-Out (sometimes called Delivery Expense). For example, if the freight terms on the invoice in Illustration 5-6 had required PW Audio Supply (the seller) to pay the freight charges, the entry by PW Audio Supply would be:

May 4	Freight-Out (or Delivery Expense)	150	
	Cash		150
	(To record payment of freight on goods sold)		

A	=	L	+	OE
				−150 Exp
−150				

Cash Flows
−150

When the seller pays the freight charges, the seller will usually establish a higher invoice price for the goods to cover the shipping expense.

Purchase Returns and Allowances

A purchaser may be dissatisfied with the merchandise received because the goods are damaged or defective, of inferior quality, or do not meet the purchaser's specifications. In such cases, the purchaser may return the goods to the seller for credit if the sale was made on credit, or for a cash refund if the purchase was for cash. This transaction is known as a **purchase return**. Alternatively, the purchaser may choose to keep the merchandise if the seller is willing to grant an allowance (deduction) from the purchase price. This transaction is known as a **purchase allowance**.

Assume that Sauk Stereo returned goods costing $300 to PW Audio Supply on May 8. The following entry by Sauk Stereo for the returned merchandise decreases (debits) Accounts Payable and decreases (credits) Inventory.

A	=	L	+	OE
		−300		
−300				

Cash Flows
no effect

May 8	Accounts Payable	300	
	Inventory		300
	(To record return of goods purchased from PW Audio Supply)		

Because Sauk Stereo increased Inventory when the goods were received, Inventory is decreased when Sauk Stereo returns the goods.

Suppose instead that Sauk Stereo chose to keep the goods after being granted a $50 allowance (reduction in price). It would reduce (debit) Accounts Payable and reduce (credit) Inventory for $50.

Purchase Discounts

The credit terms of a purchase on account may permit the buyer to claim a cash discount for prompt payment. The buyer calls this cash discount a **purchase discount**. This incentive offers advantages to both parties. The purchaser saves money, and the seller is able to shorten the operating cycle by converting the accounts receivable into cash.

Helpful Hint
The term *net* in "net 30" means the remaining amount due after subtracting any sales returns and allowances and partial payments.

Credit terms specify the amount of the cash discount and time period in which it is offered. They also indicate the time period in which the purchaser is expected to pay the full invoice price. In the sales invoice in Illustration 5-6 (page 212), credit terms are 2/10, n/30, which is read "two-ten, net thirty." This means that the buyer may take a 2% cash discount on the invoice price, less ("net of") any returns or allowances, if payment is made within 10 days of the invoice date (the **discount period**). Otherwise, the invoice price, less any returns or allowances, is due 30 days from the invoice date.

Alternatively, the discount period may extend to a specified number of days following the month in which the sale occurs. For example, 1/10 EOM (end of month) means that a 1% discount is available if the invoice is paid within the first 10 days of the next month.

When the seller elects not to offer a cash discount for prompt payment, credit terms will specify only the maximum time period for paying the balance due. For example, the invoice may state the time period as n/30, n/60, or n/10 EOM. This means, respectively, that the buyer must pay the net amount in 30 days, 60 days, or within the first 10 days of the next month.

When the buyer pays an invoice within the discount period, the amount of the discount decreases Inventory. Why? Because companies record inventory at cost and, by paying within the discount period, the buyer has reduced its cost. To illustrate, assume Sauk Stereo pays the balance due of $3,500 (gross invoice price of $3,800 less purchase returns and allowances of $300) on May 14, the last day of the discount period. The cash discount is $70 ($3,500 × 2%), and Sauk Stereo pays $3,430 ($3,500 − $70). The entry Sauk Stereo makes to record its May 14 payment decreases (debits) Accounts Payable by the amount of the gross invoice price, reduces (credits) Inventory by the $70 discount, and reduces (credits) Cash by the net amount owed.

May 14	Accounts Payable	3,500	
	Cash		3,430
	Inventory		70
	(To record payment within discount period)		

A	=	L	+	OE
		−3,500		
−3,430				
−70				

Cash Flows
−3,430

If Sauk Stereo failed to take the discount and instead made full payment of $3,500 on June 3, it would debit Accounts Payable and credit Cash for $3,500 each.

June 3	Accounts Payable	3,500	
	Cash		3,500
	(To record payment with no discount taken)		

A	=	L	+	OE
		−3500		
−3,500				

Cash Flows
−3,500

A merchandising company usually should take all available discounts. Passing up the discount may be viewed as **paying interest** for use of the money. For example, passing up the discount offered by PW Audio Supply would be comparable to Sauk Stereo paying an interest rate of 2% for the use of $3,500 for 20 days. This is the equivalent of an annual interest rate of approximately 36.5% (2% × 365/20). Obviously, it would be better for Sauk Stereo to borrow at prevailing bank interest rates of 6% to 10% than to lose the discount.

Summary of Purchasing Transactions

The following T-account (with transaction descriptions in red) provides a summary of the effect of the previous transactions on Inventory. Sauk Stereo originally purchased $3,800 worth of inventory for resale. It then returned $300 of goods. It paid $150 in freight charges, and finally, it received a $70 discount off the balance owed because it paid within the discount period. This results in a balance in Inventory of $3,580.

Inventory

Purchase	May 4	3,800	May 8	300	**Purchase return**
Freight-in	6	150	14	70	**Purchase discount**
Balance		3,580			

DO IT! 2 Purchase Transactions

On September 5, De La Hoya Company buys merchandise on account from Junot Diaz Company. The selling price of the goods is $1,500, and the cost to Diaz Company was $800. On September 8, De La Hoya returns defective goods with a selling price of $200. Record the transactions on the books of De La Hoya Company.

Solution

Sept. 5	Inventory	1,500	
	Accounts Payable		1,500
	(To record goods purchased on account)		
8	Accounts Payable	200	
	Inventory		200
	(To record return of defective goods)		

Action Plan

- ✔ Purchaser records goods at cost.
- ✔ When goods are returned, purchaser reduces Inventory.

Related exercise material: **BE5-3, BE5-5, E5-2, E5-3, E5-4, and DO IT! 5-2.**

LEARNING OBJECTIVE 3

Record sales under a perpetual inventory system.

In accordance with the revenue recognition principle, companies record sales revenue when the performance obligation is satisfied. Typically, the performance obligation is satisfied when the goods transfer from the seller to the buyer. At this point, the sales transaction is complete and the sales price established.

Sales may be made on credit or for cash. A **business document** should support every sales transaction, to provide written evidence of the sale. **Cash register documents** provide evidence of cash sales. A **sales invoice**, like the one shown in Illustration 5-6 (page 212), provides support for a credit sale. The original copy of the invoice goes to the customer, and the seller keeps a copy for use in recording the sale. The invoice shows the date of sale, customer name, total sales price, and other relevant information.

The seller makes two entries for each sale. **The first entry records the sale**: The seller increases (debits) Cash (or Accounts Receivable if a credit sale) and also increases (credits) Sales Revenue. **The second entry records the cost of the merchandise sold**: The seller increases (debits) Cost of Goods Sold and also decreases (credits) Inventory for the cost of those goods. As a result, the Inventory account will show at all times the amount of inventory that should be on hand.

To illustrate a credit sales transaction, PW Audio Supply records its May 4 sale of $3,800 to Sauk Stereo (see Illustration 5-6) as follows (assume the merchandise cost PW Audio Supply $2,400).

A	=	L	+	OE
+3,800				
				+3,800 Rev

Cash Flows
no effect

May 4	Accounts Receivable	3,800	
	Sales Revenue		3,800
	(To record credit sale to Sauk Stereo per invoice #731)		

A	=	L	+	OE
				−2,400 Exp
−2,400				

Cash Flows
no effect

4	Cost of Goods Sold	2,400	
	Inventory		2,400
	(To record cost of merchandise sold on invoice #731 to Sauk Stereo)		

For internal decision-making purposes, merchandising companies may use more than one sales account. For example, PW Audio Supply may decide to keep separate sales accounts for its sales of TVs, Blu-ray players, and headsets. REI might use separate accounts for camping gear, children's clothing, and ski equipment—or it might have even more narrowly defined accounts. By using separate sales accounts for major product lines, rather than a single combined sales account, company management can more closely monitor sales trends and respond more strategically to changes in sales patterns. For example, if TV sales are increasing while Blu-ray player sales are decreasing, PW Audio Supply might reevaluate both its advertising and pricing policies on these items to ensure they are optimal.

On its income statement presented to outside investors, a merchandising company normally would provide only a single sales figure—the sum of all of its individual sales accounts. This is done for two reasons. First, providing detail on all of its individual sales accounts would add considerable length to its income statement. Second, companies do not want their competitors to know the details of their operating results. However, Microsoft recently expanded its disclosure of revenue from three to five types. The reason: The additional categories enabled financial statement users to better evaluate the growth of the company's consumer and Internet businesses.

ETHICS NOTE

Many companies are trying to improve the quality of their financial reporting. For example, General Electric now provides more detail on its revenues and operating profits.

ANATOMY OF A FRAUD[1]

Holly Harmon was a cashier at a national superstore for only a short while when she began stealing merchandise using three methods. Under the first method, her husband or friends took UPC labels from cheaper items and put them on more expensive items. Holly then scanned the goods at the register. Using the second method, Holly scanned an item at the register but then voided the sale and left the merchandise in the shopping cart. A third approach was to put goods into large plastic containers. She scanned the plastic containers but not the goods within them. One day, Holly did not call in sick or show up for work. In such instances, the company reviews past surveillance tapes to look for suspicious activity by employees. This enabled the store to observe the thefts and to identify the participants.

Total take: $12,000

THE MISSING CONTROLS

Human resource controls. A background check would have revealed Holly's previous criminal record. She would not have been hired as a cashier.

Physical controls. Software can flag high numbers of voided transactions or a high number of sales of low-priced goods. Random comparisons of video records with cash register records can ensure that the goods reported as sold on the register are the same goods that are shown being purchased on the video recording. Finally, employees should be aware that they are being monitored.

Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 251–259.

At the end of "Anatomy of a Fraud" stories, which describe some recent real-world frauds, we discuss the missing control activities that would likely have prevented or uncovered the fraud.

Sales Returns and Allowances

We now look at the "flip side" of purchase returns and allowances, which the seller records as **sales returns and allowances**. These are transactions where the seller either accepts goods back from the buyer (a return) or grants a reduction in the purchase price (an allowance) so the buyer will keep the goods. PW Audio Supply's entries to record credit for returned goods involve (1) an increase (debit) in Sales Returns and Allowances (a contra account to Sales Revenue) and a decrease (credit) in Accounts Receivable at the $300 selling price, and (2) an increase (debit) in Inventory (assume a $140 cost) and a decrease (credit) in Cost of Goods Sold, as shown below (assuming that the goods were not defective).

May 8	Sales Returns and Allowances	300	
	Accounts Receivable		300
	(To record credit granted to Sauk Stereo for returned goods)		
8	Inventory	140	
	Cost of Goods Sold		140
	(To record cost of goods returned)		

A	=	L	+	OE
				−300 Rev
−300				

Cash Flows
no effect

A	=	L	+	OE
+140				
				+140 Exp

Cash Flows
no effect

If Sauk Stereo returns goods because they are damaged or defective, then PW Audio Supply's entry to Inventory and Cost of Goods Sold should be for the fair value of the returned goods, rather than their cost. For example, if the returned

[1]The "Anatomy of a Fraud" stories in this textbook are adapted from *Fraud Casebook: Lessons from the Bad Side of Business,* edited by Joseph T. Wells (Hoboken, NJ: John Wiley & Sons, Inc., 2007). Used by permission. The names of some of the people and organizations in the stories are fictitious, but the facts in the stories are true.

goods were defective and had a fair value of $50, PW Audio Supply would debit Inventory for $50 and credit Cost of Goods Sold for $50.

What happens if the goods are not returned but the seller grants the buyer an allowance by reducing the purchase price? In this case, the seller debits Sales Returns and Allowances and credits Accounts Receivable for the amount of the allowance. An allowance has no impact on Inventory or Cost of Goods Sold.

Sales Returns and Allowances is a **contra revenue account** to Sales Revenue. This means that it is offset against a revenue account on the income statement. The normal balance of Sales Returns and Allowances is a debit. Companies use a contra account, instead of debiting Sales Revenue, to disclose in the accounts and in the income statement the amount of sales returns and allowances. Disclosure of this information is important to management. Excessive returns and allowances may suggest problems—inferior merchandise, inefficiencies in filling orders, errors in billing customers, or delivery or shipment mistakes. Moreover, a decrease (debit) recorded directly to Sales Revenue would obscure the relative importance of sales returns and allowances as a percentage of sales. It also could distort comparisons between total sales in different accounting periods.

Accounting Across the Organization — Costco Wholesale Corp.

© Jacob Wackerhausen/iStockphoto

Should Costco Change Its Return Policy?

In most industries, sales returns are relatively minor. But returns of consumer electronics can really take a bite out of profits. Recently, the marketing executives at Costco Wholesale Corp. faced a difficult decision. Costco has always prided itself on its generous return policy. Most goods have had an unlimited grace period for returns. However, a new policy requires that certain electronics must be returned within 90 days of their purchase. The reason? The cost of returned products such as high-definition TVs, computers, and iPods cut an estimated 8¢ per share off Costco's earnings per share, which was $2.30.

Source: Kris Hudson, "Costco Tightens Policy on Returning Electronics," *Wall Street Journal* (February 27, 2007), p. B4.

If a company expects significant returns, what are the implications for revenue recognition? (Go to **WileyPLUS** for this answer and additional questions.)

Sales Discounts

As mentioned in our discussion of purchase transactions, the seller may offer the customer a cash discount—called by the seller a **sales discount**—for the prompt payment of the balance due. Like a purchase discount, a sales discount is based on the invoice price less returns and allowances, if any. The seller increases (debits) the Sales Discounts account for discounts that are taken. For example, PW Audio Supply makes the following entry to record the cash receipt on May 14 from Sauk Stereo within the discount period.

A	= L +	OE
+3,430		
		−70 Rev
−3,500		

Cash Flows
+3,430

May 14	Cash	3,430	
	Sales Discounts	70	
	Accounts Receivable		3,500
	(To record collection within 2/10, n/30 discount period from Sauk Stereo)		

Like Sales Returns and Allowances, Sales Discounts is a **contra revenue account** to Sales Revenue. Its normal balance is a debit. PW Audio Supply uses this account, instead of debiting Sales Revenue, to disclose the amount of cash discounts taken by customers. If Sauk Stereo does not take the discount, PW Audio Supply increases (debits) Cash for $3,500 and decreases (credits) Accounts Receivable for the same amount at the date of collection.

The following T-accounts summarize the three sales-related transactions and show their combined effect on net sales.

Sales Revenue		Sales Returns and Allowances		Sales Discounts	
	3,800	300		70	

Net Sales
$3,430

People, Planet, and Profit Insight — PepsiCo

Helen Sessions/Alamy

Selling Green

Here is a question an executive of PepsiCo was asked: Should PepsiCo market green? The executive indicated that the company should, as he believes it's the No. 1 thing consumers all over the world care about. Here are some of his thoughts on this issue:

"Sun Chips are part of the food business I run. It's a 'healthy snack.' We decided that Sun Chips, if it's a healthy snack, should be made in facilities that have a net-zero footprint. In other words, I want off the electric grid everywhere we make Sun Chips. We did that. Sun Chips should be made in a facility that puts back more water than it uses. It does that. And we partnered with our suppliers and came out with the world's first compostable chip package.

Now, there was an issue with this package: It was louder than the New York subway, louder than jet engines taking off. What would a company that's committed to green do: walk away or stay committed? If your people are passionate, they're going to fix it for you as long as you stay committed. Six months later, the compostable bag has half the noise of our current package.

So the view today is: we should market green, we should be proud to do it . . . it has to be a 360-degree process, both internal and external. And if you do that, you can monetize environmental sustainability for the shareholders."

Source: "Four Problems—and Solutions," *Wall Street Journal* (March 7, 2011), p. R2.

What is meant by "monetize environmental sustainability" for shareholders? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 3 Sales Transactions

On September 5, De La Hoya Company buys merchandise on account from Junot Diaz Company. The selling price of the goods is $1,500, and the cost to Diaz Company was $800. On September 8, De La Hoya returns defective goods with a selling price of $200 and a fair value of $30. Record the transactions on the books of Junot Diaz Company.

Solution

Sept. 5	Accounts Receivable	1,500	
	Sales Revenue		1,500
	(To record credit sale)		
5	Cost of Goods Sold	800	
	Inventory		800
	(To record cost of goods sold on account)		

Action Plan

- ✔ Seller records both the sale and the cost of goods sold at the time of the sale.
- ✔ When goods are returned, the seller records the return in a contra account, Sales Returns and Allowances, and reduces Accounts Receivable.

Action Plan (cont'd)

✔ Any goods returned increase Inventory and reduce Cost of Goods Sold. Defective or damaged inventory is recorded at fair value (scrap value).

8	Sales Returns and Allowances	200	
	Accounts Receivable		200
	(To record credit granted for receipt of returned goods)		
8	Inventory	30	
	Cost of Goods Sold		30
	(To record fair value of goods returned)		

Related exercise material: **BE5-3, BE5-4, E5-3, E5-4, E5-5, and DO IT! 5-3.**

LEARNING OBJECTIVE 4

Apply the steps in the accounting cycle to a merchandising company.

Up to this point, we have illustrated the basic entries for transactions relating to purchases and sales in a perpetual inventory system. Now we consider the remaining steps in the accounting cycle for a merchandising company. Each of the required steps described in Chapter 4 for service companies apply to merchandising companies. Appendix 5A to this chapter shows use of a worksheet by a merchandiser (an optional step).

Adjusting Entries

A merchandising company generally has the same types of adjusting entries as a service company. However, a merchandiser using a perpetual system will require one additional adjustment to make the records agree with the actual inventory on hand. Here's why. At the end of each period, for control purposes, a merchandising company that uses a perpetual system will take a physical count of its goods on hand. The company's unadjusted balance in Inventory usually does not agree with the actual amount of inventory on hand. The perpetual inventory records may be incorrect due to recording errors, theft, or waste. Thus, the company needs to adjust the perpetual records to make the recorded inventory amount agree with the inventory on hand. **This involves adjusting Inventory and Cost of Goods Sold.**

For example, suppose that PW Audio Supply has an unadjusted balance of \$40,500 in Inventory. Through a physical count, PW Audio Supply determines that its actual merchandise inventory at December 31 is \$40,000. The company would make an adjusting entry as follows.

A	=	L	+	OE
−500				
				−500 Exp

Cash Flows
no effect

Dec. 31	Cost of Goods Sold	500	
	Inventory		500
	(To adjust inventory to physical count)		

Closing Entries

A merchandising company, like a service company, closes to Income Summary all accounts that affect net income. In journalizing, the company credits all temporary accounts with debit balances, and debits all temporary accounts with credit balances, as shown below for PW Audio Supply. Note that PW Audio Supply closes Cost of Goods Sold to Income Summary.

Helpful Hint
The easiest way to prepare the first two closing entries is to identify the temporary accounts by their balances and then prepare one entry for the credits and one for the debits.

Dec. 31	Sales Revenue	480,000	
	Income Summary		480,000
	(To close income statement accounts with credit balances)		

31	Income Summary	450,000	
	Sales Returns and Allowances		12,000
	Sales Discounts		8,000
	Cost of Goods Sold		316,000
	Salaries and Wages Expense		64,000
	Freight-Out		7,000
	Advertising Expense		16,000
	Utilities Expense		17,000
	Depreciation Expense		8,000
	Insurance Expense		2,000
	(To close income statement accounts with debit balances)		
31	Income Summary	30,000	
	Owner's Capital		30,000
	(To close net income to capital)		
31	Owner's Capital	15,000	
	Owner's Drawings		15,000
	(To close drawings to capital)		

After PW Audio Supply has posted the closing entries, all temporary accounts have zero balances. Also, Owner's Capital has a balance that is carried over to the next period.

Summary of Merchandising Entries

Illustration 5-8 summarizes the entries for the merchandising accounts using a perpetual inventory system.

Illustration 5-8
Daily recurring and adjusting and closing entries

	Transactions	Daily Recurring Entries	Dr.	Cr.
Sales Transactions	Selling merchandise to customers.	Cash or Accounts Receivable	XX	
		Sales Revenue		XX
		Cost of Goods Sold	XX	
		Inventory		XX
	Granting sales returns or allowances to customers.	Sales Returns and Allowances	XX	
		Cash or Accounts Receivable		XX
		Inventory	XX	
		Cost of Goods Sold		XX
	Paying freight costs on sales; FOB destination.	Freight-Out	XX	
		Cash		XX
	Receiving payment from customers within discount period.	Cash	XX	
		Sales Discounts	XX	
		Accounts Receivable		XX
Purchase Transactions	Purchasing merchandise for resale.	Inventory	XX	
		Cash or Accounts Payable		XX
	Paying freight costs on merchandise purchased; FOB shipping point.	Inventory	XX	
		Cash		XX
	Receiving purchase returns or allowances from suppliers.	Cash or Accounts Payable	XX	
		Inventory		XX
	Paying suppliers within discount period.	Accounts Payable	XX	
		Inventory		XX
		Cash		XX

Events	Adjusting and Closing Entries		
Adjust because book amount is higher than the inventory amount determined to be on hand.	Cost of Goods Sold	XX	
	Inventory		XX
Closing temporary accounts with credit balances.	Sales Revenue	XX	
	Income Summary		XX
Closing temporary accounts with debit balances.	Income Summary	XX	
	Sales Returns and Allowances		XX
	Sales Discounts		XX
	Cost of Goods Sold		XX
	Freight-Out		XX
	Expenses		XX

Illustration 5-8
(*continued*)

DO IT! 4 Closing Entries

The trial balance of Celine's Sports Wear Shop at December 31 shows Inventory $25,000, Sales Revenue $162,400, Sales Returns and Allowances $4,800, Sales Discounts $3,600, Cost of Goods Sold $110,000, Rent Revenue $6,000, Freight-Out $1,800, Rent Expense $8,800, and Salaries and Wages Expense $22,000. Prepare the closing entries for the above accounts.

Action Plan

- ✔ Close all temporary accounts with credit balances to Income Summary by debiting these accounts.
- ✔ Close all temporary accounts with debit balances, except drawings, to Income Summary by crediting these accounts.

Solution

The two closing entries are:

Dec. 31	Sales Revenue	162,400	
	Rent Revenue	6,000	
	Income Summary		168,400
	(To close accounts with credit balances)		
31	Income Summary	151,000	
	Cost of Goods Sold		110,000
	Sales Returns and Allowances		4,800
	Sales Discounts		3,600
	Freight-Out		1,800
	Rent Expense		8,800
	Salaries and Wages Expense		22,000
	(To close accounts with debit balances)		

Related exercise material: **BE5-6, BE5-7, E5-6, E5-7, E5-8, and DO IT! 5-4.**

LEARNING OBJECTIVE 5 Compare a multiple-step with a single-step income statement.

Merchandising companies widely use the classified balance sheet introduced in Chapter 4 and one of two forms for the income statement. This section explains the use of these financial statements by merchandisers.

Multiple-Step Income Statement

The **multiple-step income statement** is so named because it shows several steps in determining net income. Two of these steps relate to the company's principal operating activities. A multiple-step statement also distinguishes between

operating and **nonoperating activities**. Finally, the statement highlights intermediate components of income and shows subgroupings of expenses.

INCOME STATEMENT PRESENTATION OF SALES

The multiple-step income statement begins by presenting **sales revenue**. It then deducts contra revenue accounts—sales returns and allowances, and sales discounts—from sales revenue to arrive at **net sales**. Illustration 5-9 presents the sales section for PW Audio Supply, using assumed data.

Illustration 5-9
Computation of net sales

PW AUDIO SUPPLY
Income Statement (partial)

Sales		
Sales revenue		$ 480,000
Less: Sales returns and allowances	$12,000	
Sales discounts	8,000	20,000
Net sales		**$460,000**

GROSS PROFIT

From Illustration 5-1, you learned that companies deduct cost of goods sold from sales revenue to determine **gross profit**. For this computation, companies use **net sales** (which takes into consideration Sales Returns and Allowances and Sales Discounts) as the amount of sales revenue. On the basis of the sales data in Illustration 5-9 (net sales of $460,000) and cost of goods sold under the perpetual inventory system (assume $316,000), PW Audio Supply's gross profit is $144,000, computed as follows.

Alternative Terminology
Gross profit is sometimes referred to as *gross margin*.

Illustration 5-10
Computation of gross profit

Net sales	$ 460,000
Cost of goods sold	316,000
Gross profit	**$144,000**

We also can express a company's gross profit as a percentage, called the **gross profit rate**. To do so, we divide the amount of gross profit by net sales. For PW Audio Supply, the **gross profit rate** is 31.3%, computed as follows.

Illustration 5-11
Gross profit rate formula and computation

Gross Profit	÷	Net Sales	=	Gross Profit Rate
$144,000	÷	$460,000	=	31.3%

Analysts generally consider the gross profit **rate** to be more useful than the gross profit **amount**. The rate expresses a more meaningful (qualitative) relationship between net sales and gross profit. For example, a gross profit of $1,000,000 may sound impressive. But if it is the result of a gross profit rate of only 7%, it is not so impressive. The gross profit rate tells how many cents of each sales dollar go to gross profit.

Gross profit represents the **merchandising profit** of a company. It is not a measure of the overall profitability because operating expenses are not yet deducted. But managers and other interested parties closely watch the amount and trend of gross profit. They compare current gross profit with amounts reported in past periods. They also compare the company's gross profit rate with rates of competitors and with industry averages. Such comparisons provide information about the effectiveness of a company's purchasing function and the soundness of its pricing policies.

OPERATING EXPENSES AND NET INCOME

Operating expenses are the next component in measuring net income for a merchandising company. They are the expenses incurred in the process of earning sales revenue. These expenses are similar in merchandising and service companies. At PW Audio Supply, operating expenses were $114,000. The company determines its net income by subtracting operating expenses from gross profit. Thus, net income is $30,000, as shown below.

Illustration 5-12
Operating expenses in computing net income

Gross profit	$144,000
Operating expenses	**114,000**
Net income	$ 30,000

The net income amount is the so-called "bottom line" of a company's income statement.

NONOPERATING ACTIVITIES

Nonoperating activities consist of various revenues and expenses and gains and losses that are unrelated to the company's main line of operations. When nonoperating items are included, the label "**Income from operations**" (or "Operating income") precedes them. This label clearly identifies the results of the company's normal operations, an amount determined by subtracting cost of goods sold and operating expenses from net sales. The results of nonoperating activities are shown in the categories "**Other revenues and gains**" and "**Other expenses and losses**." Illustration 5-13 lists examples of each.

Illustration 5-13
Other items of nonoperating activities

Other Revenues and Gains
Interest revenue from notes receivable and marketable securities.
Dividend revenue from investments in common stock.
Rent revenue from subleasing a portion of the store.
Gain from the sale of property, plant, and equipment.
Other Expenses and Losses
Interest expense on notes and loans payable.
Casualty losses from recurring causes, such as vandalism and accidents.
Loss from the sale or abandonment of property, plant, and equipment.
Loss from strikes by employees and suppliers.

ETHICS NOTE

Companies manage earnings in various ways. ConAgra Foods recorded a non-recurring gain for $186 million from the sale of Pilgrim's Pride stock to help meet an earnings projection for the quarter.

Merchandising companies report the nonoperating activities in the income statement immediately after the company's operating activities. Illustration 5-14 shows these sections for PW Audio Supply, using assumed data.

The distinction between operating and nonoperating activities is crucial to many external users of financial data. These users view operating income as sustainable and many nonoperating activities as non-recurring. Therefore, when forecasting next year's income, analysts put the most weight on this year's operating income and less weight on this year's nonoperating activities.

Illustration 5-14
Multiple-step income statement

PW AUDIO SUPPLY
Income Statement
For the Year Ended December 31, 2017

	Sales		
	Sales revenue		$480,000
Calculation of gross profit	Less: Sales returns and allowances	$12,000	
	Sales discounts	8,000	20,000
	Net sales		460,000
	Cost of goods sold		316,000
	Gross profit		144,000
	Operating expenses		
	Salaries and wages expense	64,000	
	Utilities expense	17,000	
Calculation of income from operations	Advertising expense	16,000	
	Depreciation expense	8,000	
	Freight-out	7,000	
	Insurance expense	2,000	
	Total operating expenses		114,000
	Income from operations		30,000
	Other revenues and gains		
	Interest revenue	3,000	
Results of nonoperating activities	Gain on disposal of plant assets	600	3,600
	Other expenses and losses		
	Interest expense	1,800	
	Casualty loss from vandalism	200	2,000
	Net income		$ 31,600

Ethics Insight IBM

ImageRite/Getty Images, Inc.

Disclosing More Details

After Enron, increased investor criticism and regulator scrutiny forced many companies to improve the clarity of their financial disclosures. For example, IBM began providing more detail regarding its "Other gains and losses." It had previously included these items in its selling, general, and administrative expenses, with little disclosure. For example, previously if IBM sold off one of its buildings at a gain, it would include this gain in the selling, general and administrative expense line item, thus reducing that expense. This made it appear that the company had done a better job of controlling operating expenses than it actually had.

As another example, when eBay sold the remainder of its investment in Skype to Microsoft, it reported a gain in "Other revenues and gains" of $1.7 billion. Since eBay's total income from operations was $2.4 billion, it was very important that the gain from the Skype sale not be buried in operating income.

Why have investors and analysts demanded more accuracy in isolating "Other gains and losses" from operating items? (Go to **WileyPLUS** for this answer and additional questions.)

Single-Step Income Statement

Another income statement format is the **single-step income statement**. The statement is so named because only one step—subtracting total expenses from total revenues—is required in determining net income.

In a single-step statement, all data are classified into two categories: (1) **revenues**, which include both operating revenues and other revenues and gains; and (2) **expenses**, which include cost of goods sold, operating expenses, and other expenses and losses. Illustration 5-15 shows a single-step statement for PW Audio Supply.

Illustration 5-15
Single-step income statement

PW AUDIO SUPPLY
Income Statement
For the Year Ended December 31, 2017

Revenues		
Net sales		$460,000
Interest revenue		3,000
Gain on disposal of plant assets		600
Total revenues		463,600
Expenses		
Cost of goods sold	$316,000	
Operating expenses	114,000	
Interest expense	1,800	
Casualty loss from vandalism	200	
Total expenses		432,000
Net income		$ 31,600

There are two primary reasons for using the single-step format. (1) A company does not realize any type of profit or income until total revenues exceed total expenses, so it makes sense to divide the statement into these two categories. (2) The format is simpler and easier to read. *For homework problems, however, you should use the single-step format only when specifically instructed to do so.*

Classified Balance Sheet

In the balance sheet, merchandising companies report inventory as a current asset immediately below accounts receivable. Recall from Chapter 4 that companies generally list current asset items in the order of their closeness to cash (liquidity). Inventory is less close to cash than accounts receivable because the goods must first be sold and then collection made from the customer. Illustration 5-16 presents the assets section of a classified balance sheet for PW Audio Supply.

Illustration 5-16
Assets section of a classified balance sheet

PW AUDIO SUPPLY
Balance Sheet (Partial)
December 31, 2017

Assets

Current assets		
Cash		$ 9,500
Accounts receivable		16,100
Inventory		40,000
Prepaid insurance		1,800
Total current assets		67,400
Property, plant, and equipment		
Equipment	$80,000	
Less: Accumulated depreciation—equipment	24,000	56,000
Total assets		$123,400

Helpful Hint
The $40,000 is the cost of the inventory on hand, not its expected selling price.

DO IT! 5 Financial Statement Classifications

You are presented with the following list of accounts from the adjusted trial balance for merchandiser Gorman Company. Indicate in which financial statement and under what classification each of the following would be reported.

Accounts Payable
Accounts Receivable
Accumulated Depreciation—Buildings
Accumulated Depreciation—Equipment
Advertising Expense
Buildings
Cash
Depreciation Expense
Equipment
Freight-Out
Gain on Disposal of Plant Assets
Insurance Expense
Interest Expense
Interest Payable
Inventory
Land
Notes Payable (due in 3 years)
Owner's Capital (beginning balance)
Owner's Drawings
Property Taxes Payable
Salaries and Wages Expense
Salaries and Wages Payable
Sales Returns and Allowances
Sales Revenue
Utilities Expense

Solution

Account	Financial Statement	Classification
Accounts Payable	Balance sheet	Current liabilities
Accounts Receivable	Balance sheet	Current assets
Accumulated Depreciation—Buildings	Balance sheet	Property, plant, and equipment
Accumulated Depreciation—Equipment	Balance sheet	Property, plant, and equipment
Advertising Expense	Income statement	Operating expenses
Buildings	Balance sheet	Property, plant, and equipment
Cash	Balance sheet	Current assets
Depreciation Expense	Income statement	Operating expenses
Equipment	Balance sheet	Property, plant, and equipment
Freight-Out	Income statement	Operating expenses
Gain on Disposal of Plant Assets	Income statement	Other revenues and gains
Insurance Expense	Income statement	Operating expenses
Interest Expense	Income statement	Other expenses and losses
Interest Payable	Balance sheet	Current liabilities
Inventory	Balance sheet	Current assets
Land	Balance sheet	Property, plant, and equipment
Notes Payable (due in 3 years)	Balance sheet	Long-term liabilities
Owner's Capital	Owner's equity statement	Beginning balance
Owner's Drawings	Owner's equity statement	Deduction section
Property Taxes Payable	Balance sheet	Current liabilities
Salaries and Wages Expense	Income statement	Operating expenses
Salaries and Wages Payable	Balance sheet	Current liabilities
Sales Returns and Allowances	Income statement	Sales
Sales Revenue	Income statement	Sales
Utilities Expense	Income statement	Operating expenses

Related exercise material: **BE5-8, BE5-9, E5-9, E5-10, E5-12, E5-13, E5-14, and DO IT! 5-5.**

Action Plan

✔ **Review the major sections of the income statement: sales, cost of goods sold, operating expenses, other revenues and gains, and other expenses and losses.**

✔ **Add net income and investments to beginning capital and deduct drawings to arrive at ending capital in the owner's equity statement.**

✔ **Review the major sections of the balance sheet, income statement, and owner's equity statement.**

LEARNING OBJECTIVE * 6

APPENDIX 5A: Prepare a worksheet for a merchandising company.

Using a Worksheet

As indicated in Chapter 4, a worksheet enables companies to prepare financial statements before they journalize and post adjusting entries. The steps in preparing a worksheet for a merchandising company are the same as for a service company (see pages 150–156). Illustration 5A-1 shows the worksheet for PW Audio Supply (excluding nonoperating items). The unique accounts for a merchandiser using a **perpetual inventory system** are in red.

PW Audio Supply.xls

Home Insert Page Layout Formulas Data Review View

P18 fx

PW AUDIO SUPPLY
Worksheet
For the Year Ended December 31, 2017

	A	B	C	D	E	F	G	H	I	J	K
5–6		Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
7	Accounts	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
8	Cash	9,500				9,500				9,500	
9	Accounts Receivable	16,100				16,100				16,100	
10	Inventory	40,500			(a) 500	40,000				40,000	
11	Prepaid Insurance	3,800			(b) 2,000	1,800				1,800	
12	Equipment	80,000				80,000				80,000	
13	Accumulated Depreciation—Equipment		16,000		(c) 8,000		24,000				24,000
14	Accounts Payable		20,400				20,400				20,400
15	Owner's Capital		83,000				83,000				83,000
16	Owner's Drawings	15,000				15,000				15,000	
17	Sales Revenue		480,000				480,000		480,000		
18	Sales Returns and Allowances	12,000				12,000		12,000			
19	Sales Discounts	8,000				8,000		8,000			
20	Cost of Goods Sold	315,500		(a) 500		316,000		316,000			
21	Freight-Out	7,000				7,000		7,000			
22	Advertising Expense	16,000				16,000		16,000			
23	Salaries and Wages Expense	59,000		(d) 5,000		64,000		64,000			
24	Utilities Expense	17,000				17,000		17,000			
25	Totals	599,400	599,400								
26	Insurance Expense			(b) 2,000		2,000		2,000			
27	Depreciation Expense			(c) 8,000		8,000		8,000			
28	Salaries and Wages Payable				(d) 5,000		5,000				5,000
29	Totals			15,500	15,500	612,400	612,400	450,000	480,000	162,400	132,400
30	Net Income							30,000			30,000
31	Totals							480,000	480,000	162,400	162,400
32											
33	Key: (a) Adjustment to inventory on hand. (b) Insurance expired. (c) Depreciation expense. (d) Salaries and wages accrued.										

Illustration 5A-1
Worksheet for merchandising company—perpetual inventory system

TRIAL BALANCE COLUMNS

Data for the trial balance come from the ledger balances of PW Audio Supply at December 31. The amount shown for Inventory, $40,500, is the year-end inventory amount from the perpetual inventory system.

ADJUSTMENTS COLUMNS

A merchandising company generally has the same types of adjustments as a service company. As you see in the worksheet, adjustments (b), (c), and (d) are for insurance, depreciation, and salaries. Pioneer Advertising, as illustrated in Chapters 3 and 4, also had these adjustments. Adjustment (a) was required to adjust the perpetual inventory carrying amount to the actual count.

After PW Audio Supply enters all adjustments data on the worksheet, it establishes the equality of the adjustments column totals. It then extends the balances in all accounts to the adjusted trial balance columns.

ADJUSTED TRIAL BALANCE

The adjusted trial balance shows the balance of all accounts after adjustment at the end of the accounting period.

INCOME STATEMENT COLUMNS

Next, the merchandising company transfers the accounts and balances that affect the income statement from the adjusted trial balance columns to the income statement columns. PW Audio Supply shows Sales Revenue of $480,000 in the credit column. It shows the contra revenue accounts Sales Returns and Allowances $12,000 and Sales Discounts $8,000 in the debit column. The difference of $460,000 is the net sales shown on the income statement (Illustration 5-14, page 225).

Finally, the company totals all the credits in the income statement column and compares those totals to the total of the debits in the income statement column. If the credits exceed the debits, the company has net income. PW Audio Supply has net income of $30,000. If the debits exceed the credits, the company would report a net loss.

BALANCE SHEET COLUMNS

The major difference between the balance sheets of a service company and a merchandiser is inventory. PW Audio Supply shows the ending inventory amount of $40,000 in the balance sheet debit column. The information to prepare the owner's equity statement is also found in these columns. That is, the Owner's Capital account is $83,000. Owner's Drawings are $15,000. Net income results when the total of the debit column exceeds the total of the credit column in the balance sheet columns. A net loss results when the total of the credits exceeds the total of the debit balances.

LEARNING OBJECTIVE *7

APPENDIX 5B: Record purchases and sales under a periodic inventory system.

As described in this chapter, companies may use one of two basic systems of accounting for inventories: (1) the perpetual inventory system or (2) the periodic inventory system. In the chapter, we focused on the characteristics of the perpetual inventory system. In this appendix, we discuss and illustrate the **periodic inventory system**. One key difference between the two systems is the point at which the company computes cost of goods sold. For a visual reminder of this difference, refer back to Illustration 5-5 (on page 210).

Determining Cost of Goods Sold Under a Periodic System

Determining cost of goods sold is different when a periodic inventory system is used rather than a perpetual system. As you have seen, a company using a **perpetual system** makes an entry to record cost of goods sold and to reduce inventory each time a sale is made. A company using a **periodic system** does not determine cost of goods sold until the end of the period. At the end of the period, the company performs a count to determine the ending balance of inventory. It then **calculates cost of goods sold by subtracting ending inventory from the cost of goods available for sale**. Goods available for sale is the sum of beginning inventory plus purchases, as shown in Illustration 5B-1.

Illustration 5B-1
Basic formula for cost of goods sold using the periodic system

	Beginning Inventory
+	Cost of Goods Purchased
	Cost of Goods Available for Sale
−	Ending Inventory
	Cost of Goods Sold

Another difference between the two approaches is that the perpetual system directly adjusts the Inventory account for any transaction that affects inventory (such as freight costs, returns, and discounts). The periodic system does not do this. Instead, it creates different accounts for purchases, freight costs, returns, and discounts. These various accounts are shown in Illustration 5B-2, which presents the calculation of cost of goods sold for PW Audio Supply using the periodic approach.

Illustration 5B-2
Cost of goods sold for a merchandiser using a periodic inventory system

Helpful Hint
The far right column identifies the primary items that make up cost of goods sold of $316,000. The middle column explains cost of goods purchased of $320,000. The left column reports contra purchase items of $17,200.

PW AUDIO SUPPLY
Cost of Goods Sold
For the Year Ended December 31, 2017

Cost of goods sold			
Inventory, January 1			**$ 36,000**
Purchases		$325,000	
Less: Purchase returns and allowances	$10,400		
Purchase discounts	6,800	17,200	
Net purchases		307,800	
Add: Freight-in		12,200	
Cost of goods purchased			**320,000**
Cost of goods available for sale			356,000
Less: Inventory, December 31			**40,000**
Cost of goods sold			**$316,000**

Note that the basic elements from Illustration 5B-1 are highlighted in Illustration 5B-2. You will learn more in Chapter 6 about how to determine cost of goods sold using the periodic system.

The use of the periodic inventory system does not affect the form of presentation in the balance sheet. As under the perpetual system, a company reports inventory in the current assets section.

Recording Merchandise Transactions

In a **periodic inventory system**, companies record revenues from the sale of merchandise when sales are made, just as in a perpetual system. Unlike the perpetual system, however, companies **do not attempt on the date of sale to**

record the cost of the merchandise sold. Instead, they take a physical inventory count at the **end of the period** to determine (1) the cost of the merchandise then on hand and (2) the cost of the goods sold during the period. And, **under a periodic system**, **companies record purchases of merchandise in the Purchases account rather than in the Inventory account**. Also, in a periodic system, purchase returns and allowances, purchase discounts, and freight costs on purchases are recorded in separate accounts.

To illustrate the recording of merchandise transactions under a periodic inventory system, we will use purchase/sales transactions between PW Audio Supply and Sauk Stereo, as illustrated for the perpetual inventory system in this chapter.

Recording Purchases of Merchandise

On the basis of the sales invoice (Illustration 5-6, shown on page 212) and receipt of the merchandise ordered from PW Audio Supply, Sauk Stereo records the $3,800 purchase as follows.

Helpful Hint
Be careful not to debit purchases of equipment or supplies to a Purchases account.

May 4	Purchases	3,800	
	Accounts Payable		3,800
	(To record goods purchased on account from PW Audio Supply)		

Purchases is a temporary account whose normal balance is a debit.

FREIGHT COSTS

When the purchaser directly incurs the freight costs, it debits the account Freight-In (or Transportation-In). For example, if Sauk Stereo pays Public Carrier Co. $150 for freight charges on its purchase from PW Audio Supply on May 6, the entry on Sauk Stereo's books is:

Alternative Terminology
Freight-In is also called *Transportation-In.*

May 6	Freight-In (Transportation-In)	150	
	Cash		150
	(To record payment of freight on goods purchased)		

Like Purchases, Freight-In is a temporary account whose normal balance is a debit. **Freight-In is part of cost of goods purchased.** The reason is that cost of goods purchased should include any freight charges necessary to bring the goods to the purchaser. Freight costs are not subject to a purchase discount. Purchase discounts apply only to the invoice cost of the merchandise.

PURCHASE RETURNS AND ALLOWANCES

Sauk Stereo returns $300 of goods to PW Audio Supply and prepares the following entry to recognize the return.

May 8	Accounts Payable	300	
	Purchase Returns and Allowances		300
	(To record return of goods purchased from PW Audio Supply)		

Purchase Returns and Allowances is a temporary account whose normal balance is a credit.

PURCHASE DISCOUNTS

On May 14, Sauk Stereo pays the balance due on account to PW Audio Supply, taking the 2% cash discount allowed by PW Audio Supply for payment within 10 days. Sauk Stereo records the payment and discount as follows.

May 14	Accounts Payable ($3,800 − $300)	3,500	
	Purchase Discounts ($3,500 × .02)		70
	Cash		3,430
	(To record payment within the discount period)		

Purchase Discounts is a temporary account whose normal balance is a credit.

Recording Sales of Merchandise

The seller, PW Audio Supply, records the sale of $3,800 of merchandise to Sauk Stereo on May 4 (sales invoice No. 731, Illustration 5-6, page 212) as follows.

May 4	Accounts Receivable	3,800	
	Sales Revenue		3,800
	(To record credit sales per invoice #731 to Sauk Stereo)		

SALES RETURNS AND ALLOWANCES

To record the returned goods received from Sauk Stereo on May 8, PW Audio Supply records the $300 sales return as follows.

May 8	Sales Returns and Allowances	300	
	Accounts Receivable		300
	(To record credit granted to Sauk Stereo for returned goods)		

SALES DISCOUNTS

On May 14, PW Audio Supply receives payment of $3,430 on account from Sauk Stereo. PW Audio Supply honors the 2% cash discount and records the payment of Sauk Stereo's account receivable in full as follows.

May 14	Cash	3,430	
	Sales Discounts ($3,500 × .02)	70	
	Accounts Receivable ($3,800 − $300)		3,500
	(To record collection within 2/10, n/30 discount period from Sauk Stereo)		

COMPARISON OF ENTRIES—PERPETUAL VS. PERIODIC

Illustration 5B-3 summarizes the periodic inventory entries shown in this appendix and compares them to the perpetual system entries from the chapter. Entries that differ in the two systems are shown in color.

ENTRIES ON SAUK STEREO'S BOOKS

		Transaction	Perpetual Inventory System			Periodic Inventory System		
May	4	Purchase of merchandise on credit.	**Inventory**	**3,800**		**Purchases**	**3,800**	
			Accounts Payable		3,800	Accounts Payable		3,800
	6	Freight costs on purchases.	**Inventory**	**150**		**Freight-In**	**150**	
			Cash		150	Cash		150
	8	Purchase returns and allowances.	Accounts Payable	300		Accounts Payable	300	
			Inventory		**300**	**Purchase Returns and Allowances**		**300**
	14	Payment on account with a discount.	Accounts Payable	3,500		Accounts Payable	3,500	
			Cash		3,430	Cash		3,430
			Inventory		**70**	**Purchase Discounts**		**70**

ENTRIES ON PW AUDIO SUPPLY'S BOOKS

		Transaction	Perpetual Inventory System			Periodic Inventory System		
May	4	Sale of merchandise on credit.	Accounts Receivable	3,800		Accounts Receivable	3,800	
			Sales Revenue		3,800	Sales Revenue		3,800
			Cost of Goods Sold	**2,400**		**No entry for cost of goods sold**		
			Inventory		**2,400**			
	8	Return of merchandise sold.	Sales Returns and Allowances	300		Sales Returns and Allowances	300	
			Accounts Receivable		300	Accounts Receivable		300
			Inventory	**140**		**No entry**		
			Cost of Goods Sold		**140**			
	14	Cash received on account with a discount.	Cash	3,430		Cash	3,430	
			Sales Discounts	70		Sales Discounts	70	
			Accounts Receivable		3,500	Accounts Receivable		3,500

Illustration 5B-3
Comparison of entries for perpetual and periodic inventory systems

Journalizing and Posting Closing Entries

For a merchandising company, like a service company, all accounts that affect the determination of net income are closed to Income Summary. Data for the preparation of closing entries may be obtained from the income statement columns of the worksheet. In journalizing, all debit column amounts are credited, and all credit columns amounts are debited. To close the merchandise inventory in a periodic inventory system:

1. The beginning inventory balance is debited to Income Summary and credited to Inventory.
2. The ending inventory balance is debited to Inventory and credited to Income Summary.

The two entries for PW Audio Supply are as follows.

	(1)		
Dec. 31	Income Summary	36,000	
	Inventory		36,000
	(To close beginning inventory)		
	(2)		
31	Inventory	40,000	
	Income Summary		40,000
	(To record ending inventory)		

After posting, the Inventory and Income Summary accounts will show the following.

Illustration 5B-4
Posting closing entries for merchandise inventory

Inventory

1/1 Bal. 36,000	12/31 Close **36,000**
12/31 Close **40,000**	
12/31 Bal. 40,000	

Income Summary

12/31 Close **36,000**	12/31 Close **40,000**

Often, the closing of inventory is included with other closing entries, as shown below for PW Audio Supply. (*Close inventory with other accounts in homework problems unless stated otherwise.*)

Helpful Hint
Except for merchandise inventory, the easiest way to prepare the first two closing entries is to identify the temporary accounts by their balances and then prepare one entry for the credits and one for the debits.

Dec. 31	**Inventory (Dec. 31)**	**40,000**	
	Sales Revenue	480,000	
	Purchase Returns and Allowances	10,400	
	Purchase Discounts	6,800	
	Income Summary		537,200
	(To record ending inventory and close accounts with credit balances)		
31	Income Summary	507,200	
	Inventory (Jan. 1)		**36,000**
	Sales Returns and Allowances		12,000
	Sales Discounts		8,000
	Purchases		325,000
	Freight-In		12,200
	Salaries and Wages Expense		64,000
	Freight-Out		7,000
	Advertising Expense		16,000
	Utilities Expense		17,000
	Depreciation Expense		8,000
	Insurance Expense		2,000
	(To close beginning inventory and other income statement accounts with debit balances)		
31	Income Summary	30,000	
	Owner's Capital		30,000
	(To transfer net income to capital)		
31	Owner's Capital	15,000	
	Owner's Drawings		15,000
	(To close drawings to capital)		

After the closing entries are posted, all temporary accounts have zero balances. In addition, Owner's Capital has a credit balance of $98,000: beginning balance + net income − drawings ($83,000 + $30,000 − $15,000).

Using a Worksheet

As indicated in Chapter 4, a worksheet enables companies to prepare financial statements before journalizing and posting adjusting entries. The steps in preparing a worksheet for a merchandising company are the same as they are for a service company (see pages 150–156).

TRIAL BALANCE COLUMNS

Data for the trial balance come from the ledger balances of PW Audio Supply at December 31. The amount shown for Inventory, $36,000, is the beginning inventory amount from the periodic inventory system.

ADJUSTMENTS COLUMNS

A merchandising company generally has the same types of adjustments as a service company. As you see in the worksheet in Illustration 5B-5, adjustments (a), (b), and (c) are for insurance, depreciation, and salaries and wages. These adjustments were also required for Pioneer Advertising, as illustrated in Chapters 3 and 4. The unique accounts for a merchandiser using a **periodic inventory system** are shown in capital red letters. Note, however, that the worksheet excludes nonoperating items.

After all adjustment data are entered on the worksheet, the equality of the adjustment column totals is established. The balances in all accounts are then extended to the adjusted trial balance columns.

Illustration 5B-5
Worksheet for merchandising company—periodic inventory system

PW Audio Supply.xls

PW AUDIO SUPPLY
Worksheet
For the Year Ended December 31, 2017

	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
Accounts	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	9,500				9,500				9,500	
Accounts Receivable	16,100				16,100				16,100	
INVENTORY	36,000				36,000		36,000	40,000	40,000	
Prepaid Insurance	3,800			(a) 2,000	1,800				1,800	
Equipment	80,000				80,000				80,000	
Accumulated Depreciation—Equipment		16,000		(b) 8,000		24,000				24,000
Accounts Payable		20,400				20,400				20,400
Owner's Capital		83,000				83,000				83,000
Owner's Drawings	15,000				15,000				15,000	
SALES REVENUE		480,000				480,000		480,000		
SALES RETURNS AND ALLOWANCES	12,000				12,000		12,000			
SALES DISCOUNTS	8,000				8,000		8,000			
PURCHASES	325,000				325,000		325,000			
PURCHASE RETURNS AND ALLOWANCES		10,400				10,400		10,400		
PURCHASE DISCOUNTS		6,800				6,800		6,800		
FREIGHT-IN	12,200				12,200		12,200			
Freight-Out	7,000				7,000		7,000			
Advertising Expense	16,000				16,000		16,000			
Salaries and Wages Expense	59,000		(c) 5,000		64,000		64,000			
Utilities Expense	17,000				17,000		17,000			
Totals	616,600	616,600								
Insurance Expense			(a) 2,000		2,000		2,000			
Depreciation Expense			(b) 8,000		8,000		8,000			
Salaries and Wages Payable				(c) 5,000		5,000				5,000
Totals			15,000	15,000	629,600	629,600	507,200	537,200	162,400	132,400
Net Income							30,000			30,000
Totals							537,200	537,200	162,400	162,400

Key: (a) Insurance expired. (b) Depreciation expense. (c) Salaries and wages accrued.

INCOME STATEMENT COLUMNS

Next, PW Audio Supply transfers the accounts and balances that affect the income statement from the adjusted trial balance columns to the income statement columns. The company shows Sales Revenue of $480,000 in the credit column. It shows the contra revenue accounts, Sales Returns and Allowances of $12,000 and Sales Discounts of $8,000 in the debit column. The difference of $460,000 is the net sales shown on the income statement (Illustration 5-9, page 223). Similarly, Purchases of $325,000 and Freight-In of $12,200 are extended to the debit column. The contra purchase accounts, Purchase Returns and Allowances of $10,400 and Purchase Discounts of $6,800, are extended to the credit columns.

The worksheet procedures for the Inventory account merit specific comment. The procedures are:

1. The beginning balance, $36,000, is extended from the adjusted trial balance column to the **income statement debit column**. From there, it can be added in reporting cost of goods available for sale in the income statement.
2. The ending inventory, $40,000, is added to the worksheet by an **income statement credit and a balance sheet debit**. The credit makes it possible to deduct ending inventory from the cost of goods available for sale in the income statement to determine cost of goods sold. The debit means the ending inventory can be reported as an asset on the balance sheet.

These two procedures are specifically illustrated below:

Illustration 5B-6
Worksheet procedures for inventories

		Income Statement			Balance Sheet	
		Dr.	Cr.		Dr.	Cr.
Inventory	(1)	36,000	40,000 ←	(2)	→ 40,000	

The computation for cost of goods sold, taken from the income statement column in Illustration 5B-5, is as follows.

Illustration 5B-7
Computation of cost of goods sold from worksheet columns

Debit Column		Credit Column	
Beginning inventory	$ 36,000	Ending inventory	$40,000
Purchases	325,000	Purchase returns and allowances	10,400
Freight-in	12,200	Purchase discounts	6,800
Total debits	373,200	Total credits	$57,200
Less: Total credits	57,200		
Cost of goods sold	**$316,000**		

Helpful Hint
In a periodic system, cost of goods sold is a computation—it is not a separate account with a balance.

Finally, PW Audio Supply totals all the credits in the income statement column and compares these totals to the total of the debits in the income statement column. If the credits exceed the debits, the company has net income. PW Audio Supply has net income of $30,000. If the debits exceed the credits, the company would report a net loss.

BALANCE SHEET COLUMNS

The major difference between the balance sheets of a service company and a merchandising company is inventory. PW Audio Supply shows ending inventory of $40,000 in the balance sheet debit column. The information to prepare the owner's equity statement is also found in these columns. That is, the Owner's Capital account is $83,000. Owner's Drawings are $15,000. Net income results when the total of the debit column exceeds the total of the credit column in the balance sheet columns. A net loss results when the total of the credits exceeds the total of the debit balances.

REVIEW AND PRACTICE

LEARNING OBJECTIVES REVIEW

1 **Describe merchandising operations and inventory systems.** Because of inventory, a merchandising company has sales revenue, cost of goods sold, and gross profit. To account for inventory, a merchandising company must choose between a perpetual and a periodic inventory system.

2 **Record purchases under a perpetual inventory system.** The company debits the Inventory account for all purchases of merchandise and freight-in, and credits it for purchase discounts and purchase returns and allowances.

3 **Record sales under a perpetual inventory system.** When a merchandising company sells inventory, it debits Accounts Receivable (or Cash) and credits Sales Revenue for the **selling price** of the merchandise. At the same time, it debits Cost of Goods Sold and credits Inventory for the **cost** of the inventory items sold. Sales Returns and Allowances and Sales Discounts are debited and are contra revenue accounts.

4 **Apply the steps in the accounting cycle to a merchandising company.** Each of the required steps in the accounting cycle for a service company applies to a merchandising company. A worksheet is again an optional step. Under a perpetual inventory system, the company must adjust the Inventory account to agree with the physical count.

5 **Compare a multiple-step with a single-step income statement.** A multiple-step income statement shows numerous steps in determining net income, including nonoperating activities sections. A single-step income statement classifies all data under two categories, revenues or expenses, and determines net income in one step.

*6 **Prepare a worksheet for a merchandising company.** The steps in preparing a worksheet for a merchandising company are the same as for a service company. The unique accounts for a merchandiser are Inventory, Sales Revenue, Sales Returns and Allowances, Sales Discounts, and Cost of Goods Sold.

*7 **Record purchases and sales under a periodic inventory system.** In recording purchases under a periodic system, companies must make entries for (a) cash and credit purchases, (b) purchase returns and allowances, (c) purchase discounts, and (d) freight costs. In recording sales, companies must make entries for (a) cash and credit sales, (b) sales returns and allowances, and (c) sales discounts.

GLOSSARY REVIEW

Contra revenue account An account that is offset against a revenue account on the income statement. (p. 218).

Cost of goods sold The total cost of merchandise sold during the period. (p. 208).

FOB destination Freight terms indicating that the seller places the goods free on board to the buyer's place of business, and the seller pays the freight. (p. 213).

FOB shipping point Freight terms indicating that the seller places goods free on board the carrier, and the buyer pays the freight costs. (p. 213).

Gross profit The excess of net sales over the cost of goods sold. (p. 223).

Gross profit rate Gross profit expressed as a percentage, by dividing the amount of gross profit by net sales. (p. 223).

Income from operations Income from a company's principal operating activity; determined by subtracting cost of goods sold and operating expenses from net sales. (p. 224).

Multiple-step income statement An income statement that shows several steps in determining net income. (p. 222).

Net sales Sales revenue less sales returns and allowances and less sales discounts. (p. 223).

Nonoperating activities Various revenues, expenses, gains, and losses that are unrelated to a company's main line of operations. (p. 224).

Operating expenses Expenses incurred in the process of earning sales revenue. (p. 224).

Other expenses and losses A nonoperating-activities section of the income statement that shows expenses and losses unrelated to the company's main line of operations. (p. 224).

Other revenues and gains A nonoperating-activities section of the income statement that shows revenues and gains unrelated to the company's main line of operations. (p. 224).

Periodic inventory system An inventory system under which the company does not keep detailed inventory records throughout the accounting period but determines the cost of goods sold only at the end of an accounting period. (p. 210).

Perpetual inventory system An inventory system under which the company keeps detailed records of the cost of each inventory purchase and sale, and the records continuously show the inventory that should be on hand. (p. 209).

Purchase allowance A deduction made to the selling price of merchandise, granted by the seller so that the buyer will keep the merchandise. (p. 214).

Purchase discount A cash discount claimed by a buyer for prompt payment of a balance due. (p. 214).

Purchase invoice A document that supports each credit purchase. (p. 212).

Purchase return A return of goods from the buyer to the seller for a cash or credit refund. (p. 214).

Sales discount A reduction given by a seller for prompt payment of a credit sale. (p. 218).

Sales invoice A document that supports each credit sale. (p. 216).

Sales returns and allowances Purchase returns and allowances from the seller's perspective. See *Purchase return* and *Purchase allowance,* above. (p. 217).

Sales revenue (Sales) The primary source of revenue in a merchandising company. (p. 208).

Single-step income statement An income statement that shows only one step in determining net income. (p. 226).

PRACTICE MULTIPLE-CHOICE QUESTIONS

(LO 1) **1.** Gross profit will result if:
(a) operating expenses are less than net income.
(b) sales revenues are greater than operating expenses.
(c) sales revenues are greater than cost of goods sold.
(d) operating expenses are greater than cost of goods sold.

(LO 2) **2.** Under a perpetual inventory system, when goods are purchased for resale by a company:
(a) purchases on account are debited to Inventory.
(b) purchases on account are debited to Purchases.
(c) purchase returns are debited to Purchase Returns and Allowances.
(d) freight costs are debited to Freight-Out.

(LO 3) **3.** The sales accounts that normally have a debit balance are:
(a) Sales Discounts.
(b) Sales Returns and Allowances.
(c) Both (a) and (b).
(d) Neither (a) nor (b).

(LO 3) **4.** A credit sale of $750 is made on June 13, terms 2/10, net/30. A return of $50 is granted on June 16. The amount received as payment in full on June 23 is:
(a) $700.
(b) $686.
(c) $685.
(d) $650.

(LO 2) **5.** Which of the following accounts will normally appear in the ledger of a merchandising company that uses a perpetual inventory system?
(a) Purchases.
(b) Freight-In.
(c) Cost of Goods Sold.
(d) Purchase Discounts.

(LO 3) **6.** To record the sale of goods for cash in a perpetual inventory system:
(a) only one journal entry is necessary to record cost of goods sold and reduction of inventory.
(b) only one journal entry is necessary to record the receipt of cash and the sales revenue.
(c) two journal entries are necessary: one to record the receipt of cash and sales revenue, and one to record the cost of goods sold and reduction of inventory.
(d) two journal entries are necessary: one to record the receipt of cash and reduction of inventory, and one to record the cost of goods sold and sales revenue.

7. The steps in the accounting cycle for a merchandising company are the same as those in a service company **except**: (LO 4)
(a) an additional adjusting journal entry for inventory may be needed in a merchandising company.
(b) closing journal entries are not required for a merchandising company.
(c) a post-closing trial balance is not required for a merchandising company.
(d) a multiple-step income statement is required for a merchandising company.

8. The multiple-step income statement for a merchandising company shows each of the following features **except**: (LO 5)
(a) gross profit.
(b) cost of goods sold.
(c) a sales section.
(d) an investing activities section.

9. If sales revenues are $400,000, cost of goods sold is $310,000, and operating expenses are $60,000, the gross profit is: (LO 5)
(a) $30,000.
(b) $90,000.
(c) $340,000.
(d) $400,000.

10. A single-step income statement: (LO 5)
(a) reports gross profit.
(b) does not report cost of goods sold.
(c) reports sales revenue and "Other revenues and gains" in the revenues section of the income statement.
(d) reports operating income separately.

11. Which of the following appears on both a single-step and a multiple-step income statement? (LO 5)
(a) Inventory.
(b) Gross profit.
(c) Income from operations.
(d) Cost of goods sold.

***12.** In a worksheet using a perpetual inventory system, Inventory is shown in the following columns: (LO 6)
(a) adjusted trial balance debit and balance sheet debit.
(b) income statement debit and balance sheet debit.
(c) income statement credit and balance sheet debit.
(d) income statement credit and adjusted trial balance debit.

(LO 7) *13. In determining cost of goods sold in a periodic system:
(a) purchase discounts are deducted from net purchases.
(b) freight-out is added to net purchases.
(c) purchase returns and allowances are deducted from net purchases.
(d) freight-in is added to net purchases.

(LO 7) *14. If beginning inventory is $60,000, cost of goods purchased is $380,000, and ending inventory is $50,000, cost of goods sold is:
(a) $390,000. (c) $330,000.
(b) $370,000. (d) $420,000.

*15. When goods are purchased for resale by a company using a periodic inventory system: (LO 7)
(a) purchases on account are debited to Inventory.
(b) purchases on account are debited to Purchases.
(c) purchase returns are debited to Purchase Returns and Allowances.
(d) freight costs are debited to Purchases.

Solutions

1. (c) Gross profit will result if sales revenues are greater than cost of goods sold. The other choices are incorrect because (a) operating expenses and net income are not used in the computation of gross profit; (b) gross profit results when sales revenues are greater than cost of goods sold, not operating expenses; and (d) gross profit results when sales revenues, not operating expenses, are greater than cost of goods sold.

2. (a) Under a perpetual inventory system, when a company purchases goods for resale, purchases on account are debited to the Inventory account, not (b) Purchases or (c) Purchase Returns and Allowances. Choice (d) is incorrect because freight costs are also debited to the Inventory account, not the Freight-Out account.

3. (c) Both Sales Discounts and Sales Returns and Allowances normally have a debit balance. Choices (a) and (b) are both correct, but (c) is the better answer. Choice (d) is incorrect as both (a) and (b) are correct.

4. (b) The full amount of $686 is paid within 10 days of the purchase ($750 − $50) − [($750 − $50) × 2%]. The other choices are incorrect because (a) does not consider the discount of $14; (c) the amount of the discount is based upon the amount after the return is granted ($700 × 2%), not the amount before the return of merchandise ($750 × 2%); and (d) does not constitute payment in full on June 23.

5. (c) The Cost of Goods Sold account normally appears in the ledger of a merchandising company using a perpetual inventory system. The other choices are incorrect because (a) the Purchases account, (b) the Freight-In account, and (d) the Purchase Discounts account all appear in the ledger of a merchandising company that uses a periodic inventory system.

6. (c) Two journal entries are necessary: one to record the receipt of cash and sales revenue, and one to record the cost of goods sold and reduction of inventory. The other choices are incorrect because (a) only considers the recognition of the expense and ignores the revenue, (b) only considers the recognition of revenue and leaves out the expense or cost of merchandise sold, and (d) the receipt of cash and sales revenue, not reduction of inventory, are paired together, and the cost of goods sold and reduction of inventory, not sales revenue, are paired together.

7. (a) An additional adjusting journal entry for inventory may be needed in a merchandising company to adjust for a physical inventory count, but it is not needed for a service company. The other choices are incorrect because (b) closing journal entries and (c) a post-closing trial balance are required for both types of companies, Choice (d) is incorrect because while a multiple-step income statement is not required for a merchandising company, it is useful to distinguish income generated from operating the business versus income or loss from nonrecurring, nonoperating items.

8. (d) An investing activities section appears on the statement of cash flows, not on a multiple-step income statement. Choices (a) gross profit, (b) cost of goods sold, and (c) a sales section are all features of a multiple-step income statement.

9. (b) Gross profit = Sales revenue ($400,000) − Cost of goods sold ($310,000) = $90,000, not (a) $30,000, (c) $340,000, or (d) $400,000.

10. (c) Both sales revenue and "Other revenues and gains" are reported in the revenues section of a single-step income statement. The other choices are incorrect because (a) gross profit is not reported on a single-step income statement, (b) cost of goods sold is included in the expenses section of a single-step income statement, and (d) income from operations is not shown separately on a single-step income statement.

11. (d) Cost of goods sold appears on both a single-step and a multiple-step income statement. The other choices are incorrect because (a) inventory does not appear on either a single-step or a multiple-step income statement and (b) gross profit and (c) income from operations appear on a multiple-step income statement but not on a single-step income statement.

12. (a) In a worksheet using a perpetual inventory system, inventory is shown in the adjusted trial balance debit column and in the balance sheet debit column. The other choices are incorrect because the Inventory account is not shown in the income statement columns.

***13. (d)** In determining cost of goods sold in a periodic system, freight-in is added to net purchases. The other choices are incorrect because (a) purchase discounts are deducted from purchases, not net purchases; (b) freight-out is a cost of sales, not a cost of purchases; and (c) purchase returns and allowances are deducted from purchases, not net purchases.

***14. (a)** Beginning inventory ($60,000) + Cost of goods purchased ($380,000) − Ending inventory ($50,000) = Cost of goods sold ($390,000), not (b) $370,000, (c) $330,000, or (d) $420,000.

***15. (b)** Purchases for resale are debited to the Purchases account. The other choices are incorrect because (a) purchases on account are debited to Purchases, not Inventory; (c) Purchase Returns and Allowances are always credited; and (d) freight costs are debited to Freight-In, not Purchases.

PRACTICE EXERCISES

Prepare purchase and sales entries.

(LO 2, 3)

1. On June 10, Spinner Company purchased $10,000 of merchandise from Lawrence Company, FOB shipping point, terms 2/10, n/30. Spinner pays the freight costs of $600 on June 11. Damaged goods totaling $700 are returned to Lawrence for credit on June 12. The fair value of these goods is $300. On June 19, Spinner pays Lawrence in full, less the purchase discount. Both companies use a perpetual inventory system.

Instructions

(a) Prepare separate entries for each transaction on the books of Spinner Company.

(b) Prepare separate entries for each transaction for Lawrence Company. The merchandise purchased by Spinner on June 10 had cost Lawrence $6,400.

Solution

1. (a)			
June 10	Inventory	10,000	
	Accounts Payable		10,000
11	Inventory	600	
	Cash		600
12	Accounts Payable	700	
	Inventory		700
19	Accounts Payable ($10,000 − $700)	9,300	
	Inventory ($9,300 × 2%)		186
	Cash ($9,300 − $186)		9,114
(b)			
June 10	Accounts Receivable	10,000	
	Sales Revenue		10,000
	Cost of Goods Sold	6,400	
	Inventory		6,400
12	Sales Returns and Allowances	700	
	Accounts Receivable		700
	Inventory	300	
	Cost of Goods Sold		300
19	Cash ($9,300 − $186)	9,114	
	Sales Discounts ($9,300 × 2%)	186	
	Accounts Receivable ($10,000 − $700)		9,300

Prepare multiple-step and single-step income statements.

(LO 5)

2. In its income statement for the year ended December 31, 2017, Sale Company reported the following condensed data.

Interest expense	$ 50,000	Net sales	$1,650,000
Operating expenses	590,000	Interest revenue	20,000
Cost of goods sold	902,000	Loss on disposal of equipment	7,000

Instructions

(a) Prepare a multiple-step income statement.

(b) Prepare a single-step income statement.

Solution

2. (a)

SALE COMPANY
Income Statement
For the Year Ended December 31, 2017

Net sales			$1,650,000
Cost of goods sold			902,000
Gross profit			748,000
Operating expenses			590,000
Income from operations			158,000
Other revenues and gains			
Interest revenue		$20,000	
Other expenses and losses			
Interest expense	$50,000		
Loss on disposal of equipment	7,000	57,000	(37,000)
Net income			$ 121,000

(b)

SALE COMPANY
Income Statement
For the Year Ended December 31, 2017

Revenues		
Net sales	$1,650,000	
Interest revenue	20,000	
Total revenues		$1,670,000
Expenses		
Cost of goods sold	902,000	
Operating expenses	590,000	
Interest expenses	50,000	
Loss on sale of equipment	7,000	
Total expenses		1,549,000
Net income		$ 121,000

PRACTICE PROBLEM

Prepare a multiple-step income statement.

(LO 5)

The adjusted trial balance columns of Falcetto Company's worksheet for the year ended December 31, 2017, are as follows.

	Debit		Credit
Cash	14,500	Accumulated Depreciation—Equipment	18,000
Accounts Receivable	11,100	Notes Payable	25,000
Inventory	29,000	Accounts Payable	10,600
Prepaid Insurance	2,500	Owner's Capital	81,000
Equipment	95,000	Sales Revenue	536,800
Owner's Drawings	12,000	Interest Revenue	2,500
Sales Returns and Allowances	6,700		673,900
Sales Discounts	5,000		
Cost of Goods Sold	363,400		
Freight-Out	7,600		
Advertising Expense	12,000		
Salaries and Wages Expense	56,000		
Utilities Expense	18,000		
Rent Expense	24,000		
Depreciation Expense	9,000		
Insurance Expense	4,500		
Interest Expense	3,600		
	673,900		

Instructions

Prepare a multiple-step income statement for Falcetto Company.

Solution

FALCETTO COMPANY
Income Statement
For the Year Ended December 31, 2017

Sales		
Sales revenue		$536,800
Less: Sales returns and allowances	$ 6,700	
Sales discounts	5,000	11,700
Net sales		525,100
Cost of goods sold		363,400
Gross profit		161,700
Operating expenses		
Salaries and wages expense	56,000	
Rent expense	24,000	
Utilities expense	18,000	
Advertising expense	12,000	
Depreciation expense	9,000	
Freight-out	7,600	
Insurance expense	4,500	
Total operating expenses		131,100
Income from operations		30,600
Other revenues and gains		
Interest revenue	2,500	
Other expenses and losses		
Interest expense	3,600	1,100
Net income		$ 29,500

NOTE: All asterisked Questions, Exercises, and Problems relate to material in the appendices to the chapter.

QUESTIONS

1. (a) "The steps in the accounting cycle for a merchandising company are different from the accounting cycle for a service company." Do you agree or disagree? (b) Is the measurement of net income for a merchandising company conceptually the same as for a service company? Explain.
2. Why is the normal operating cycle for a merchandising company likely to be longer than for a service company?
3. What components of revenues and expenses are different between merchandising and service companies?
4. How does income measurement differ between a merchandising and a service company?
5. When is cost of goods sold determined in a perpetual inventory system?
6. Distinguish between FOB shipping point and FOB destination. Identify the freight terms that will result in a debit to Inventory by the buyer and a debit to Freight-Out by the seller.
7. Explain the meaning of the credit terms 2/10, n/30.
8. Goods costing $2,000 are purchased on account on July 15 with credit terms of 2/10, n/30. On July 18, a $200 credit memo is received from the supplier for damaged goods. Give the journal entry on July 24 to record payment of the balance due within the discount period using a perpetual inventory system.
9. Celina Harris believes revenues from credit sales may be recorded before they are collected in cash. Do you agree? Explain.
10. (a) What is the primary source document for recording (1) cash sales and (2) credit sales? (b) Using XXs for amounts, give the journal entry for each of the transactions in part (a).
11. A credit sale is made on July 10 for $900, terms 2/10, n/30. On July 12, $100 of goods are returned for credit. Give the journal entry on July 19 to record the receipt of the balance due within the discount period.

12. Explain why the Inventory account will usually require adjustment at year-end.
13. Prepare the closing entries for the Sales Revenue account, assuming a balance of $200,000 and the Cost of Goods Sold account with a $145,000 balance.
14. What merchandising account(s) will appear in the post-closing trial balance?
15. Cupery Co. has sales revenue of $105,000, cost of goods sold of $70,000, and operating expenses of $20,000. What is its gross profit and its gross profit rate?
16. Stefan Page Company reports net sales of $800,000, gross profit of $370,000, and net income of $240,000. What are its operating expenses?
17. Identify the distinguishing features of an income statement for a merchandising company.
18. Identify the sections of a multiple-step income statement that relate to (a) operating activities, and (b) nonoperating activities.
19. How does the single-step form of income statement differ from the multiple-step form?
20. Determine Apple's gross profit rate for 2013 and 2012. Indicate whether it increased or decreased from 2012 to 2013.
*21. Indicate the columns of the worksheet in a perpetual system in which (a) inventory and (b) cost of goods sold will be shown.
*22. Identify the accounts that are added to or deducted from Purchases in a periodic system to determine the cost of goods purchased. For each account, indicate whether it is added or deducted.
*23. Goods costing $3,000 are purchased on account on July 15 with credit terms of 2/10, n/30. On July 18, a $200 credit was received from the supplier for damaged goods. Give the journal entry on July 24 to record payment of the balance due within the discount period, assuming a periodic inventory system.

BRIEF EXERCISES

Compute missing amounts in determining cost of goods sold. (LO 1)

BE5-1 Presented below are the components in determining cost of goods sold. Determine the missing amounts.

	Beginning Inventory	Purchases	Cost of Goods Available for Sale	Ending Inventory	Cost of Goods Sold
(a)	$80,000	$100,000	?	?	$120,000
(b)	$50,000	?	$115,000	$35,000	?
(c)	?	$110,000	$160,000	$29,000	?

Compute missing amounts in determining net income. (LO 1)

BE5-2 Presented below are the components in Veasy Company's income statement. Determine the missing amounts.

	Sales Revenue	Cost of Goods Sold	Gross Profit	Operating Expenses	Net Income
(a)	$ 75,000	?	$28,000	?	$ 9,800
(b)	$108,000	$70,000	?	?	$29,500
(c)	?	$83,900	$79,600	$39,500	?

Journalize perpetual inventory entries. (LO 2, 3)

BE5-3 Cha Company buys merchandise on account from Wirtz Company. The selling price of the goods is $780, and the cost of the goods is $470. Both companies use perpetual inventory systems. Journalize the transaction on the books of both companies.

Journalize sales transactions. (LO 3)

BE5-4 Prepare the journal entries to record the following transactions on Novy Company's books using a perpetual inventory system.

(a) On March 2, Novy Company sold $900,000 of merchandise to Opps Company, terms 2/10, n/30. The cost of the merchandise sold was $590,000.
(b) On March 6, Opps Company returned $90,000 of the merchandise purchased on March 2. The cost of the returned merchandise was $62,000.
(c) On March 12, Novy Company received the balance due from Opps Company.

Journalize purchase transactions. (LO 2)

BE5-5 From the information in BE5-4, prepare the journal entries to record these transactions on Opps Company's books under a perpetual inventory system.

Prepare adjusting entry for inventory. (LO 4)

BE5-6 At year-end, the perpetual inventory records of Gutierrez Company showed merchandise inventory of $98,000. The company determined, however, that its actual inventory on hand was $96,100. Record the necessary adjusting entry.

Prepare closing entries for accounts. (LO 4)

BE5-7 Brueser Company has the following account balances: Sales Revenue $195,000, Sales Discounts $2,000, Cost of Goods Sold $117,000, and Inventory $40,000. Prepare the entries to record the closing of these items to Income Summary.

Prepare sales section of income statement.
(LO 5)

BE5-8 Nelson Company provides the following information for the month ended October 31, 2017: sales on credit $280,000, cash sales $95,000, sales discounts $5,000, and sales returns and allowances $11,000. Prepare the sales section of the income statement based on this information.

Contrast presentation in multiple-step and single-step income statements.
(LO 5)

BE5-9 Explain where each of the following items would appear on (1) a multiple-step income statement, and on (2) a single-step income statement: (a) gain on sale of equipment, (b) interest expense, (c) casualty loss from vandalism, and (d) cost of goods sold.

Compute net sales, gross profit, income from operations, and gross profit rate.
(LO 5)

BE5-10 Assume Kupfer Company has the following reported amounts: Sales revenue $510,000, Sales returns and allowances $15,000, Cost of goods sold $330,000, and Operating expenses $90,000. Compute the following: (a) net sales, (b) gross profit, (c) income from operations, and (d) gross profit rate. (Round to one decimal place.)

Identify worksheet columns for selected accounts.
(LO 6)

***BE5-11** Presented below is the format of the worksheet using the perpetual inventory system presented in Appendix 5A.

Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.

Indicate where the following items will appear on the worksheet: (a) Cash, (b) Inventory, (c) Sales revenue, and (d) Cost of goods sold.

Example:
Cash: Trial balance debit column; Adjusted trial balance debit column; and Balance sheet debit column.

Compute net purchases and cost of goods purchased.
(LO 7)

***BE5-12** Assume that Morgan Company uses a periodic inventory system and has these account balances: Purchases $450,000, Purchase Returns and Allowances $13,000, Purchase Discounts $9,000, and Freight-In $18,000. Determine net purchases and cost of goods purchased.

Compute cost of goods sold and gross profit.
(LO 7)

***BE5-13** Assume the same information as in BE5-12 and also that Morgan Company has beginning inventory of $60,000, ending inventory of $90,000, and net sales of $730,000. Determine the amounts to be reported for cost of goods sold and gross profit.

Journalize purchase transactions.
(LO 7)

***BE5-14** Prepare the journal entries to record these transactions on Shabani Company's books using a periodic inventory system.

(a) On March 2, Shabani Company purchased $900,000 of merchandise from Ballas Company, terms 2/10, n/30.
(b) On March 6, Shabani Company returned $110,000 of the merchandise purchased on March 2.
(c) On March 12, Shabani Company paid the balance due to Ballas Company.

Prepare closing entries for merchandise accounts.
(LO 7)

***BE5-15** T. Corlett Company has the following merchandise account balances: Sales Revenue $180,000, Sales Discounts $2,000, Purchases $120,000, and Purchases Returns and Allowances $30,000. In addition, it has a beginning inventory of $40,000 and an ending inventory of $30,000. Prepare the entries to record the closing of these items to Income Summary using the periodic inventory system.

Identify worksheet columns for selected accounts
(LO 7)

***BE5-16** Presented below is the format of the worksheet using the periodic inventory system presented in Appendix 5B.

Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance Sheet	
Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.

Indicate where the following items will appear on the worksheet: (a) Cash, (b) Beginning inventory, (c) Accounts payable, and (d) Ending inventory.

Example
Cash: Trial balance debit column; Adjustment trial balance debit column; and Balance sheet debit column.

DO IT! Exercises

Answer general questions about merchandisers.
(LO 1)

DO IT! 5-1 Indicate whether the following statements are true or false.

1. A merchandising company reports gross profit but a service company does not.
2. Under a periodic inventory system, a company determines the cost of goods sold each time a sale occurs.
3. A service company is likely to use accounts receivable but a merchandising company is not likely to do so.
4. Under a periodic inventory system, the cost of goods on hand at the beginning of the accounting period plus the cost of goods purchased less the cost of goods on hand at the end of the accounting period equals cost of goods sold.

Record transactions of purchasing company.
(LO 2)

DO IT! 5-2 On October 5, Wang Company buys merchandise on account from Davis Company. The selling price of the goods is $4,800, and the cost to Davis Company is $3,100. On October 8, Wang returns defective goods with a selling price of $650 and a fair value of $100. Record the transactions on the books of Wang Company.

Record transactions of selling company.
(LO 3)

DO IT! 5-3 Assume information similar to that in **DO IT! 5-2**: On October 5, Wang Company buys merchandise on account from Davis Company. The selling price of the goods is $4,800, and the cost to Davis Company is $3,100. On October 8, Wang returns defective goods with a selling price of $650 and a fair value of $100. Record the transactions on the books of Davis Company.

Prepare closing entries for a merchandising company.
(LO 4)

DO IT! 5-4 The trial balance of Beads and Bangles at December 31 shows Inventory $21,000, Sales Revenue $156,000, Sales Returns and Allowances $4,000, Sales Discounts $3,000, Cost of Goods Sold $92,400, Interest Revenue $5,000, Freight-Out $1,800, Utilities Expense $7,700, and Salaries and Wages Expense $19,500. Prepare the closing entries for Beads and Bangles for these accounts.

Classify financial statement accounts.
(LO 5)

DO IT! 5-5 Pfannes Company is preparing its multiple-step income statement, owner's equity statement, and classified balance sheet. Using the column headings **Account**, **Financial Statement**, and **Classification**, indicate in which financial statement and under what classification each of the following would be reported.

Account	Financial Statement	Classification
Accounts Payable		
Accounts Receivable		
Accumulated Depreciation—Buildings		
Cash		
Casualty Loss from Vandalism		
Cost of Goods Sold		
Depreciation Expense		
Equipment		
Freight-Out		
Insurance Expense		
Interest Payable		
Inventory		
Land		
Notes Payable (due in 5 years)		
Owner's Capital (beginning balance)		
Owner's Drawings		
Property Taxes Payable		
Salaries and Wages Expense		
Salaries and Wages Payable		
Sales Returns and Allowances		
Sales Revenue		
Unearned Rent Revenue		
Utilities Expense		

EXERCISES

Answer general questions about merchandisers.
(LO 1)

E5-1 Mr. McKenzie has prepared the following list of statements about service companies and merchandisers.

1. Measuring net income for a merchandiser is conceptually the same as for a service company.
2. For a merchandiser, sales less operating expenses is called gross profit.
3. For a merchandiser, the primary source of revenues is the sale of inventory.
4. Sales salaries and wages is an example of an operating expense.
5. The operating cycle of a merchandiser is the same as that of a service company.
6. In a perpetual inventory system, no detailed inventory records of goods on hand are maintained.
7. In a periodic inventory system, the cost of goods sold is determined only at the end of the accounting period.
8. A periodic inventory system provides better control over inventories than a perpetual system.

Instructions
Identify each statement as true or false. If false, indicate how to correct the statement.

Journalize purchase transactions.
(LO 2)

E5-2 Information related to Kerber Co. is presented below.

1. On April 5, purchased merchandise from Wilkes Company for $23,000, terms 2/10, net/30, FOB shipping point.
2. On April 6, paid freight costs of $900 on merchandise purchased from Wilkes.
3. On April 7, purchased equipment on account for $26,000.
4. On April 8, returned damaged merchandise to Wilkes Company and was granted a $3,000 credit for returned merchandise.
5. On April 15, paid the amount due to Wilkes Company in full.

Instructions
(a) Prepare the journal entries to record these transactions on the books of Kerber Co. under a perpetual inventory system.
(b) Assume that Kerber Co. paid the balance due to Wilkes Company on May 4 instead of April 15. Prepare the journal entry to record this payment.

Journalize perpetual inventory entries.
(LO 2, 3)

E5-3 On September 1, Nixa Office Supply had an inventory of 30 calculators at a cost of $18 each. The company uses a perpetual inventory system. During September, the following transactions occurred.

Sept.	6	Purchased 90 calculators at $22 each from York, terms net/30.
	9	Paid freight of $90 on calculators purchased from York Co.
	10	Returned 3 calculators to York Co. for $69 credit (including freight) because they did not meet specifications.
	12	Sold 26 calculators costing $23 (including freight) for $31 each to Sura Book Store, terms n/30.
	14	Granted credit of $31 to Sura Book Store for the return of one calculator that was not ordered.
	20	Sold 30 calculators costing $23 for $32 each to Davis Card Shop, terms n/30.

Instructions
Journalize the September transactions.

Prepare purchase and sales entries.
(LO 2, 3)

E5-4 On June 10, Diaz Company purchased $8,000 of merchandise from Taylor Company, FOB shipping point, terms 2/10, n/30. Diaz pays the freight costs of $400 on June 11. Damaged goods totaling $300 are returned to Taylor for credit on June 12. The fair value of these goods is $70. On June 19, Diaz pays Taylor Company in full, less the purchase discount. Both companies use a perpetual inventory system.

Instructions
(a) Prepare separate entries for each transaction on the books of Diaz Company.
(b) Prepare separate entries for each transaction for Taylor Company. The merchandise purchased by Diaz on June 10 had cost Taylor $4,800.

Journalize sales transactions.

(LO 3)

E5-5 Presented below are transactions related to R. Humphrey Company.

1. On December 3, R. Humphrey Company sold $570,000 of merchandise to Frazier Co., terms 1/10, n/30, FOB destination. R. Humphrey paid $400 for freight charges. The cost of the merchandise sold was $350,000.
2. On December 8, Frazier Co. was granted an allowance of $20,000 for merchandise purchased on December 3.
3. On December 13, R. Humphrey Company received the balance due from Frazier Co.

Instructions

(a) Prepare the journal entries to record these transactions on the books of R. Humphrey Company using a perpetual inventory system.

(b) Assume that R. Humphrey Company received the balance due from Frazier Co. on January 2 of the following year instead of December 13. Prepare the journal entry to record the receipt of payment on January 2.

Prepare sales section and closing entries.

(LO 4, 5)

E5-6 The adjusted trial balance of Sang Company shows the following data pertaining to sales at the end of its fiscal year October 31, 2017: Sales Revenue $820,000, Freight-Out $16,000, Sales Returns and Allowances $25,000, and Sales Discounts $13,000.

Instructions

(a) Prepare the sales section of the income statement.

(b) Prepare separate closing entries for (1) sales revenue, and (2) the contra accounts to sales revenue.

Prepare adjusting and closing entries.

(LO 4)

E5-7 Tim Jarosz Company had the following account balances at year-end: Cost of Goods Sold $60,000, Inventory $15,000, Operating Expenses $29,000, Sales Revenue $115,000, Sales Discounts $1,200, and Sales Returns and Allowances $1,700. A physical count of inventory determines that merchandise inventory on hand is $13,600.

Instructions

(a) Prepare the adjusting entry necessary as a result of the physical count.

(b) Prepare closing entries.

Prepare adjusting and closing entries.

(LO 4)

E5-8 Presented below is information related to Hoerl Co. for the month of January 2017.

Ending inventory per perpetual records	$ 21,600	Insurance expense	$ 12,000
Ending inventory actually on hand	21,000	Rent expense	20,000
Cost of goods sold	218,000	Salaries and wages expense	55,000
Freight-out	7,000	Sales discounts	10,000
		Sales returns and allowances	13,000
		Sales revenue	380,000

Instructions

(a) Prepare the necessary adjusting entry for inventory.

(b) Prepare the necessary closing entries.

Prepare multiple-step income statement.

(LO 5)

E5-9 Presented below is information for Kaila Company for the month of March 2017.

Cost of goods sold	$215,000	Rent expense	$ 30,000
Freight-out	7,000	Sales discounts	8,000
Insurance expense	6,000	Sales returns and allowances	13,000
Salaries and wages expense	58,000	Sales revenue	380,000

Instructions

(a) Prepare a multiple-step income statement.

(b) Compute the gross profit rate.

Prepare multiple-step and single-step income statements.

(LO 5)

XLS

E5-10 In its income statement for the year ended December 31, 2017, Anhad Company reported the following condensed data.

Operating expenses	$ 725,000	Interest revenue	$ 28,000
Cost of goods sold	1,289,000	Loss on disposal of plant assets	17,000
Interest expense	70,000	Net sales	2,200,000

Instructions

(a) Prepare a multiple-step income statement.

(b) Prepare a single-step income statement.

Prepare correcting entries for sales and purchases.
(LO 2, 3)

E5-11 An inexperienced accountant for Stahr Company made the following errors in recording merchandising transactions.

1. A $210 refund to a customer for faulty merchandise was debited to Sales Revenue $210 and credited to Cash $210.
2. A $180 credit purchase of supplies was debited to Inventory $180 and credited to Cash $180.
3. A $215 sales discount was debited to Sales Revenue.
4. A cash payment of $20 for freight on merchandise purchases was debited to Freight-Out $200 and credited to Cash $200.

Instructions
Prepare separate correcting entries for each error, assuming that the incorrect entry is not reversed. (Omit explanations.)

Compute various income measures.
(LO 5)

E5-12 In 2017, Laquen Company had net sales of $900,000 and cost of goods sold of $522,000. Operating expenses were $225,000, and interest expense was $11,000. Laquen prepares a multiple-step income statement.

Instructions
(a) Compute Laquen's gross profit.
(b) Compute the gross profit rate. Why is this rate computed by financial statement users?
(c) What is Laquen's income from operations and net income?
(d) If Laquen prepared a single-step income statement, what amount would it report for net income?
(e) In what section of its classified balance sheet should Laquen report inventory?

Compute missing amounts and compute gross profit rate.
(LO 5)

E5-13 Presented below is financial information for two different companies.

	Summer Company	Winter Company
Sales revenue	$92,000	(d)
Sales returns	(a)	$ 5,000
Net sales	87,000	102,000
Cost of goods sold	56,000	(e)
Gross profit	(b)	41,500
Operating expenses	15,000	(f)
Net income	(c)	18,000

Instructions
(a) Determine the missing amounts.
(b) Determine the gross profit rates. (Round to one decimal place.)

Compute missing amounts.
(LO 5)

E5-14 Financial information is presented below for three different companies.

	Hardy Cosmetics	Yee Grocery	Wang Wholesalers
Sales revenue	$90,000	$ (e)	$122,000
Sales returns and allowances	(a)	5,000	12,000
Net sales	86,000	95,000	(i)
Cost of goods sold	56,000	(f)	(j)
Gross profit	(b)	38,000	24,000
Operating expenses	15,000	(g)	18,000
Income from operations	(c)	(h)	(k)
Other expenses and losses	4,000	7,000	(l)
Net income	(d)	11,000	5,000

Instructions
Determine the missing amounts.

Complete worksheet using a perpetual inventory system.
(LO 6)

***E5-15** Presented on the next page are selected accounts for McPhan Company as reported in the worksheet using a perpetual inventory system at the end of May 2017.

Accounts	Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	11,000					
Inventory	76,000					
Sales Revenue		480,000				
Sales Returns and Allowances	10,000					
Sales Discounts	9,000					
Cost of Goods Sold	300,000					

Instructions
Complete the worksheet by extending amounts reported in the adjusted trial balance to the appropriate columns in the worksheet. Do not total individual columns.

***E5-16** The trial balance columns of the worksheet using a perpetual inventory system for Balistreri Company at June 30, 2017, are as follows.

Prepare a worksheet using a perpetual inventory system.

(LO 6)

BALISTRERI COMPANY
Worksheet
For the Month Ended June 30, 2017

Account Titles	Trial Balance Debit	Trial Balance Credit
Cash	1,920	
Accounts Receivable	2,440	
Inventory	11,640	
Accounts Payable		1,120
Owner's Capital		3,500
Sales Revenue		42,500
Cost of Goods Sold	20,560	
Operating Expenses	10,560	
	47,120	47,120

Other data:
Operating expenses incurred on account, but not yet recorded, total $1,500.

Instructions
Enter the trial balance on a worksheet and complete the worksheet.

***E5-17** The trial balance of A. Wiencek Company at the end of its fiscal year, August 31, 2017, includes these accounts: Inventory $19,500; Purchases $149,000; Sales Revenue $190,000; Freight-In $5,000; Sales Returns and Allowances $3,000; Freight-Out $1,000; and Purchase Returns and Allowances $2,000. The ending inventory is $23,000.

Prepare cost of goods sold section.

(LO 7)

Instructions
Prepare a cost of goods sold section for the year ending August 31 (periodic inventory).

***E5-18** On January 1, 2017, Brooke Hanson Corporation had inventory of $50,000. At December 31, 2017, Brooke Hanson had the following account balances.

Compute various income statement items.

(LO 7)

Freight-in	$ 4,000
Purchases	509,000
Purchase discounts	6,000
Purchase returns and allowances	2,000
Sales revenue	840,000
Sales discounts	5,000
Sales returns and allowances	10,000

At December 31, 2017, Brooke Hanson determines that its ending inventory is $60,000.

Instructions
(a) Compute Brooke Hanson's 2017 gross profit.
(b) Compute Brooke Hanson's 2017 operating expenses if net income is $130,000 and there are no nonoperating activities.

Prepare cost of goods sold section.
(LO 7)

***E5-19** Below is a series of cost of goods sold sections for companies B, F, L, and R.

	B	F	L	R
Beginning inventory	$ 180	$ 70	$1,000	$ (j)
Purchases	1,620	1,060	(g)	43,590
Purchase returns and allowances	40	(d)	290	(k)
Net purchases	(a)	1,030	6,210	41,090
Freight-in	110	(e)	(h)	2,240
Cost of goods purchased	(b)	1,280	7,940	(l)
Cost of goods available for sale	1,870	1,350	(i)	49,530
Ending inventory	250	(f)	1,450	6,230
Cost of goods sold	(c)	1,230	7,490	43,300

Instruction
Fill in the lettered blanks to complete the cost of goods sold sections.

Journalize purchase transactions.
(LO 7)

***E5-20** This information relates to Nandi Co.

1. On April 5, purchased merchandise from Dion Company for $25,000, terms 2/10, net/30, FOB shipping point.
2. On April 6, paid freight costs of $900 on merchandise purchased from Dion Company.
3. On April 7, purchased equipment on account for $30,000.
4. On April 8, returned some of April 5 merchandise, which cost $2,800, to Dion Company.
5. On April 15, paid the amount due to Dion Company in full.

Instructions
(a) Prepare the journal entries to record these transactions on the books of Nandi Co. using a periodic inventory system.
(b) Assume that Nandi Co. paid the balance due to Dion Company on May 4 instead of April 15. Prepare the journal entry to record this payment.

Journalize purchase transactions.
(LO 7)

***E5-21** Presented below is information related to Chung Co.

1. On April 5, purchased merchandise from Jose Company for $21,000, terms 2/10, net/30, FOB shipping point.
2. On April 6, paid freight costs of $800 on merchandise purchased from Jose.
3. On April 7, purchased equipment on account from Winker Mfg. Co. for $26,000.
4. On April 8, returned merchandise, which cost $4,000, to Jose Company.
5. On April 15, paid the amount due to Jose Company in full.

Instructions
(a) Prepare the journal entries to record these transactions on the books of Chung Co. using a periodic inventory system.
(b) Assume that Chung Co. paid the balance due to Jose Company on May 4 instead of April 15. Prepare the journal entry to record this payment.

Complete worksheet.
(LO 7)

***E5-22** Presented below are selected accounts for T. Swift Company as reported in the worksheet at the end of May 2017. Ending inventory is $75,000.

Accounts	Adjusted Trial Balance		Income Statement		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	9,000					
Inventory	80,000					
Purchases	240,000					
Purchase Returns and Allowances		30,000				
Sales Revenue		450,000				
Sales Returns and Allowances	10,000					
Sales Discounts	5,000					
Rent Expense	42,000					

Instructions
Complete the worksheet by extending amounts reported in the adjustment trial balance to the appropriate columns in the worksheet. The company uses the periodic inventory system.

EXERCISES: SET B AND CHALLENGE EXERCISES

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Exercises: Set B and Challenge Exercises.

PROBLEMS: SET A

Journalize purchase and sales transactions under a perpetual inventory system.

(LO 2, 3)

P5-1A Kern's Book Warehouse distributes hardcover books to retail stores and extends credit terms of 2/10, n/30 to all of its customers. At the end of May, Kern's inventory consisted of books purchased for $1,800. During June, the following merchandising transactions occurred.

June 1 Purchased books on account for $1,600 from Binsfeld Publishers, FOB destination, terms 2/10, n/30. The appropriate party also made a cash payment of $50 for the freight on this date.
3 Sold books on account to Reading Rainbow for $2,500. The cost of the books sold was $1,440.
6 Received $100 credit for books returned to Binsfeld Publishers.
9 Paid Binsfeld Publishers in full, less discount.
15 Received payment in full from Reading Rainbow.
17 Sold books on account to Rapp Books for $1,800. The cost of the books sold was $1,080.
20 Purchased books on account for $1,800 from McGinn Publishers, FOB destination, terms 2/15, n/30. The appropriate party also made a cash payment of $60 for the freight on this date.
24 Received payment in full from Rapp Books.
26 Paid McGinn Publishers in full, less discount.
28 Sold books on account to Baeten Bookstore for $1,600. The cost of the books sold was $970.
30 Granted Baeten Bookstore $120 credit for books returned costing $72.

Kern's Book Warehouse's chart of accounts includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Inventory, No. 201 Accounts Payable, No. 401 Sales Revenue, No. 412 Sales Returns and Allowances, No. 414 Sales Discounts, and No. 505 Cost of Goods Sold.

Instructions

Journalize the transactions for the month of June for Kern's Book Warehouse using a perpetual inventory system.

Journalize, post, and prepare a partial income statement.

(LO 2, 3, 5)

P5-2A Renner Hardware Store completed the following merchandising transactions in the month of May. At the beginning of May, the ledger of Renner showed Cash of $5,000 and Owner's Capital of $5,000.

May 1 Purchased merchandise on account from Braun's Wholesale Supply $4,200, terms 2/10, n/30.
2 Sold merchandise on account $2,100, terms 1/10, n/30. The cost of the merchandise sold was $1,300.
5 Received credit from Braun's Wholesale Supply for merchandise returned $300.
9 Received collections in full, less discounts, from customers billed on sales of $2,100 on May 2.
10 Paid Braun's Wholesale Supply in full, less discount.
11 Purchased supplies for cash $400.
12 Purchased merchandise for cash $1,400.
15 Received refund for poor quality merchandise from supplier on cash purchase $150.
17 Purchased merchandise from Valley Distributors $1,300, FOB shipping point, terms 2/10, n/30.
19 Paid freight on May 17 purchase $130.
24 Sold merchandise for cash $3,200. The merchandise sold had a cost of $2,000.
25 Purchased merchandise from Lumley, Inc. $620, FOB destination, terms 2/10, n/30.

27 Paid Valley Distributors in full, less discount.
29 Made refunds to cash customers for defective merchandise $70. The returned merchandise had a fair value of $30.
31 Sold merchandise on account $1,000 terms n/30. The cost of the merchandise sold was $560.

Renner Hardware's chart of accounts includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Inventory, No. 126 Supplies, No. 201 Accounts Payable, No. 301 Owner's Capital, No. 401 Sales Revenue, No. 412 Sales Returns and Allowances, No. 414 Sales Discounts, and No. 505 Cost of Goods Sold.

Instructions

(a) Journalize the transactions using a perpetual inventory system.
(b) Enter the beginning cash and capital balances and post the transactions. (Use J1 for the journal reference.)
(c) Prepare an income statement through gross profit for the month of May 2017.

(c) Gross profit $2,379

Prepare financial statements and adjusting and closing entries.

(LO 4, 5)

P5-3A Big Box Store is located in midtown Madison. During the past several years, net income has been declining because of suburban shopping centers. At the end of the company's fiscal year on November 30, 2017, the following accounts appeared in two of its trial balances.

	Unadjusted	**Adjusted**		**Unadjusted**	**Adjusted**
Accounts Payable	$ 25,200	$ 25,200	Notes Payable	$ 37,000	$ 37,000
Accounts Receivable	30,500	30,500	Owner's Capital	101,700	101,700
Accumulated Depr.—Equip.	34,000	45,000	Owner's Drawings	10,000	10,000
Cash	26,000	26,000	Prepaid Insurance	10,500	3,500
Cost of Goods Sold	518,000	518,000	Property Tax Expense		2,500
Freight-Out	6,500	6,500	Property Taxes Payable		2,500
Equipment	146,000	146,000	Rent Expense	15,000	15,000
Depreciation Expense		11,000	Salaries and Wages Expense	96,000	96,000
Insurance Expense		7,000	Sales Revenue	720,000	720,000
Interest Expense	6,400	6,400	Sales Commissions Expense	6,500	11,000
Interest Revenue	2,000	2,000	Sales Commissions Payable		4,500
Inventory	32,000	32,000	Sales Returns and Allowances	8,000	8,000
			Utilities Expense	8,500	8,500

Instructions

(a) Prepare a multiple-step income statement, an owner's equity statement, and a classified balance sheet. Notes payable are due in 2020.
(b) Journalize the adjusting entries that were made.
(c) Journalize the closing entries that are necessary.

(a) Net income $32,100
Owner's capital $123,800
Total assets $193,000

Journalize, post, and prepare a trial balance.

(LO 2, 3, 4)

GLS

P5-4A Yolanda Hagen, a former disc golf star, operates Yolanda's Discorama. At the beginning of the current season on April 1, the ledger of Yolanda's Discorama showed Cash $1,800, Inventory $2,500, and Owner's Capital $4,300. The following transactions were completed during April.

Apr. 5 Purchased golf discs, bags, and other inventory on account from Mumford Co. $1,200, FOB shipping point, terms 2/10, n/60.
7 Paid freight on the Mumford purchase $50.
9 Received credit from Mumford Co. for merchandise returned $100.
10 Sold merchandise on account for $900, terms n/30. The merchandise sold had a cost of $540.
12 Purchased disc golf shirts and other accessories on account from Saucer Sportswear $670, terms 1/10, n/30.
14 Paid Mumford Co. in full, less discount.
17 Received credit from Saucer Sportswear for merchandise returned $70.
20 Made sales on account for $610, terms n/30. The cost of the merchandise sold was $370.
21 Paid Saucer Sportswear in full, less discount.
27 Granted an allowance to customers for clothing that was flawed $20.
30 Received payments on account from customers $900.

The chart of accounts for the store includes the following: No. 101 Cash, No. 112 Accounts Receivable, No. 120 Inventory, No. 201 Accounts Payable, No. 301 Owner's Capital, No. 401 Sales Revenue, No. 412 Sales Returns and Allowances, and No. 505 Cost of Goods Sold.

Instructions

(a) Journalize the April transactions using a perpetual inventory system.
(b) Enter the beginning balances in the ledger accounts and post the April transactions. (Use J1 for the journal reference.)
(c) Prepare a trial balance on April 30, 2017.

(c) Total debits $5,810

***P5-5A** The trial balance of Gaolee Fashion Center contained the following accounts at November 30, the end of the company's fiscal year.

Complete accounting cycle beginning with a worksheet.

(LO 4, 5, 6)

XLS

GAOLEE FASHION CENTER
Trial Balance
November 30, 2017

	Debit	Credit
Cash	$ 20,700	
Accounts Receivable	30,700	
Inventory	44,700	
Supplies	6,200	
Equipment	133,000	
Accumulated Depreciation—Equipment		$ 28,000
Notes Payable		60,000
Accounts Payable		48,500
Owner's Capital		93,000
Owner's Drawings	12,000	
Sales Revenue		755,200
Sales Returns and Allowances	8,800	
Cost of Goods Sold	497,400	
Salaries and Wages Expense	140,000	
Advertising Expense	24,400	
Utilities Expense	14,000	
Maintenance and Repairs Expense	12,100	
Freight-Out	16,700	
Rent Expense	24,000	
Totals	$984,700	$984,700

Adjustment data:

1. Supplies on hand totaled $2,600.
2. Depreciation is $11,500 on the equipment.
3. Interest of $3,800 is accrued on notes payable at November 30.
4. Inventory actually on hand is $44,400.

Instructions

(a) Enter the trial balance on a worksheet, and complete the worksheet.
(b) Prepare a multiple-step income statement and an owner's equity statement for the year, and a classified balance sheet as of November 30, 2017. Notes payable of $20,000 are due in January 2018.
(c) Journalize the adjusting entries.
(d) Journalize the closing entries.
(e) Prepare a post-closing trial balance.

(a) Adj. trial balance $1,000,000
Net loss $1,400
(b) Gross profit $248,700
Total assets $191,900

***P5-6A** At the end of Donaldson Department Store's fiscal year on November 30, 2017, these accounts appeared in its adjusted trial balance.

Determine cost of goods sold and gross profit under periodic approach.

(LO 5, 7)

Freight-In	$ 7,500
Inventory	40,000
Purchases	585,000
Purchase Discounts	6,300

Purchase Returns and Allowances	2,700
Sales Revenue	1,000,000
Sales Returns and Allowances	20,000

Additional facts:

1. Merchandise inventory on November 30, 2017, is $52,600.
2. Donaldson Department Store uses a periodic system.

Instructions

Gross profit $409,100

Prepare an income statement through gross profit for the year ended November 30, 2017.

Calculate missing amounts and assess profitability.

(LO 5, 7)

***P5-7A** Kayla Inc. operates a retail operation that purchases and sells home entertainment products. The company purchases all merchandise inventory on credit and uses a periodic inventory system. The Accounts Payable account is used for recording inventory purchases only; all other current liabilities are accrued in separate accounts. You are provided with the following selected information for the fiscal years 2014 through 2017, inclusive.

	2014	2015	2016	2017
Income Statement Data				
Sales revenue		$55,000	$ (e)	$47,000
Cost of goods sold		(a)	14,800	14,300
Gross profit		38,300	35,200	(i)
Operating expenses		34,900	(f)	28,800
Net income		$ (b)	$ 2,500	$ (j)
Balance Sheet Data				
Inventory	$7,200	$ (c)	$ 8,100	$ (k)
Accounts payable	3,200	3,600	2,500	(l)
Additional Information				
Purchases of merchandise inventory on account		$14,200	$ (g)	$13,200
Cash payments to suppliers		(d)	(h)	13,600

(c) $4,700
(g) $18,200
(i) $32,700

Instructions

(a) Calculate the missing amounts.

(b) Sales declined over the 3-year fiscal period, 2015–2017. Does that mean that profitability necessarily also declined? Explain, computing the gross profit rate and the profit margin (Net income ÷ Sales revenue) for each fiscal year to help support your answer. (Round to one decimal place.)

Journalize, post, and prepare trial balance and partial income statement using periodic approach.

(LO 7)

GLS

***P5-8A** At the beginning of the current season on April 1, the ledger of Gage Pro Shop showed Cash $3,000, Inventory $4,000, and Owner's Capital $7,000. These transactions occurred during April 2017.

Apr.	5	Purchased golf bags, clubs, and balls on account from Tiger Co. $1,200, FOB shipping point, terms 2/10, n/60.
	7	Paid freight on Tiger Co. purchases $50.
	9	Received credit from Tiger Co. for merchandise returned $100.
	10	Sold merchandise on account to customers $600, terms n/30.
	12	Purchased golf shoes, sweaters, and other accessories on account from Classic Sportswear $450, terms 1/10, n/30.
	14	Paid Tiger Co. in full.
	17	Received credit from Classic Sportswear for merchandise returned $50.
	20	Made sales on account to customers $600, terms n/30.
	21	Paid Classic Sportswear in full.
	27	Granted credit to customers for clothing that had flaws $35.
	30	Received payments on account from customers $600.

The chart of accounts for the pro shop includes Cash, Accounts Receivable, Inventory, Accounts Payable, Owner's Capital, Sales Revenue, Sales Returns and Allowances, Purchases, Purchase Returns and Allowances, Purchase Discounts, and Freight-In.

Instructions

(a) Journalize the April transactions using a periodic inventory system.
(b) Using T-accounts, enter the beginning balances in the ledger accounts and post the April transactions.
(c) Prepare a trial balance on April 30, 2017.
(d) Prepare an income statement through gross profit, assuming merchandise inventory on hand at April 30 is $4,824.

(c) Tot. trial balance $8,376
Gross profit $465

PROBLEMS: SET B AND SET C

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Problems: Set B and Set C.

COMPREHENSIVE PROBLEM

CP5 On December 1, 2017, Rodriguez Distributing Company had the following account balances.

	Debit		Credit
Cash	$ 7,200	Accumulated Depreciation— Equipment	$ 2,200
Accounts Receivable	4,600	Accounts Payable	4,500
Inventory	12,000	Salaries and Wages Payable	1,000
Supplies	1,200	Owner's Capital	39,300
Equipment	22,000		
	$47,000		$47,000

During December, the company completed the following summary transactions.

Dec. 6 Paid $1,600 for salaries and wages due employees, of which $600 is for December and $1,000 is for November salaries and wages payable.
8 Received $2,200 cash from customers in payment of account (no discount allowed).
10 Sold merchandise for cash $6,300. The cost of the merchandise sold was $4,100.
13 Purchased merchandise on account from Boehm Co. $9,000, terms 2/10, n/30.
15 Purchased supplies for cash $2,000.
18 Sold merchandise on account $15,000, terms 3/10, n/30. The cost of the merchandise sold was $10,000.
20 Paid salaries and wages $1,800.
23 Paid Boehm Co. in full, less discount.
27 Received collections in full, less discounts, from customers billed on December 18.

Adjustment data:

1. Accrued salaries and wages payable $840.
2. Depreciation $200 per month.
3. Supplies on hand $1,500.

Instructions

(a) Journalize the December transactions using a perpetual inventory system.
(b) Enter the December 1 balances in the ledger T-accounts and post the December transactions. Use Cost of Goods Sold, Depreciation Expense, Salaries and Wages Expense, Sales Revenue, Sales Discounts, and Supplies Expense.
(c) Journalize and post adjusting entries.
(d) Prepare an adjusted trial balance.
(e) Prepare an income statement and an owner's equity statement for December and a classified balance sheet at December 31.

(d) Totals $68,340
(e) Net income $1,610

CONTINUING PROBLEM


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COOKIE CREATIONS: AN ENTREPRENEURIAL JOURNEY

(*Note:* This is a continuation of the Cookie Creations problem from Chapters 1 through 4.)

CC5 Because Natalie has had such a successful first few months, she is considering other opportunities to develop her business. One opportunity is the sale of fine European mixers. The owner of Kzinski Supply Company has approached Natalie to become the exclusive U.S. distributor of these fine mixers. The current cost of a mixer is approximately $525 (U.S.), and Natalie would sell each one for $1,050. Natalie comes to you for advice on how to account for these mixers.

Go to the book's companion website, **www.wiley.com/college/weygandt**, *to see the completion of this problem.*

BROADENING YOUR PERSPECTIVE

FINANCIAL REPORTING AND ANALYSIS

Financial Reporting Problem: Apple Inc.

BYP5-1 The financial statements of Apple Inc. are presented in Appendix A at the end of this textbook. Instructions for accessing and using the company's complete annual report, including the notes to the financial statements, are also provided in Appendix A.

Instructions
Answer the following questions using Apple's Consolidated Statement of Income.

(a) What was the percentage change in (1) sales and in (2) net income from 2011 to 2012 and from 2012 to 2013?
(b) What was the company's gross profit rate in 2011, 2012, and 2013?
(c) What was the company's percentage of net income to net sales in 2011, 2012, and 2013? Comment on any trend in this percentage.

Comparative Analysis Problem: PepsiCo, Inc. vs. The Coca-Cola Company

BYP5-2 PepsiCo's financial statements are presented in Appendix B. Financial statements of The Coca-Cola Company are presented in Appendix C. Instructions for accessing and using the complete annual reports of PepsiCo and Coca-Cola, including the notes to the financial statements, are also provided in Appendices B and C, respectively.

Instructions
(a) Based on the information contained in these financial statements, determine each of the following for each company.
   (1) Gross profit for 2013.
   (2) Gross profit rate for 2013.
   (3) Operating income for 2013.
   (4) Percentage change in operating income from 2012 to 2013.
(b) What conclusions concerning the relative profitability of the two companies can you draw from these data?

Comparative Analysis Problem: Amazon.com, Inc. vs. Wal-Mart Stores, Inc.

BYP5-3 Amazon.com, Inc.'s financial statements are presented in Appendix D. Financial statements of Wal-Mart Stores, Inc. are presented in Appendix E. (Use Wal-Mart's January 31, 2014, financial statements for comparative purposes.) Instructions for accessing and using the complete annual reports of Amazon and Wal-Mart, including the notes to the financial statements, are also provided in Appendices D and E, respectively.

Instructions

(a) Based on the information contained in these financial statements, determine each of the following for each company. Use Amazon's net product sales to compute gross profit information.
  (1) Gross profit for 2013.
  (2) Gross profit rate for 2013.
  (3) Operating income for 2013.
  (4) Percentage change in operating income from 2012 to 2013.

(b) What conclusions concerning the relative profitability of the two companies can you draw from these data?

Real-World Focus

BYP5-4 No financial decision-maker should ever rely solely on the financial information reported in the annual report to make decisions. It is important to keep abreast of financial news. This activity demonstrates how to search for financial news on the Web.

Address: **biz.yahoo.com/i**, or go to **www.wiley.com/college/weygandt**

Steps:

1. Type in either PepsiCo or Coca-Cola.
2. Choose **News**.
3. Select an article that sounds interesting to you.

Instructions

(a) What was the source of the article (e.g., Reuters, Businesswire, PR Newswire)?

(b) Assume that you are a personal financial planner and that one of your clients owns stock in the company. Write a brief memo to your client, summarizing the article and explaining the implications of the article for his or her investment.

CRITICAL THINKING

Decision-Making Across the Organization

BYP5-5 Three years ago, Amy Hessler and her brother-in-law Jacob Seelig opened Family Department Store. For the first two years, business was good, but the following condensed income results for 2016 were disappointing.

FAMILY DEPARTMENT STORE
Income Statement
For the Year Ended December 31, 2016

Net sales		$700,000
Cost of goods sold		553,000
Gross profit		147,000
Operating expenses		
Selling expenses	$100,000	
Administrative expenses	20,000	120,000
Net income		$ 27,000

Amy believes the problem lies in the relatively low gross profit rate (gross profit divided by net sales) of 21%. Jacob believes the problem is that operating expenses are too high.

Amy thinks the gross profit rate can be improved by making both of the following changes. She does not anticipate that these changes will have any effect on operating expenses.

1. Increase average selling prices by 17%. This increase is expected to lower sales volume so that total sales will increase only 6%.
2. Buy merchandise in larger quantities and take all purchase discounts. These changes are expected to increase the gross profit rate by 3 percentage points.

Jacob thinks expenses can be cut by making both of the following changes. He feels that these changes will not have any effect on net sales.

1. Cut sales salaries of $60,000 in half and give sales personnel a commission of 2% of net sales.
2. Reduce store deliveries to one day per week rather than twice a week. This change will reduce delivery expenses of $30,000 by 40%.

Amy and Jacob come to you for help in deciding the best way to improve net income.

Instructions

With the class divided into groups, answer the following.

(a) Prepare a condensed income statement for 2017, assuming (1) Amy's changes are implemented and (2) Jacob's ideas are adopted.

(b) What is your recommendation to Amy and Jacob?

(c) Prepare a condensed income statement for 2017, assuming both sets of proposed changes are made.

Communication Activity

BYP5-6 The following situation is in chronological order.

1. Parker decides to buy a surfboard.
2. He calls Surfing USA Co. to inquire about its surfboards.
3. Two days later, he requests Surfing USA Co. to make a surfboard.
4. Three days later, Surfing USA Co. sends him a purchase order to fill out.
5. He sends back the purchase order.
6. Surfing USA Co. receives the completed purchase order.
7. Surfing USA Co. completes the surfboard.
8. Parker picks up the surfboard.
9. Surfing USA Co. bills Parker.
10. Surfing USA Co. receives payment from Parker.

Instructions

In a memo to the president of Surfing USA Co., answer the following.

(a) When should Surfing USA Co. record the sale?

(b) Suppose that with his purchase order, Parker is required to make a down payment. Would that change your answer?

Ethics Case

BYP5-7 Tiffany Lyons was just hired as the assistant treasurer of Key West Stores. The company is a specialty chain store with nine retail stores concentrated in one metropolitan area. Among other things, the payment of all invoices is centralized in one of the departments Tiffany will manage. Her primary responsibility is to maintain the company's high credit rating by paying all bills when due and to take advantage of all cash discounts.

Jay Barnes, the former assistant treasurer who has been promoted to treasurer, is training Tiffany in her new duties. He instructs Tiffany that she is to continue the practice of preparing all checks "net of discount" and dating the checks the last day of the discount period. "But," Jay continues, "we always hold the checks at least 4 days beyond the discount period before mailing them. That way, we get another 4 days of interest on our money. Most of our creditors need our business and don't complain. And, if they scream about our missing the discount period, we blame it on the mail room or the post office. We've only lost one discount out of every hundred we take that way. I think everybody does it. By the way, welcome to our team!"

Instructions

(a) What are the ethical considerations in this case?

(b) Who are the stakeholders that are harmed or benefitted in this situation?

(c) Should Tiffany continue the practice started by Jay? Does she have any choice?

All About You

BYP5-8 There are many situations in business where it is difficult to determine the proper period in which to record revenue. Suppose that after graduation with a degree in finance, you take a job as a manager at a consumer electronics store called Impact Electronics. The company has expanded rapidly in order to compete with Best Buy. Impact has also begun selling gift cards for its electronic products. The cards are available in any dollar amount and allow the holder of the card to purchase an item for up to 2 years from the time the card is purchased. If the card is not used during that 2 years, it expires.

Instructions

Answer the following questions.

At what point should the revenue from the gift cards be recognized? Should the revenue be recognized at the time the card is sold, or should it be recorded when the card is redeemed? Explain the reasoning to support your answers.

FASB Codification Activity

BYP5-9 If your school has a subscription to the FASB Codification, go to **http://aaahq.org/ascLogin.cfm** to log in and prepare responses to the following.

Instructions

(a) Access the glossary ("Master Glossary") to answer the following:
  (1) What is the definition provided for inventory?
  (2) What is a customer?
(b) What guidance does the Codification provide concerning reporting inventories above cost?

A Look at IFRS

LEARNING OBJECTIVE 8 **Compare the accounting for merchandising under GAAP and IFRS.**

The basic accounting entries for merchandising are the same under both GAAP and IFRS. The income statement is a required statement under both sets of standards. The basic format is similar although some differences do exist.

Key Points

Following are the key similarities and differences between GAAP and IFRS related to inventories.

Similarities

- Under both GAAP and IFRS, a company can choose to use either a perpetual or periodic inventory systems.
- The definition of inventories is basically the same under GAAP and IFRS.
- As indicated above, the basic accounting entries for merchandising are the same under both GAAP and IFRS.
- Both GAAP and IFRS require that income statement information be presented for multiple years. For example, IFRS requires that 2 years of income statement information be presented, whereas GAAP requires 3 years.

Differences

- Under GAAP companies generally classify income statement items by function. Classification by function leads to descriptions like administration, distribution, and manufacturing. Under IFRS, companies must classify expenses either by nature or by function. Classification by nature leads to descriptions such as the following: salaries, depreciation expense, and utilities expense. If a company uses the functional-expense method on the income statement, disclosure by nature is required in the notes to the financial statements.
- Presentation of the income statement under GAAP follows either a single-step or multiple-step format. IFRS does not mention a single-step or multiple-step approach.
- Under IFRS revaluation of land, buildings, and intangible assets is permitted. The initial gains and losses resulting from this revaluation are reported as adjustments to equity, often referred to as **other comprehensive income**. The effect of this difference is that the use of IFRS results in more transactions affecting equity (other comprehensive income) but not net income.

Looking to the Future

The IASB and FASB are working on a project that would rework the structure of financial statements. Specifically, this project will address the issue of how to classify various items in the income statement. A main goal of this new approach is to provide information that better represents how businesses are run. In addition, this approach draws attention away from just one number—net income. It will adopt major groupings similar to those currently used by the statement of cash flows (operating, investing, and financing), so that numbers can be more readily traced across statements. For example, the amount of income that is generated by operations would be traceable to the assets and liabilities used to generate the income. Finally, this approach would also provide detail, beyond that currently seen in most statements (either GAAP or IFRS), by requiring that line items be presented both by function and by nature. The new financial statement format was heavily influenced by suggestions from financial statement analysts.

IFRS Practice

IFRS Self-Test Questions

1. Which of the following would **not** be included in the definition of inventory under IFRS?
   (a) Photocopy paper held for sale by an office-supply store.
   (b) Stereo equipment held for sale by an electronics store.
   (c) Used office equipment held for sale by the human relations department of a plastics company.
   (d) All of the above would meet the definition.
2. Which of the following would **not** be a line item of a company reporting costs by nature?
   (a) Depreciation expense. (c) Interest expense.
   (b) Salaries expense. (d) Manufacturing expense.
3. Which of the following would **not** be a line item of a company reporting costs by function?
   (a) Administration. (c) Utilities expense.
   (b) Manufacturing. (d) Distribution.
4. Which of the following statements is **false**?
   (a) IFRS specifically requires use of a multiple-step income statement.
   (b) Under IFRS, companies can use either a perpetual or periodic system.
   (c) The proposed new format for financial statements was heavily influenced by the suggestions of financial statement analysts.
   (d) The new income statement format will try to de-emphasize the focus on the "net income" line item.

IFRS Exercises

IFRS5-1 Explain the difference between the "nature-of-expense" and "function-of-expense" classifications.

IFRS5-2 For each of the following income statement line items, state whether the item is a "by nature" expense item or a "by function" expense item.

________ Cost of goods sold
________ Depreciation expense
________ Salaries and wages expense
________ Selling expenses
________ Utilities expense
________ Delivery expense
________ General and administrative expenses

IFRS5-3 Matilda Company reported the following amounts (in euros) in 2017: Net income, €150,000; Unrealized gain related to revaluation of buildings, €10,000; and Unrealized loss on non-trading securities, €(35,000). Determine Matilda's total comprehensive income for 2017.

International Financial Reporting Problem: Louis Vuitton

IFRS5-4 The financial statements of Louis Vuitton are presented in Appendix F. Instructions for accessing and using the company's complete annual report, including the notes to its financial statements, are also provided in Appendix F.

Instructions

Use Louis Vuitton's annual report to answer the following questions.

(a) Does Louis Vuitton use a multiple-step or a single-step income statement format? Explain how you made your determination.
(b) Instead of "interest expense," what label does Louis Vuitton use for interest costs that it incurs?
(c) Using the notes to the company's financial statements, determine the following:
  (1) Composition of the inventory.
  (2) Amount of inventory (gross) before impairment.

Answers to IFRS Self-Test Questions

1. c **2.** d **3.** c **4.** a

6 Inventories

CHAPTER PREVIEW In the previous chapter, we discussed the accounting for merchandise inventory using a perpetual inventory system. In this chapter, we explain the methods used to calculate the cost of inventory on hand at the balance sheet date and the cost of goods sold.

FEATURE STORY

"Where Is That Spare Bulldozer Blade?"

Let's talk inventory—big, bulldozer-size inventory. Caterpillar Inc. is the world's largest manufacturer of construction and mining equipment, diesel and natural gas engines, and industrial gas turbines. It sells its products in over 200 countries, making it one of the most successful U.S. exporters. More than 70% of its productive assets are located domestically, and nearly 50% of its sales are foreign.

In the past, Caterpillar's profitability suffered, but today it is very successful. A big part of this turnaround can be attributed to effective management of its inventory. Imagine what it costs Caterpillar to have too many bulldozers sitting around in inventory—a situation the company definitely wants to avoid. Yet Caterpillar must also make sure it has enough inventory to meet demand.

At one time during a 7-year period, Caterpillar's sales increased by 100% while its inventory increased by only 50%. To achieve this dramatic reduction in the amount of resources tied up in inventory while continuing to meet customers' needs, Caterpillar used a two-pronged approach. First, it completed a factory modernization program, which greatly increased its production efficiency. The program reduced by 60% the amount of inventory the company processes at any one time. It also reduced by an incredible 75% the time it takes to manufacture a part.

Second, Caterpillar dramatically improved its parts distribution system. It ships more than 100,000 items daily from its 23 distribution centers strategically located around the world (10 million square feet of warehouse space—remember, we're talking bulldozers). The company can virtually guarantee that it can get any part to anywhere in the world within 24 hours.

These changes led to record exports, profits, and revenues for Caterpillar. It would seem that things couldn't be better. But industry analysts, as well as the company's managers, thought otherwise. In order to maintain Caterpillar's position as the industry leader, management began another major overhaul of inventory production and inventory management processes. The goal: to cut the number of repairs in half, increase productivity by 20%, and increase inventory turnover by 40%.

In short, Caterpillar's ability to manage its inventory has been a key reason for its past success and will very likely play a huge part in its future profitability as well.

James Porter/Workbook/Getty Images, Inc.

CHAPTER OUTLINE

Learning Objectives

	Learning Objective	Topics	DO IT!
1	Discuss how to classify and determine inventory.	• Classifying inventory • Determining inventory quantities	DO IT! 1 Rules of Ownership
2	Apply inventory cost flow methods and discuss their financial effects.	• Specific identification • Cost flow assumptions • Financial statement and tax effects • Using cost flow methods consistently	DO IT! 2 Cost Flow Methods
3	Indicate the effects of inventory errors on the financial statements.	• Income statement effects • Balance sheet effects	DO IT! 3 Inventory Errors
4	Explain the statement presentation and analysis of inventory.	• Presentation • Lower-of-cost-or-market • Analysis	DO IT! 4 LCM and Inventory Turnover

Go to the ***REVIEW AND PRACTICE*** section at the end of the chapter for a review of key concepts and practice applications with solutions.

Visit **WileyPLUS with ORION** for additional tutorials and practice opportunities.

LEARNING OBJECTIVE 1

Discuss how to classify and determine inventory.

Two important steps in the reporting of inventory at the end of the accounting period are the classification of inventory based on its degree of completeness and the determination of inventory amounts.

Classifying Inventory

How a company classifies its inventory depends on whether the firm is a merchandiser or a manufacturer. In a **merchandising** company, such as those described in Chapter 5, inventory consists of many different items. For example, in a grocery store, canned goods, dairy products, meats, and produce are just a few of the inventory items on hand. These items have two common characteristics: (1) they are owned by the company, and (2) they are in a form ready for sale to customers in the ordinary course of business. Thus, merchandisers need only one inventory classification, **merchandise inventory**, to describe the many different items that make up the total inventory.

In a **manufacturing** company, some inventory may not yet be ready for sale. As a result, manufacturers usually classify inventory into three categories: finished goods, work in process, and raw materials. **Finished goods inventory** is manufactured items that are completed and ready for sale. **Work in process** is that portion of manufactured inventory that has been placed into the production process but is not yet complete. **Raw materials** are the basic goods that will be used in production but have not yet been placed into production.

Helpful Hint
Regardless of the classification, companies report all inventories under Current Assets on the balance sheet.

For example, Caterpillar classifies earth-moving tractors completed and ready for sale as **finished goods**. It classifies the tractors on the assembly line in various stages of production as **work in process**. The steel, glass, tires, and other components that are on hand waiting to be used in the production of tractors are identified as **raw materials**. Illustration 6-1 shows an adapted excerpt from Note 7 of Caterpillar's annual report.

Illustration 6-1
Composition of Caterpillar's inventory

	December 31		
(millions of dollars)	**2013**	**2012**	**2011**
Raw materials	$ 2,966	$ 3,573	$ 3,766
Work-in-process	2,589	2,920	2,959
Finished goods	6,785	8,767	7,562
Other	285	287	257
Total inventories	**$12,625**	**$15,547**	**$14,544**

By observing the levels and changes in the levels of these three inventory types, financial statement users can gain insight into management's production plans. For example, low levels of raw materials and high levels of finished goods suggest that management believes it has enough inventory on hand and production will be slowing down—perhaps in anticipation of a recession. Conversely, high levels of raw materials and low levels of finished goods probably signal that management is planning to step up production.

Many companies have significantly lowered inventory levels and costs using **just-in-time (JIT) inventory** methods. Under a just-in-time method, companies manufacture or purchase goods only when needed for use. Dell is famous for having developed a system for making computers in response to individual customer requests. Even though it makes each computer to meet each customer's particular specifications, Dell is able to assemble the computer and put it on a truck in less than 48 hours. The success of the JIT system depends on reliable suppliers. By integrating its information systems with those of its suppliers, Dell reduced its inventories to nearly zero. This is a huge advantage in an industry where products become obsolete nearly overnight.

The accounting concepts discussed in this chapter apply to the inventory classifications of both merchandising and manufacturing companies. Our focus here is on merchandise inventory. Additional issues specific to manufacturing companies are discussed later in the managerial section of this textbook (Chapters 19–26).

Accounting Across the Organization | Ford

© PeskyMonkey/iStockphoto

A Big Hiccup

JIT can save a company a lot of money, but it isn't without risk. An unexpected disruption in the supply chain can cost a company a lot of money. Japanese automakers experienced just such a disruption when a 6.8-magnitude earthquake caused major damage to the company that produces 50% of their piston rings. The rings themselves cost only $1.50, but you can't make a car without them. As a result, the automakers were forced to shut down production for a few days—a loss of tens of thousands of cars.

Similarly, a major snowstorm halted production at the Canadian plants of Ford. A Ford spokesperson said, "Because the plants run with just-in-time inventory, we don't have large stockpiles of parts sitting around. When you have a somewhat significant disruption, you can pretty quickly run out of parts."

Sources: Amy Chozick, "A Key Strategy of Japan's Car Makers Backfires," *Wall Street Journal* (July 20, 2007); and Kate Linebaugh, "Canada Military Evacuates Motorists Stranded by Snow," *Wall Street Journal* (December 15, 2010).

What steps might the companies take to avoid such a serious disruption in the future? (Go to **WileyPLUS** for this answer and additional questions.)

Determining Inventory Quantities

No matter whether they are using a periodic or perpetual inventory system, all companies need to determine inventory quantities at the end of the accounting period. If using a perpetual system, companies take a physical inventory for the following reasons:

1. To check the accuracy of their perpetual inventory records.
2. To determine the amount of inventory lost due to wasted raw materials, shoplifting, or employee theft.

Companies using a periodic inventory system take a physical inventory for **two different purposes**: to determine the inventory on hand at the balance sheet date, and to determine the cost of goods sold for the period.

Determining inventory quantities involves two steps: (1) taking a physical inventory of goods on hand and (2) determining the ownership of goods.

ETHICS NOTE

In a famous fraud, a salad oil company filled its storage tanks mostly with water. The oil rose to the top, so auditors thought the tanks were full of oil. The company also said it had more tanks than it really did: It repainted numbers on the tanks to confuse auditors.

TAKING A PHYSICAL INVENTORY

Companies take a physical inventory at the end of the accounting period. Taking a physical inventory involves actually counting, weighing, or measuring each kind of inventory on hand. In many companies, taking an inventory is a formidable task. Retailers such as Target, True Value Hardware, or Home Depot have thousands of different inventory items. An inventory count is generally more accurate when goods are not being sold or received during the counting. Consequently, companies often "take inventory" when the business is closed or when business is slow. Many retailers close early on a chosen day in January—after the holiday sales and returns, when inventories are at their lowest level—to count inventory. Wal-Mart Stores, Inc., for example, has a year-end of January 31.

Ethics Insight Leslie Fay

© Greg Brookes/iStockphoto

Falsifying Inventory to Boost Income

Managers at women's apparel maker Leslie Fay were convicted of falsifying inventory records to boost net income—and consequently to boost management bonuses. In another case, executives at Craig Consumer Electronics were accused of defrauding lenders by manipulating inventory records. The indictment said the company classified "defective goods as new or refurbished" and claimed that it owned certain shipments "from overseas suppliers" when, in fact, Craig either did not own the shipments or the shipments did not exist.

What effect does an overstatement of inventory have on a company's financial statements? (Go to **WileyPLUS** for this answer and additional questions.)

DETERMINING OWNERSHIP OF GOODS

One challenge in computing inventory quantities is determining what inventory a company owns. To determine ownership of goods, two questions must be answered: Do all of the goods included in the count belong to the company? Does the company own any goods that were not included in the count?

GOODS IN TRANSIT A complication in determining ownership is **goods in transit** (on board a truck, train, ship, or plane) at the end of the period. The company may have purchased goods that have not yet been received, or it may have sold goods that have not yet been delivered. To arrive at an accurate count, the company must determine ownership of these goods.

Goods in transit should be included in the inventory of the company that has legal title to the goods. Legal title is determined by the terms of the sale, as shown in Illustration 6-2 and described below.

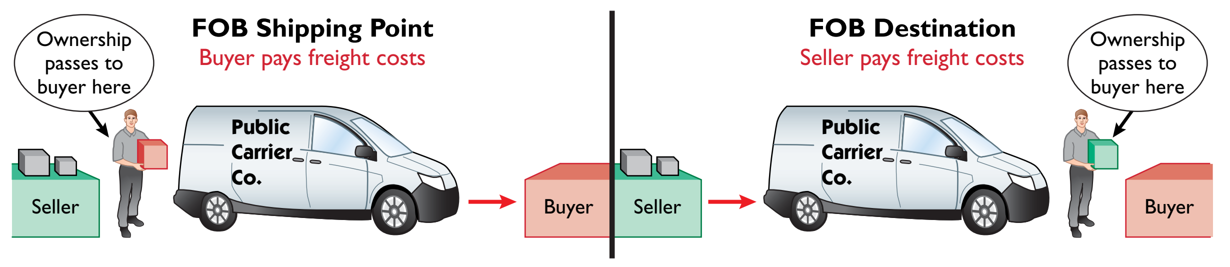


Illustration 6-2
Terms of sale

1. When the terms are **FOB (free on board) shipping point**, ownership of the goods passes to the buyer when the public carrier accepts the goods from the seller.

2. When the terms are **FOB destination**, ownership of the goods remains with the seller until the goods reach the buyer.

If goods in transit at the statement date are ignored, inventory quantities may be seriously miscounted. Assume, for example, that Hargrove Company has 20,000 units of inventory on hand on December 31. It also has the following goods in transit:

1. Sales of 1,500 units shipped December 31 FOB destination.
2. Purchases of 2,500 units shipped FOB shipping point by the seller on December 31.

Hargrove has legal title to both the 1,500 units sold and the 2,500 units purchased. If the company ignores the units in transit, it would understate inventory quantities by 4,000 units (1,500 + 2,500).

As we will see later in the chapter, inaccurate inventory counts affect not only the inventory amount shown on the balance sheet but also the cost of goods sold calculation on the income statement.

CONSIGNED GOODS In some lines of business, it is common to hold the goods of other parties and try to sell the goods for them for a fee, but without taking ownership of the goods. These are called **consigned goods**.

For example, you might have a used car that you would like to sell. If you take the item to a dealer, the dealer might be willing to put the car on its lot and charge you a commission if it is sold. Under this agreement, the dealer **would not take ownership** of the car, which would still belong to you. Therefore, if an inventory count were taken, the car would not be included in the dealer's inventory because the dealer does not own it.

Many car, boat, and antique dealers sell goods on consignment to keep their inventory costs down and to avoid the risk of purchasing an item that they will not be able to sell. Today, even some manufacturers are making consignment agreements with their suppliers in order to keep their inventory levels low.

ANATOMY OF A FRAUD

Ted Nickerson, CEO of clock manufacturer Dally Industries, was feared by all of his employees. Ted also had expensive tastes. To support this habit, Ted took out large loans, which he collateralized with his shares of Dally Industries stock. If the price of Dally's stock fell, he was required to provide the bank with more shares of stock. To achieve target net income figures and thus maintain the stock price, Ted coerced employees in the company to alter inventory figures. Inventory quantities were manipulated by changing the amounts on inventory control tags after the year-end physical inventory count. For example, if a tag said there were 20 units of a particular item, the tag was changed to 220. Similarly, the unit costs that were used to determine the value of ending inventory were increased from, for example, $125 per unit to $1,250. Both of these fraudulent changes had the effect of increasing the amount of reported ending inventory. This reduced cost of goods sold and increased net income.

Total take: $245,000

THE MISSING CONTROL

Independent internal verification. The company should have spot-checked its inventory records periodically, verifying that the number of units in the records agreed with the amount on hand and that the unit costs agreed with vendor price sheets.

Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 502–509.

DO IT! 1 Rules of Ownership

Hasbeen Company completed its inventory count. It arrived at a total inventory value of $200,000. As a new member of Hasbeen's accounting department, you have been given the information listed below. Discuss how this information affects the reported cost of inventory.

1. Hasbeen included in the inventory goods held on consignment for Falls Co., costing $15,000.
2. The company did not include in the count purchased goods of $10,000 which were in transit (terms: FOB shipping point).
3. The company did not include in the count sold inventory with a cost of $12,000 which was in transit (terms: FOB shipping point).

Action Plan

✔ Apply the rules of ownership to goods held on consignment.

✔ Apply the rules of ownership to goods in transit.

Solution

The goods of $15,000 held on consignment should be deducted from the inventory count. The goods of $10,000 purchased FOB shipping point should be added to the inventory count. Sold goods of $12,000 which were in transit FOB shipping point should not be included in the ending inventory. Thus, inventory should be carried at $195,000 ($200,000 − $15,000 + $10,000).

Related exercise material: **BE6-1, BE6-2, E6-1, E6-2, and DO IT! 6-1.**

LEARNING OBJECTIVE 2 Apply inventory cost flow methods and discuss their financial effects.

Inventory is accounted for at cost. Cost includes all expenditures necessary to acquire goods and place them in a condition ready for sale. For example, freight costs incurred to acquire inventory are added to the cost of inventory, but the cost of shipping goods to a customer are a selling expense.

After a company has determined the quantity of units of inventory, it applies unit costs to the quantities to compute the total cost of the inventory and the cost of goods sold. This process can be complicated if a company has purchased inventory items at different times and at different prices.

For example, assume that Crivitz TV Company purchases three identical 50-inch TVs on different dates at costs of $720, $750, and $800. During the year, Crivitz sold two sets at $1,200 each. These facts are summarized in Illustration 6-3.

Illustration 6-3
Data for inventory costing example

Purchases			
February 3	1 TV	at	$720
March 5	1 TV	at	$750
May 22	1 TV	at	$800
Sales			
June 1	2 TVs	for	$2,400 ($1,200 × 2)

Cost of goods sold will differ depending on which two TVs the company sold. For example, it might be $1,470 ($720 + $750), or $1,520 ($720 + $800), or $1,550 ($750 + $800). In this section, we discuss alternative costing methods available to Crivitz.

Specific Identification

If Crivitz can positively identify which particular units it sold and which are still in ending inventory, it can use the **specific identification method** of inventory costing. For example, if Crivitz sold the TVs it purchased on February 3 and May 22, then its cost of goods sold is $1,520 ($720 + $800), and its ending inventory is $750 (see Illustration 6-4). Using this method, companies can accurately determine ending inventory and cost of goods sold.

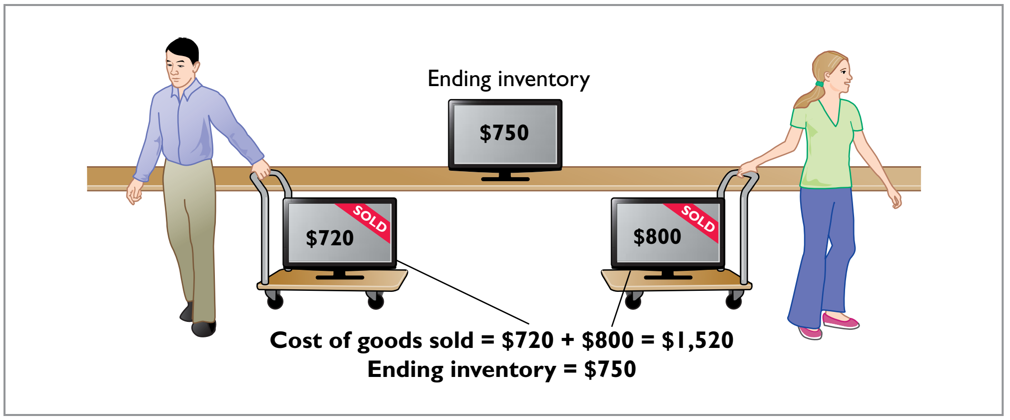


Illustration 6-4
Specific identification method

Specific identification requires that companies keep records of the original cost of each individual inventory item. Historically, specific identification was possible only when a company sold a limited variety of high-unit-cost items that could be identified clearly from the time of purchase through the time of sale. Examples of such products are cars, pianos, or expensive antiques.

Today, bar coding, electronic product codes, and radio frequency identification make it theoretically possible to do specific identification with nearly any type of product. The reality is, however, that this practice is still relatively rare. Instead, rather than keep track of the cost of each particular item sold, most companies make assumptions, called **cost flow assumptions**, about which units were sold.

ETHICS NOTE

A major disadvantage of the specific identification method is that management may be able to manipulate net income. For example, it can boost net income by selling units purchased at a low cost, or reduce net income by selling units purchased at a high cost.

Cost Flow Assumptions

Because specific identification is often impractical, other cost flow methods are permitted. These differ from specific identification in that they **assume** flows of costs that may be unrelated to the physical flow of goods. There are three assumed cost flow methods:

1. First-in, first-out (FIFO)
2. Last-in, first-out (LIFO)
3. Average-cost

There is no accounting requirement that the cost flow assumption be consistent with the physical movement of the goods. Company management selects the appropriate cost flow method.

To demonstrate the three cost flow methods, we will use a **periodic** inventory system. We assume a periodic system because **very few companies use perpetual LIFO, FIFO, or average-cost** to cost their inventory and related cost of goods sold. Instead, companies that use perpetual systems often use an assumed cost (called a standard cost) to record cost of goods sold at the time of sale. Then, at the end of the period when they count their inventory, they **recalculate cost**

of goods sold using periodic FIFO, LIFO, or average-cost as shown in this chapter and adjust cost of goods sold to this recalculated number.[1]

To illustrate the three inventory cost flow methods, we will use the data for Houston Electronics' Astro condensers, shown in Illustration 6-5.

Illustration 6-5
Data for Houston Electronics

HOUSTON ELECTRONICS
Astro Condensers

Date	Explanation	Units	Unit Cost	Total Cost
Jan. 1	Beginning inventory	100	$10	$ 1,000
Apr. 15	Purchase	200	11	2,200
Aug. 24	Purchase	300	12	3,600
Nov. 27	Purchase	400	13	5,200
	Total units available for sale	1,000		$12,000
	Units in ending inventory	450		
	Units sold	550		

The cost of goods sold formula in a periodic system is:

(Beginning Inventory + Purchases) − Ending Inventory = Cost of Goods Sold

Houston Electronics had a total of 1,000 units available to sell during the period (beginning inventory plus purchases). The total cost of these 1,000 units is $12,000, referred to as **cost of goods available for sale**. A physical inventory taken at December 31 determined that there were 450 units in ending inventory. Therefore, Houston sold 550 units (1,000 − 450) during the period. To determine the cost of the 550 units that were sold (the cost of goods sold), we assign a cost to the ending inventory and subtract that value from the cost of goods available for sale. The value assigned to the ending inventory **will depend on which cost flow method we use**. No matter which cost flow assumption we use, though, the sum of cost of goods sold plus the cost of the ending inventory must equal the cost of goods available for sale—in this case, $12,000.

FIRST-IN, FIRST-OUT (FIFO)

The **first-in, first-out (FIFO) method** assumes that the **earliest goods** purchased are the first to be sold. FIFO often parallels the actual physical flow of merchandise. That is, it generally is good business practice to sell the oldest units first. Under the FIFO method, therefore, the **costs** of the earliest goods purchased are the first to be recognized in determining cost of goods sold. (This does not necessarily mean that the oldest units **are** sold first, but that the costs of the oldest units are **recognized** first. In a bin of picture hangers at the hardware store, for example, no one really knows, nor would it matter, which hangers are sold first.) Illustration 6-6 shows the allocation of the cost of goods available for sale at Houston Electronics under FIFO.

[1]Also, some companies use a perpetual system to keep track of units, but they do not make an entry for perpetual cost of goods sold. In addition, firms that employ LIFO tend to use **dollar-value LIFO**, a method discussed in upper-level courses. FIFO periodic and FIFO perpetual give the same result. Therefore, companies should not incur the additional cost to use FIFO perpetual. Few companies use perpetual average-cost because of the added cost of recordkeeping. Finally, for instructional purposes, we believe it is easier to demonstrate the cost flow assumptions under the periodic system, which makes it more pedagogically appropriate.

Illustration 6-6
Allocation of costs—FIFO method

COST OF GOODS AVAILABLE FOR SALE

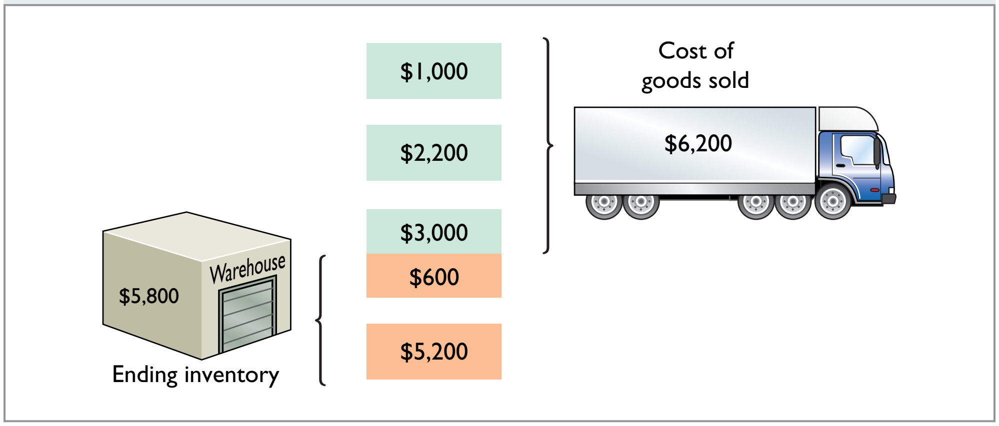
Date	Explanation	Units	Unit Cost	Total Cost
Jan. 1	Beginning inventory	100	$10	$ 1,000
Apr. 15	Purchase	200	11	2,200
Aug. 24	Purchase	300	12	3,600
Nov. 27	Purchase	400	13	5,200
	Total	1,000		**$12,000**

STEP 1: ENDING INVENTORY

Date	Units	Unit Cost	Total Cost
Nov. 27	400	$13	$ 5,200
Aug. 24	50	12	600
Total	450		**$5,800**

STEP 2: COST OF GOODS SOLD

Cost of goods available for sale	$12,000
Less: Ending inventory	5,800
Cost of goods sold	**$ 6,200**



Helpful Hint
Note the sequencing of the allocation: (1) compute ending inventory, and (2) determine cost of goods sold.

Helpful Hint
Another way of thinking about the calculation of FIFO ending inventory is the **LISH assumption**—last in still here.

Under FIFO, since it is assumed that the first goods purchased were the first goods sold, ending inventory is based on the prices of the most recent units purchased. That is, **under FIFO, companies obtain the cost of the ending inventory by taking the unit cost of the most recent purchase and working backward until all units of inventory have been costed**. In this example, Houston Electronics prices the 450 units of ending inventory using the **most recent** prices. The last purchase was 400 units at $13 on November 27. The remaining 50 units are priced using the unit cost of the second most recent purchase, $12, on August 24. Next, Houston Electronics calculates cost of goods sold by subtracting the cost of the units **not sold** (ending inventory) from the cost of all goods available for sale.

Illustration 6-7 demonstrates that companies also can calculate cost of goods sold by pricing the 550 units sold using the prices of the first 550 units acquired. Note that of the 300 units purchased on August 24, only 250 units are assumed sold. This agrees with our calculation of the cost of ending inventory, where 50 of these units were assumed unsold and thus included in ending inventory.

Illustration 6-7
Proof of cost of goods sold

Date	Units	Unit Cost	Total Cost
Jan. 1	100	$10	$ 1,000
Apr. 15	200	11	2,200
Aug. 24	250	12	3,000
Total	550		**$6,200**

LAST-IN, FIRST-OUT (LIFO)

The **last-in, first-out (LIFO) method** assumes that the **latest goods** purchased are the first to be sold. LIFO seldom coincides with the actual physical flow of inventory. (Exceptions include goods stored in piles, such as coal or hay, where goods are removed from the top of the pile as they are sold.) Under the LIFO method, the **costs** of the latest goods purchased are the first to be recognized in determining cost of goods sold. Illustration 6-8 shows the allocation of the cost of goods available for sale at Houston Electronics under LIFO.

Illustration 6-8
Allocation of costs—LIFO method

COST OF GOODS AVAILABLE FOR SALE

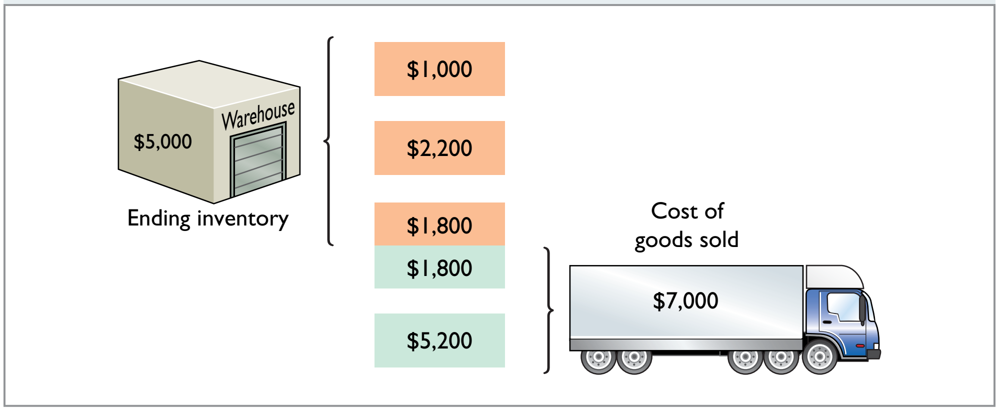
Date	Explanation	Units	Unit Cost	Total Cost
Jan. 1	Beginning inventory	100	$10	$ 1,000
Apr. 15	Purchase	200	11	2,200
Aug. 24	Purchase	300	12	3,600
Nov. 27	Purchase	400	13	5,200
	Total	1,000		**$12,000**

STEP 1: ENDING INVENTORY

Date	Units	Unit Cost	Total Cost
Jan. 1	100	$10	$ 1,000
Apr. 15	200	11	2,200
Aug. 24	150	12	1,800
Total	450		**$5,000**

STEP 2: COST OF GOODS SOLD

Cost of goods available for sale	$12,000
Less: Ending inventory	5,000
Cost of goods sold	**$ 7,000**



Helpful Hint
Another way of thinking about the calculation of LIFO ending inventory is the **FISH assumption**—first in still here.

Under LIFO, since it is assumed that the first goods sold were those that were most recently purchased, ending inventory is based on the prices of the oldest units purchased. That is, **under LIFO, companies obtain the cost of the ending inventory by taking the unit cost of the earliest goods available for sale and working forward until all units of inventory have been costed**. In this example, Houston Electronics prices the 450 units of ending inventory using the **earliest** prices. The first purchase was 100 units at $10 in the January 1 beginning inventory. Then, 200 units were purchased at $11. The remaining 150 units needed are priced at $12 per unit (August 24 purchase). Next, Houston Electronics calculates cost of goods sold by subtracting the cost of the units **not sold** (ending inventory) from the cost of all goods available for sale.

Illustration 6-9 demonstrates that companies also can calculate cost of goods sold by pricing the 550 units sold using the prices of the last 550 units acquired. Note that of the 300 units purchased on August 24, only 150 units are assumed sold. This agrees with our calculation of the cost of ending inventory, where 150 of these units were assumed unsold and thus included in ending inventory.

Date	Units	Unit Cost	Total Cost
Nov. 27	400	$13	$5,200
Aug. 24	150	12	1,800
Total	550		$7,000

Illustration 6-9
Proof of cost of goods sold

Under a periodic inventory system, which we are using here, **all goods purchased during the period are assumed to be available for the first sale, regardless of the date of purchase**.

AVERAGE-COST

The **average-cost method** allocates the cost of goods available for sale on the basis of the **weighted-average unit cost** incurred. The average-cost method assumes that goods are similar in nature. Illustration 6-10 presents the formula and a sample computation of the weighted-average unit cost.

Cost of Goods Available for Sale	÷	Total Units Available for Sale	=	Weighted-Average Unit Cost
$12,000	÷	1,000	=	$12

Illustration 6-10
Formula for weighted-average unit cost

The company then applies the weighted-average unit cost to the units on hand to determine the cost of the ending inventory. Illustration 6-11 shows the allocation of the cost of goods available for sale at Houston Electronics using average-cost.

COST OF GOODS AVAILABLE FOR SALE

Date	Explanation	Units	Unit Cost	Total Cost
Jan. 1	Beginning inventory	100	$10	$ 1,000
Apr. 15	Purchase	200	11	2,200
Aug. 24	Purchase	300	12	3,600
Nov. 27	Purchase	400	13	5,200
	Total	1,000		$12,000

STEP 1: ENDING INVENTORY

$12,000 ÷ 1,000 = $12

Units	Unit Cost	Total Cost
450	$12	$5,400

STEP 2: COST OF GOODS SOLD

Cost of goods available for sale	$12,000
Less: Ending inventory	5,400
Cost of goods sold	$ 6,600

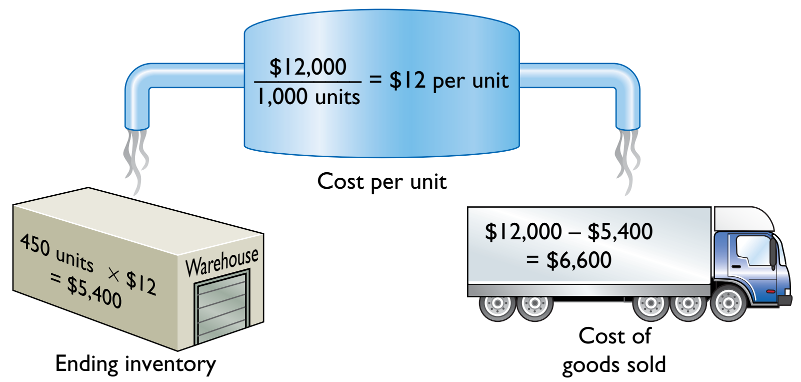


Illustration 6-11
Allocation of costs—average-cost method

We can verify the cost of goods sold under this method by multiplying the units sold times the weighted-average unit cost (550 × $12 = $6,600). Note that this method does **not** use the average of the unit costs. That average is $11.50 ($10 + $11 + $12 + $13 = $46; $46 ÷ 4). The average-cost method instead uses the average **weighted by** the quantities purchased at each unit cost.

Financial Statement and Tax Effects of Cost Flow Methods

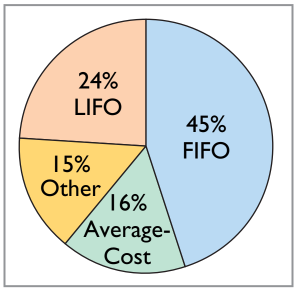


Illustration 6-12
Use of cost flow methods in major U.S. companies

Each of the three assumed cost flow methods is acceptable for use. For example, **Reebok International Ltd.** and **Wendy's International** currently use the FIFO method of inventory costing. **Campbell Soup Company**, **Kroger**, and **Walgreen Drugs** use LIFO for part or all of their inventory. **Bristol-Myers Squibb**, **Starbucks**, and **Motorola** use the average-cost method. In fact, a company may also use more than one cost flow method at the same time. **Stanley Black & Decker Manufacturing Company**, for example, uses LIFO for domestic inventories and FIFO for foreign inventories. Illustration 6-12 (in the margin) shows the use of the three cost flow methods in 500 large U.S. companies.

The reasons companies adopt different inventory cost flow methods are varied, but they usually involve one of three factors: (1) income statement effects, (2) balance sheet effects, or (3) tax effects.

INCOME STATEMENT EFFECTS

To understand why companies might choose a particular cost flow method, let's examine the effects of the different cost flow assumptions on the financial statements of Houston Electronics. The condensed income statements in Illustration 6-13 assume that Houston sold its 550 units for $18,500, had operating expenses of $9,000, and is subject to an income tax rate of 30%.

Illustration 6-13
Comparative effects of cost flow methods

HOUSTON ELECTRONICS
Condensed Income Statements

	FIFO	LIFO	Average-Cost
Sales revenue	$18,500	$18,500	$18,500
Beginning inventory	1,000	1,000	1,000
Purchases	11,000	11,000	11,000
Cost of goods available for sale	12,000	12,000	12,000
Ending inventory	**5,800**	**5,000**	**5,400**
Cost of goods sold	6,200	7,000	6,600
Gross profit	12,300	11,500	11,900
Operating expenses	9,000	9,000	9,000
Income before income taxes*	3,300	2,500	2,900
Income tax expense (30%)	990	750	870
Net income	**$ 2,310**	**$ 1,750**	**$ 2,030**

*We are assuming that Houston Electronics is a corporation, and corporations are required to pay income taxes.

Note the cost of goods available for sale ($12,000) is the same under each of the three inventory cost flow methods. However, the ending inventories and the costs of goods sold are different. This difference is due to the unit costs that the company allocated to cost of goods sold and to ending inventory. Each dollar of difference in ending inventory results in a corresponding dollar difference in income before income taxes. For Houston, an $800 difference exists between FIFO and LIFO cost of goods sold.

In periods of changing prices, the cost flow assumption can have significant impacts both on income and on evaluations of income, such as the following.

1. In a period of inflation, FIFO produces a higher net income because lower unit costs of the first units purchased are matched against revenue.
2. In a period of inflation, LIFO produces a lower net income because higher unit costs of the last goods purchased are matched against revenue.
3. If prices are falling, the results from the use of FIFO and LIFO are reversed. FIFO will report the lowest net income and LIFO the highest.
4. Regardless of whether prices are rising or falling, average-cost produces net income between FIFO and LIFO.

As shown in the Houston example (Illustration 6-13), in a period of rising prices FIFO reports the highest net income ($2,310) and LIFO the lowest ($1,750); average-cost falls between these two amounts ($2,030).

To management, higher net income is an advantage. It causes external users to view the company more favorably. In addition, management bonuses, if based on net income, will be higher. Therefore, when prices are rising (which is usually the case), companies tend to prefer FIFO because it results in higher net income.

Others believe that LIFO presents a more realistic net income number. That is, LIFO matches the more recent costs against current revenues to provide a better measure of net income. During periods of inflation, many challenge the quality of non-LIFO earnings, noting that failing to match current costs against current revenues leads to an understatement of cost of goods sold and an overstatement of net income. As some indicate, net income computed using FIFO creates **"paper or phantom profits"**—that is, earnings that do not really exist.

BALANCE SHEET EFFECTS

A major advantage of the FIFO method is that in a period of inflation, the costs allocated to ending inventory will approximate their current cost. For example, for Houston Electronics, 400 of the 450 units in the ending inventory are costed under FIFO at the higher November 27 unit cost of $13.

Conversely, a major shortcoming of the LIFO method is that in a period of inflation, the costs allocated to ending inventory may be significantly understated in terms of current cost. The understatement becomes greater over prolonged periods of inflation if the inventory includes goods purchased in one or more prior accounting periods. For example, Caterpillar has used LIFO for more than 50 years. Its balance sheet shows ending inventory of $12,625 million. But the inventory's actual current cost if FIFO had been used is $15,129 million.

TAX EFFECTS

We have seen that both inventory on the balance sheet and net income on the income statement are higher when companies use FIFO in a period of inflation. Yet, many companies have selected LIFO. Why? The reason is that LIFO results in the lowest income taxes (because of lower net income) during times of rising prices. For example, at Houston Electronics, income taxes are $750 under LIFO, compared to $990 under FIFO. The tax savings of $240 makes more cash available for use in the business.

Helpful Hint
A tax rule, often referred to as the **LIFO conformity rule**, requires that if companies use LIFO for tax purposes they must also use it for financial reporting purposes. This means that if a company chooses the LIFO method to reduce its tax bills, it will also have to report lower net income in its financial statements.

Using Inventory Cost Flow Methods Consistently

Whatever cost flow method a company chooses, it should use that method consistently from one accounting period to another. This approach is often referred to as the **consistency concept**, which means that a company uses the same accounting principles and methods from year to year. Consistent application enhances the comparability of financial statements over successive time periods. In contrast, using the FIFO method one year and the LIFO method the next year would make it difficult to compare the net incomes of the two years.

Although consistent application is preferred, it does not mean that a company may never change its inventory costing method. When a company adopts a different method, it should disclose in the financial statements the change and its effects on net income. Illustration 6-14 shows a typical disclosure, using information from recent financial statements of Quaker Oats (now a unit of PepsiCo).

Illustration 6-14
Disclosure of change in cost flow method

Real World

QUAKER OATS
Notes to the Financial Statements

Note 1: Effective July 1, the Company adopted the LIFO cost flow assumption for valuing the majority of U.S. Grocery Products inventories. The Company believes that the use of the LIFO method better matches current costs with current revenues. The effect of this change on the current year was to decrease net income by $16.0 million.

International Insight ExxonMobil Corporation

Bloomberg/Getty Images

Is LIFO Fair?

ExxonMobil Corporation, like many U.S. companies, uses LIFO to value its inventory for financial reporting and tax purposes. In one recent year, this resulted in a cost of goods sold figure that was $5.6 billion higher than under FIFO. By increasing cost of goods sold, ExxonMobil reduces net income, which reduces taxes. Critics say that LIFO provides an unfair "tax dodge." As Congress looks for more sources of tax revenue, some lawmakers favor the elimination of LIFO. Supporters of LIFO argue that the method is conceptually sound because it matches current costs with current revenues. In addition, they point out that this matching provides protection against inflation.

International accounting standards do not allow the use of LIFO. Because of this, the net income of foreign oil companies such as BP and Royal Dutch Shell are not directly comparable to U.S. companies, which makes analysis difficult.

Source: David Reilly, "Big Oil's Accounting Methods Fuel Criticism," *Wall Street Journal* (August 8, 2006), p. C1.

What are the arguments for and against the use of LIFO? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 2 Cost Flow Methods

The accounting records of Shumway Ag Implements show the following data.

Beginning inventory	4,000 units at $ 3
Purchases	6,000 units at $ 4
Sales	7,000 units at $12

Determine the cost of goods sold during the period under a periodic inventory system using (a) the FIFO method, (b) the LIFO method, and (c) the average-cost method.

Action Plan

- ✔ Understand the periodic inventory system.
- ✔ Allocate costs between goods sold and goods on hand (ending inventory) for each cost flow method.
- ✔ Compute cost of goods sold for each method.

Solution

Cost of goods available for sale = (4,000 × $3) + (6,000 × $4) = $36,000
Ending inventory = 10,000 − 7,000 = 3,000 units

(a) FIFO: $36,000 − (3,000 × $4) = $24,000

(b) LIFO: $36,000 − (3,000 × $3) = $27,000

(c) Average cost per unit: [(4,000 @ $3) + (6,000 @ $4)] ÷ 10,000 = $3.60
Average-cost: $36,000 − (3,000 × $3.60) = $25,200

Related exercise material: **BE6-3, BE6-4, BE6-5, E6-3, E6-4, E6-5, E6-6, E6-7, E6-8, and DO IT! 6-2.**

LEARNING OBJECTIVE 3

Indicate the effects of inventory errors on the financial statements.

Unfortunately, errors occasionally occur in accounting for inventory. In some cases, errors are caused by failure to count or price the inventory correctly. In other cases, errors occur because companies do not properly recognize the transfer of legal title to goods that are in transit. When errors occur, they affect both the income statement and the balance sheet.

Income Statement Effects

Under a periodic inventory system, both the beginning and ending inventories appear in the income statement. The ending inventory of one period automatically becomes the beginning inventory of the next period. Thus, inventory errors affect the computation of cost of goods sold and net income in two periods.

The effects on cost of goods sold can be computed by first entering incorrect data in the formula in Illustration 6-15 and then substituting the correct data.

Illustration 6-15
Formula for cost of goods sold

Beginning Inventory	+	Cost of Goods Purchased	−	Ending Inventory	=	Cost of Goods Sold

If the error understates **beginning** inventory, cost of goods sold will be understated. If the error understates **ending** inventory, cost of goods sold will be overstated. Illustration 6-16 shows the effects of inventory errors on the current year's income statement.

Illustration 6-16
Effects of inventory errors on current year's income statement

When Inventory Error:	Cost of Goods Sold Is:	Net Income Is:
Understates beginning inventory	Understated	Overstated
Overstates beginning inventory	Overstated	Understated
Understates ending inventory	Overstated	Understated
Overstates ending inventory	Understated	Overstated

So far, the effects of inventory errors are fairly straightforward. Now, though, comes the (at first) surprising part: An error in the ending inventory of the current period will have a **reverse effect on net income of the next accounting period**. Illustration 6-17 (page 278) shows this effect. As you study the illustration, you will see that the reverse effect comes from the fact that understating ending inventory in 2016 results in understating beginning inventory in 2017 and overstating net income in 2017.

Over the two years, though, total net income is correct because the errors **offset each other**. Notice that total income using incorrect data is $35,000 ($22,000 + $13,000), which is the same as the total income of $35,000 ($25,000 + $10,000) using correct data. Also note in this example that an error in the beginning inventory does not result in a corresponding error in the ending inventory for that period. The correctness of the ending inventory depends entirely on the accuracy of taking and costing the inventory at the balance sheet date under the periodic inventory system.

ETHICS NOTE

Inventory fraud increases during recessions. Such fraud includes pricing inventory at amounts in excess of its actual value, or claiming to have inventory when no inventory exists. Inventory fraud usually overstates ending inventory, thereby understating cost of goods sold and creating higher income.

SAMPLE COMPANY
Condensed Income Statements

	2016				2017			
	Incorrect		Correct		Incorrect		Correct	
Sales revenue		$80,000		$80,000		$90,000		$90,000
Beginning inventory	$20,000		$20,000		**$12,000**		**$15,000**	
Cost of goods purchased	40,000		40,000		68,000		68,000	
Cost of goods available for sale	60,000		60,000		80,000		83,000	
Ending inventory	**12,000**		**15,000**		23,000		23,000	
Cost of goods sold		48,000		45,000		57,000		60,000
Gross profit		32,000		35,000		33,000		30,000
Operating expenses		10,000		10,000		20,000		20,000
Net income		$22,000		$25,000		$13,000		$10,000

$(3,000)
Net income understated

$3,000
Net income overstated

The errors cancel. Thus, the combined total income for the 2-year period is correct.

Illustration 6-17
Effects of inventory errors on two years' income statements

Balance Sheet Effects

Companies can determine the effect of ending inventory errors on the balance sheet by using the basic accounting equation: Assets = Liabilities + Owner's Equity. Errors in the ending inventory have the effects shown in Illustration 6-18.

Illustration 6-18
Effects of ending inventory errors on balance sheet

Ending Inventory Error	Assets	Liabilities	Owner's Equity
Overstated	Overstated	No effect	Overstated
Understated	Understated	No effect	Understated

The effect of an error in ending inventory on the subsequent period was shown in Illustration 6-17. Recall that if the error is not corrected, the combined total net income for the two periods would be correct. Thus, total owner's equity reported on the balance sheet at the end of 2017 will also be correct.

DO IT! 3 Inventory Errors

Action Plan

✔ An ending inventory error in one period will have an equal and opposite effect on cost of goods sold and net income in the next period.

✔ After two years, the errors have offset each other.

Visual Company overstated its 2016 ending inventory by $22,000. Determine the impact this error has on ending inventory, cost of goods sold, and owner's equity in 2016 and 2017.

Solution

	2016	2017
Ending inventory	$22,000 overstated	No effect
Cost of goods sold	$22,000 understated	$22,000 overstated
Owner's equity	$22,000 overstated	No effect

Related exercise material: **BE6-6, E6-9, E6-10, and DO IT! 6-3.**

LEARNING OBJECTIVE 4

Explain the statement presentation and analysis of inventory.

Presentation

As indicated in Chapter 5, inventory is classified in the balance sheet as a current asset immediately below receivables. In a multiple-step income statement, cost of goods sold is subtracted from net sales. There also should be disclosure of (1) the major inventory classifications, (2) the basis of accounting (cost, or lower-of-cost-or-market), and (3) the cost method (FIFO, LIFO, or average-cost).

Wal-Mart Stores, Inc., for example, in its January 31, 2014, balance sheet reported inventories of $44,858 million under current assets. The accompanying notes to the financial statements, as shown in Illustration 6-19, disclosed the following information.

Illustration 6-19
Inventory disclosures by Wal-Mart

Real World

WAL-MART STORES, INC.
Notes to the Financial Statements

Note 1. Summary of Significant Accounting Policies

Inventories

The Company values inventories at the lower of cost or market as determined primarily by the retail method of accounting, using the last-in, first-out ("LIFO") method for substantially all of the WalMart U.S. segment's inventories. The WalMart International segment's inventories are primarily valued by the retail method of accounting, using the first-in, first-out ("FIFO") method. The retail method of accounting results in inventory being valued at the lower of cost or market since permanent markdowns are currently taken as a reduction of the retail value of inventory. The Sam's Club segment's inventories are valued based on the weighted-average cost using the LIFO method. At January 31, 2014 and 2013, the Company's inventories valued at LIFO approximate those inventories as if they were valued at FIFO.

As indicated in this note, Wal-Mart values its inventories at the lower-of-cost-or-market using LIFO and FIFO.

Lower-of-Cost-or-Market

The value of inventory for companies selling high-technology or fashion goods can drop very quickly due to continual changes in technology or fashions. These circumstances sometimes call for inventory valuation methods other than those presented so far. For example, at one time purchasing managers at Ford decided to make a large purchase of palladium, a precious metal used in vehicle emission devices. They made this purchase because they feared a future shortage. The shortage did not materialize, and by the end of the year the price of palladium had plummeted. Ford's inventory was then worth $1 billion less than its original cost. Do you think Ford's inventory should have been stated at cost, in accordance with the historical cost principle, or at its lower replacement cost?

As you probably reasoned, this situation requires a departure from the cost basis of accounting. This is done by valuing the inventory at the **lower-of-cost-or-market (LCM)** in the period in which the price decline occurs. LCM is a basis whereby inventory is stated at the lower of either its cost or market value as determined by current replacement cost. LCM is an example of the accounting convention of **conservatism**. Conservatism means that the approach adopted among accounting alternatives is the method that is least likely to overstate assets and net income.

International Note

Under U.S. GAAP, companies cannot reverse inventory write-downs if inventory increases in value in subsequent periods. IFRS permits companies to reverse write-downs in some circumstances.

Companies apply LCM to the items in inventory after they have used one of the cost flow methods (specific identification, FIFO, LIFO, or average-cost) to determine cost. Under the LCM basis, market is defined as **current replacement cost**, not selling price. For a merchandising company, current replacement cost is the cost of purchasing the same goods at the present time from the usual suppliers in the usual quantities. Current replacement cost is used because a decline in the replacement cost of an item usually leads to a decline in the selling price of the item.

To illustrate the application of LCM, assume that Ken Tuckie TV has the following lines of merchandise with costs and market values as indicated. LCM produces the results shown in Illustration 6-20. Note that the amounts shown in the final column are the lower-of-cost-or-market amounts for each item.

Illustration 6-20
Computation of lower-of-cost-or-market

	Units	Cost per Unit	Market per Unit	Lower-of-Cost-or-Market	
Flat-screen TVs	100	$600	$550	$ 55,000	($550 × 100)
Satellite radios	500	90	104	45,000	($90 × 500)
Blu-ray players	850	50	48	40,800	($48 × 850)
CDs	3,000	5	6	15,000	($5 × 3,000)
Total inventory				$155,800	

Analysis

The amount of inventory carried by a company has significant economic consequences. And inventory management is a double-edged sword that requires constant attention. On the one hand, management wants to have a great variety and quantity available so that customers have a wide selection and items are always in stock. But, such a policy may incur high carrying costs (e.g., investment, storage, insurance, obsolescence, and damage). On the other hand, low inventory levels lead to stock-outs and lost sales. Common ratios used to manage and evaluate inventory levels are inventory turnover and a related measure, days in inventory.

Inventory turnover measures the number of times on average the inventory is sold during the period. Its purpose is to measure the liquidity of the inventory. The inventory turnover is computed by dividing cost of goods sold by the average inventory during the period. Unless seasonal factors are significant, average inventory can be computed from the beginning and ending inventory balances. For example, Wal-Mart reported in its 2014 annual report a beginning inventory of $43,803 million, an ending inventory of $44,858 million, and cost of goods sold for the year ended January 31, 2014, of $358,069 million. The inventory turnover formula and computation for Wal-Mart are shown below.

Illustration 6-21
Inventory turnover formula and computation for Wal-Mart

Cost of Goods Sold	÷	Average Inventory	=	Inventory Turnover
$358,069	÷	$\frac{\$44,858 + \$43,803}{2}$	=	**8.1 times**

A variant of the inventory turnover is **days in inventory**. This measures the average number of days inventory is held. It is calculated as 365 divided by the inventory turnover. For example, Wal-Mart's inventory turnover of 8.1 times divided into 365 is approximately 45.1 days. This is the approximate time that it takes a company to sell the inventory once it arrives at the store.

There are typical levels of inventory in every industry. Companies that are able to keep their inventory at lower levels and higher turnovers and still satisfy customer needs are the most successful.

Accounting Across the Organization — Sony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Too Many TVs or Too Few?

Financial analysts closely monitored the inventory management practices of companies during the recent recession. For example, some analysts following Sony expressed concern because the company built up its inventory of televisions in an attempt to sell 25 million liquid crystal display (LCD) TVs—a 60% increase over the prior year. A year earlier, Sony had cut its inventory levels so that its quarterly days in inventory was down to 38 days, compared to 61 days for the same quarter a year before that. But now, as a result of its inventory build-up, days in inventory rose to 59 days. While management was saying that it didn't think that Sony's inventory levels were now too high, analysts were concerned that the company would have to engage in very heavy discounting in order to sell off its inventory. Analysts noted that the losses from discounting can be "punishing."

Source: Daisuke Wakabayashi, "Sony Pledges to Corral Inventory," *Wall Street Journal* Online (November 2, 2010).

For Sony, what are the advantages and disadvantages of having a low days in inventory measure? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 4 LCM and Inventory Turnover

(a) Tracy Company sells three different types of home heating stoves (gas, wood, and pellet). The cost and market value of its inventory of stoves are as follows.

	Cost	Market
Gas	$ 84,000	$ 79,000
Wood	250,000	280,000
Pellet	112,000	101,000

Determine the value of the company's inventory under the lower-of-cost-or-market approach.

Solution

The lowest value for each inventory type is gas $79,000, wood $250,000, and pellet $101,000. The total inventory value is the sum of these amounts, $430,000.

Action Plan

✔ Determine whether cost or market value is lower for each inventory type.

✔ Sum the lowest value of each inventory type to determine the total value of inventory.

(b) Early in 2017, Westmoreland Company switched to a just-in-time inventory system. Its sales revenue, cost of goods sold, and inventory amounts for 2016 and 2017 are shown below.

	2016	2017
Sales revenue	$2,000,000	$1,800,000
Cost of goods sold	1,000,000	910,000
Beginning inventory	290,000	210,000
Ending inventory	210,000	50,000

Determine the inventory turnover and days in inventory for 2016 and 2017. Discuss the changes in the amount of inventory, the inventory turnover and days in inventory, and the amount of sales across the two years.

Solution

	2016	2017
Inventory turnover	$\dfrac{\$1{,}000{,}000}{(\$290{,}000 + \$210{,}000)/2} = 4$	$\dfrac{\$910{,}000}{(\$210{,}000 + \$50{,}000)/2} = 7$
Days in inventory	$365 \div 4 = 91.3$ days	$365 \div 7 = 52.1$ days

Action Plan

✔ To find the inventory turnover, divide cost of goods sold by average inventory.

✔ To determine days in inventory, divide 365 days by the inventory turnover.

Action Plan (cont'd)

✔ Just-in-time inventory reduces the amount of inventory on hand, which reduces carrying costs. Reducing inventory levels by too much has potential negative implications for sales.

The company experienced a very significant decline in its ending inventory as a result of the just-in-time inventory. This decline improved its inventory turnover and its days in inventory. However, its sales declined by 10%. It is possible that this decline was caused by the dramatic reduction in the amount of inventory that was on hand, which increased the likelihood of "stock-outs." To determine the optimal inventory level, management must weigh the benefits of reduced inventory against the potential lost sales caused by stock-outs.

Related exercise material: **BE6-7, BE6-8, E6-11, E6-12, E6-13, E6-14, and DO IT! 6-4.**

LEARNING OBJECTIVE *5

APPENDIX 6A: Apply the inventory cost flow methods to perpetual inventory records.

What inventory cost flow methods can companies employ if they use a perpetual inventory system? Simple—they can use any of the inventory cost flow methods described in the chapter. To illustrate the application of the three assumed cost flow methods (FIFO, LIFO, and average-cost), we will use the data shown in Illustration 6A-1 and in this chapter for Houston Electronics' Astro condensers.

Illustration 6A-1
Inventoriable units and costs

HOUSTON ELECTRONICS
Astro Condensers

Date	Explanation	Units	Unit Cost	Total Cost	Balance in Units
1/1	Beginning inventory	100	$10	$ 1,000	100
4/15	Purchases	200	11	2,200	300
8/24	Purchases	300	12	3,600	600
9/10	Sale	550			50
11/27	Purchases	400	13	5,200	450
				$12,000	

First-In, First-Out (FIFO)

Under perpetual FIFO, the company charges to cost of goods sold the cost of the earliest goods on hand **prior to each sale**. Therefore, the cost of goods sold on September 10 consists of the units on hand January 1 and the units purchased April 15 and August 24. Illustration 6A-2 shows the inventory under a FIFO method perpetual system.

Illustration 6A-2
Perpetual system—FIFO

Date	Purchases		Cost of Goods Sold	Balance (in units and cost)	
January 1				(100 @ $10)	$ 1,000
April 15	(200 @ $11)	$2,200		(100 @ $10) (200 @ $11)	$ 3,200
August 24	(300 @ $12)	$3,600		(100 @ $10) (200 @ $11) (300 @ $12)	$ 6,800
September 10			(100 @ $10) (200 @ $11) (250 @ $12) **$6,200**	(50 @ $12)	$ 600
November 27	(400 @ $13)	$5,200		(50 @ $12) (400 @ $13)	**$5,800**

Cost of goods sold

Ending inventory

The ending inventory in this situation is $5,800, and the cost of goods sold is $6,200 [(100 @ $10) + (200 @ $11) + (250 @ $12)].

Compare Illustrations 6-6 (page 271) and 6A-2. You can see that the results under FIFO in a perpetual system are the **same as in a periodic system**. In both cases, the ending inventory is $5,800 and cost of goods sold is $6,200. Regardless of the system, the first costs in are the costs assigned to cost of goods sold.

Last-In, First-Out (LIFO)

Under the LIFO method using a perpetual system, the company charges to cost of goods sold the cost of the most recent purchase prior to sale. Therefore, the cost of the goods sold on September 10 consists of all the units from the August 24 and April 15 purchases plus 50 of the units in beginning inventory. Illustration 6A-3 shows the computation of the ending inventory under the LIFO method.

Illustration 6A-3
Perpetual system—LIFO

Date	Purchases		Cost of Goods Sold	Balance (in units and cost)	
January 1				(100 @ $10)	$ 1,000
April 15	(200 @ $11)	$2,200		(100 @ $10)	$ 3,200
				(200 @ $11)	
August 24	(300 @ $12)	$3,600		(100 @ $10)	
				(200 @ $11)	$ 6,800
				(300 @ $12)	
September 10			(300 @ $12)		
			(200 @ $11)		
			(50 @ $10)	(50 @ $10)	$ 500
			$6,300 Cost of goods sold		
November 27	(400 @ $13)	$5,200		(50 @ $10)	**$5,700** Ending inventory
				(400 @ $13)	

The use of LIFO in a perpetual system will usually produce cost allocations that differ from those using LIFO in a periodic system. In a perpetual system, the company allocates the latest units purchased **prior to each sale** to cost of goods sold. In contrast, in a periodic system, the latest units purchased **during the period** are allocated to cost of goods sold. Thus, when a purchase is made after the last sale, the LIFO periodic system will apply this purchase to the previous sale. Compare Illustrations 6-8 (page 272) and 6A-3. Illustration 6-8 shows that the 400 units at $13 purchased on November 27 applied to the sale of 550 units on September 10. Under the LIFO perpetual system in Illustration 6A-3, the 400 units at $13 purchased on November 27 are all applied to the ending inventory.

The ending inventory in this LIFO perpetual illustration is $5,700, and cost of goods sold is $6,300, as compared to the LIFO periodic Illustration 6-8 (page 272) where the ending inventory is $5,000 and cost of goods sold is $7,000.

Average-Cost

The average-cost method in a perpetual inventory system is called the **moving-average method**. Under this method, the company computes a new average **after each purchase**, by dividing the cost of goods available for sale by the units on hand. The average cost is then applied to (1) the units sold, to determine the cost of goods sold, and (2) the remaining units on hand, to determine the ending inventory amount. Illustration 6A-4 (page 284) shows the application of the moving-average cost method by Houston Electronics (computations of the moving-average unit cost are shown after Illustration 6A-4).

Illustration 6A-4
Perpetual system—moving-average method

Date	Purchases	Cost of Goods Sold	Balance (in units and cost)
January 1			(100 @ \$10) \$ 1,000
April 15	(200 @ \$11) \$2,200		(300 @ \$10.667) \$ 3,200
August 24	(300 @ \$12) \$3,600		(600 @ \$11.333) \$ 6,800
September 10		(550 @ \$11.333)	(50 @ \$11.333) \$ 567
		\$6,233	
November 27	(400 @ \$13) \$5,200		(450 @ \$12.816) **\$5,767**

Cost of goods sold

Ending inventory

As indicated, Houston Electronics computes **a new average each time it makes a purchase**.

1. On April 15, after Houston buys 200 units for \$2,200, a total of 300 units costing \$3,200 (\$1,000 + \$2,200) are on hand. The average unit cost is \$10.667 (\$3,200 ÷ 300).
2. On August 24, after Houston buys 300 units for \$3,600, a total of 600 units costing \$6,800 (\$1,000 + \$2,200 + \$3,600) are on hand. The average cost per unit is \$11.333 (\$6,800 ÷ 600).
3. On September 10, to compute cost of goods sold, Houston uses this unit cost of \$11.333 until it makes another purchase, when the company computes a new unit cost. Accordingly, the unit cost of the 550 units sold on September 10 is \$11.333, and the total cost of goods sold is \$6,233.
4. On November 27, following the purchase of 400 units for \$5,200, there are 450 units on hand costing \$5,767 (\$567 + \$5,200) with a new average cost of \$12.816 (\$5,767 ÷ 450).

Compare this moving-average cost under the perpetual inventory system to Illustration 6-11 (page 273) showing the average-cost method under a periodic inventory system.

LEARNING OBJECTIVE *6

APPENDIX 6B: Describe the two methods of estimating inventories.

In the chapter, we assumed that a company would be able to physically count its inventory. What if it cannot? What if the inventory were destroyed by fire or flood, for example? In that case, the company would use an estimate.

Two circumstances explain why companies sometimes estimate inventories. First, a casualty such as fire, flood, or earthquake may make it impossible to take a physical inventory. Second, managers may want monthly or quarterly financial statements, but a physical inventory is taken only annually. The need for estimating inventories occurs primarily with a periodic inventory system because of the absence of perpetual inventory records.

There are two widely used methods of estimating inventories: (1) the gross profit method, and (2) the retail inventory method.

Gross Profit Method

The **gross profit method** estimates the cost of ending inventory by applying a gross profit rate to net sales. This method is relatively simple but effective. Accountants, auditors, and managers frequently use the gross profit method to test the reasonableness of the ending inventory amount. It will detect large errors.

To use this method, a company needs to know its net sales, cost of goods available for sale, and gross profit rate. The company then can estimate its gross profit for the period. Illustration 6B-1 shows the formulas for using the gross profit method.

Illustration 6B-1
Gross profit method formulas

Step 1:	**Net Sales**	**−**	**Estimated Gross Profit**	**=**	**Estimated Cost of Goods Sold**
Step 2:	**Cost of Goods Available for Sale**	**−**	**Estimated Cost of Goods Sold**	**=**	**Estimated Cost of Ending Inventory**

To illustrate, assume that Kishwaukee Company wishes to prepare an income statement for the month of January. Its records show net sales of $200,000, beginning inventory $40,000, and cost of goods purchased $120,000. In the preceding year, the company realized a 30% gross profit rate. It expects to earn the same rate this year. Given these facts and assumptions, Kishwaukee can compute the estimated cost of the ending inventory at January 31 under the gross profit method as follows.

Illustration 6B-2
Example of gross profit method

Step 1:	
Net sales	$ 200,000
Less: Estimated gross profit (30% × $200,000)	60,000
Estimated cost of goods sold	**$140,000**
Step 2:	
Beginning inventory	$ 40,000
Cost of goods purchased	120,000
Cost of goods available for sale	160,000
Less: Estimated cost of goods sold	140,000
Estimated cost of ending inventory	**$ 20,000**

The gross profit method is based on the assumption that the gross profit rate will remain constant. But, it may not remain constant, due to a change in merchandising policies or in market conditions. In such cases, the company should adjust the rate to reflect current operating conditions. In some cases, companies can obtain a more accurate estimate by applying this method on a department or product-line basis.

Note that companies should not use the gross profit method to prepare financial statements at the end of the year. These statements should be based on a physical inventory count.

Retail Inventory Method

A retail store such as Home Depot, Ace Hardware, or Walmart has thousands of different types of merchandise at low unit costs. In such cases, it is difficult and time-consuming to apply unit costs to inventory quantities. An alternative is to use the **retail inventory method** to estimate the cost of inventory. Most retail companies can establish a relationship between cost and sales price. The company then applies the cost-to-retail percentage to the ending inventory at retail prices to determine inventory at cost.

Under the retail inventory method, a company's records must show both the cost and retail value of the goods available for sale. Illustration 6B-3 (page 286) presents the formulas for using the retail inventory method.

We can demonstrate the logic of the retail method by using unit-cost data. Assume that Ortiz Inc. has marked 10 units purchased at $7 to sell for $10 per unit. Thus, the cost-to-retail ratio is 70% ($70 ÷ $100). If four units remain unsold, their retail value is $40 (4 × $10), and their cost is $28 ($40 × 70%). This amount agrees with the total cost of goods on hand on a per unit basis (4 × $7).

Illustration 6B-3
Retail inventory method formulas

Step 1:	Goods Available for Sale at Retail	−	Net Sales	=	Ending Inventory at Retail
Step 2:	Goods Available for Sale at Cost	÷	Goods Available for Sale at Retail	=	Cost-to-Retail Ratio
Step 3:	Ending Inventory at Retail	×	Cost-to-Retail Ratio	=	Estimated Cost of Ending Inventory

Illustration 6B-4 shows application of the retail method for Valley West. Note that it is not necessary to take a physical inventory to determine the estimated cost of goods on hand at any given time.

Illustration 6B-4
Application of retail inventory method

	At Cost	At Retail
Beginning inventory	$14,000	$ 21,500
Goods purchased	61,000	78,500
Goods available for sale	$75,000	100,000
Less: Net sales		70,000
Step (1) Ending inventory at retail =		**$ 30,000**

Step (2) Cost-to-retail ratio = $75,000 ÷ $100,000 = 75%
Step (3) Estimated cost of ending inventory = $30,000 × 75% = $22,500

Helpful Hint
In determining inventory at retail, companies use selling prices of the units.

The retail inventory method also facilitates taking a physical inventory at the end of the year. Valley West can value the goods on hand at the prices marked on the merchandise, and then apply the cost-to-retail ratio to the goods on hand at retail to determine the ending inventory at cost.

The major disadvantage of the retail method is that it is an averaging technique. Thus, it may produce an incorrect inventory valuation if the mix of the ending inventory is not representative of the mix in the goods available for sale. Assume, for example, that the cost-to-retail ratio of 75% for Valley West consists of equal proportions of inventory items that have cost-to-retail ratios of 70%, 75%, and 80%. If the ending inventory contains only items with a 70% ratio, an incorrect inventory cost will result. Companies can minimize this problem by applying the retail method on a department or product-line basis.

REVIEW AND PRACTICE

LEARNING OBJECTIVES REVIEW

1 **Discuss how to classify and determine inventory.** Merchandisers need only one inventory classification, merchandise inventory, to describe the different items that make up total inventory. Manufacturers, on the other hand, usually classify inventory into three categories: finished goods, work in process, and raw materials. To determine inventory quantities, manufacturers (1) take a physical inventory of goods on hand and (2) determine the ownership of goods in transit or on consignment.

2 **Apply inventory cost flow methods and discuss their financial effects.** The primary basis of accounting for inventories is cost. Cost of goods available for sale includes (a) cost of beginning inventory and (b) cost of goods purchased. The inventory cost flow methods are specific identification and three assumed cost flow methods—FIFO, LIFO, and average-cost.

When prices are rising, the first-in, first-out (FIFO) method results in lower cost of goods sold and higher net income than the other methods. The last-in, first-out

(LIFO) method results in the lowest income taxes. The reverse is true when prices are falling. In the balance sheet, FIFO results in an ending inventory that is closest to current value. Inventory under LIFO is the farthest from current value.

3 **Indicate the effects of inventory errors on the financial statements.** In the income statement of the current year: (a) If beginning inventory is understated, net income is overstated. The reverse occurs if beginning inventory is overstated. (b) If ending inventory is overstated, net income is overstated. If ending inventory is understated, net income is understated. In the following period, its effect on net income for that period is reversed, and total net income for the two years will be correct.

In the balance sheet: Ending inventory errors will have the same effect on total assets and total owner's equity and no effect on liabilities.

4 **Explain the statement presentation and analysis of inventory.** Inventory is classified in the balance sheet as a current asset immediately below receivables. There also should be disclosure of (1) the major inventory classifications, (2) the basis of accounting, and (3) the cost method.

Companies use the lower-of-cost-or-market (LCM) basis when the current replacement cost (market) is less than cost. Under LCM, companies recognize the loss in the period in which the price decline occurs.

The inventory turnover is cost of goods sold divided by average inventory. To convert it to average days in inventory, divide 365 days by the inventory turnover.

*5 **Apply the inventory cost flow methods to perpetual inventory records.** Under FIFO and a perpetual inventory system, companies charge to cost of goods sold the cost of the earliest goods on hand prior to each sale. Under LIFO and a perpetual system, companies charge to cost of goods sold the cost of the most recent purchase prior to sale. Under the moving-average (average-cost) method and a perpetual system, companies compute a new average cost after each purchase.

*6 **Describe the two methods of estimating inventories.** The two methods of estimating inventories are the gross profit method and the retail inventory method. Under the gross profit method, companies apply a gross profit rate to net sales to determine estimated gross profit and cost of goods sold. They then subtract estimated cost of goods sold from cost of goods available for sale to determine the estimated cost of the ending inventory.

Under the retail inventory method, companies compute a cost-to-retail ratio by dividing the cost of goods available for sale by the retail value of the goods available for sale. They then apply this ratio to the ending inventory at retail to determine the estimated cost of the ending inventory.

GLOSSARY REVIEW

Average-cost method Inventory costing method that uses the weighted-average unit cost to allocate to ending inventory and cost of goods sold the cost of goods available for sale. (p. 273).

Consigned goods Goods held for sale by one party although ownership of the goods is retained by another party. (p. 267).

Consistency concept Dictates that a company use the same accounting principles and methods from year to year. (p. 275).

Current replacement cost The current cost to replace an inventory item. (p. 280).

Days in inventory Measure of the average number of days inventory is held; calculated as 365 divided by inventory turnover. (p. 280).

Finished goods inventory Manufactured items that are completed and ready for sale. (p. 264).

First-in, first-out (FIFO) method Inventory costing method that assumes that the costs of the earliest goods purchased are the first to be recognized as cost of goods sold. (p. 270).

FOB (free on board) destination Freight terms indicating that ownership of the goods remains with the seller until the goods reach the buyer. (p. 267).

FOB (free on board) shipping point Freight terms indicating that ownership of the goods passes to the buyer when the public carrier accepts the goods from the seller. (p. 266).

***Gross profit method** A method for estimating the cost of the ending inventory by applying a gross profit rate to net sales and subtracting estimated cost of goods sold from cost of goods available for sale. (p. 284).

Inventory turnover A ratio that measures the number of times on average the inventory sold during the period; computed by dividing cost of goods sold by the average inventory during the period. (p. 280).

Just-in-time (JIT) inventory Inventory system in which companies manufacture or purchase goods only when needed for use. (p. 264).

Last-in, first-out (LIFO) method Inventory costing method that assumes the costs of the latest units purchased are the first to be allocated to cost of goods sold. (p. 272).

Lower-of-cost-or-market (LCM) A basis whereby inventory is stated at the lower of either its cost or its market value as determined by current replacement cost. (p. 279).

***Moving-average method** A new average is computed after each purchase, by dividing the cost of goods available for sale by the units on hand. (p. 283).

Raw materials Basic goods that will be used in production but have not yet been placed into production. (p. 264).

***Retail inventory method** A method for estimating the cost of the ending inventory by applying a cost-to-retail ratio to the ending inventory at retail. (p. 285).

Specific identification method An actual physical flow costing method in which items still in inventory are specifically costed to arrive at the total cost of the ending inventory. (p. 269).

Weighted-average unit cost Average cost that is weighted by the number of units purchased at each unit cost. (p. 273).

Work in process That portion of manufactured inventory that has been placed into the production process but is not yet complete. (p. 264).

PRACTICE MULTIPLE-CHOICE QUESTIONS

(LO 1) **1.** Which of the following should **not** be included in the physical inventory of a company?
(a) Goods held on consignment from another company.
(b) Goods shipped on consignment to another company.
(c) Goods in transit from another company shipped FOB shipping point.
(d) None of the above.

(LO 1) **2.** As a result of a thorough physical inventory, Railway Company determined that it had inventory worth $180,000 at December 31, 2017. This count did not take into consideration the following facts: Rogers Consignment store currently has goods worth $35,000 on its sales floor that belong to Railway but are being sold on consignment by Rogers. The selling price of these goods is $50,000. Railway purchased $13,000 of goods that were shipped on December 27, FOB destination, that will be received by Railway on January 3. Determine the correct amount of inventory that Railway should report.
(a) $230,000. (c) $228,000.
(b) $215,000. (d) $193,000.

(LO 2) **3.** Cost of goods available for sale consists of two elements: beginning inventory and
(a) ending inventory.
(b) cost of goods purchased.
(c) cost of goods sold.
(d) All of the answer choices are correct.

(LO 2) **4.** Poppins Company has the following:

	Units	Unit Cost
Inventory, Jan. 1	8,000	$11
Purchase, June 19	13,000	12
Purchase, Nov. 8	5,000	13

If Poppins has 9,000 units on hand at December 31, the cost of the ending inventory under FIFO is:
(a) $99,000. (c) $113,000.
(b) $108,000. (d) $117,000.

(LO 2) **5.** Using the data in Question 4 above, the cost of the ending inventory under LIFO is:
(a) $113,000. (c) $99,000.
(b) $108,000. (d) $100,000.

(LO 2) **6.** Hansel Electronics has the following:

	Units	Unit Cost
Inventory, Jan. 1	5,000	$ 8
Purchase, April 2	15,000	$10
Purchase, Aug. 28	20,000	$12

If Hansel has 7,000 units on hand at December 31, the cost of ending inventory under the average-cost method is:
(a) $84,000. (c) $56,000.
(b) $70,000. (d) $75,250.

7. In periods of rising prices, LIFO will produce: (LO 2)
(a) higher net income than FIFO.
(b) the same net income as FIFO.
(c) lower net income than FIFO.
(d) higher net income than average-cost.

8. Factors that affect the selection of an inventory costing method do **not** include: (LO 2)
(a) tax effects.
(b) balance sheet effects.
(c) income statement effects.
(d) perpetual vs. periodic inventory system.

9. Falk Company's ending inventory is understated $4,000. The effects of this error on the current year's cost of goods sold and net income, respectively, are: (LO 3)
(a) understated, overstated.
(b) overstated, understated.
(c) overstated, overstated.
(d) understated, understated.

10. Pauline Company overstated its inventory by $15,000 at December 31, 2016. It did not correct the error in 2016 or 2017. As a result, Pauline's owner's equity was: (LO 3)
(a) overstated at December 31, 2016, and understated at December 31, 2017.
(b) overstated at December 31, 2016, and properly stated at December 31, 2017.
(c) understated at December 31, 2016, and understated at December 31, 2017.
(d) overstated at December 31, 2016, and overstated at December 31, 2017.

11. Norton Company purchased 1,000 widgets and has 200 widgets in its ending inventory at a cost of $91 each and a current replacement cost of $80 each. The ending inventory under lower-of-cost-or-market is: (LO 4)
(a) $91,000. (c) $18,200.
(b) $80,000. (d) $16,000.

12. Santana Company had beginning inventory of $80,000, ending inventory of $110,000, cost of goods sold of $285,000, and sales of $475,000. Santana's days in inventory is: (LO 4)
(a) 73 days. (c) 102.5 days.
(b) 121.7 days. (d) 84.5 days.

13. Which of these would cause the inventory turnover to increase the most? (LO 4)
(a) Increasing the amount of inventory on hand.
(b) Keeping the amount of inventory on hand constant but increasing sales.
(c) Keeping the amount of inventory on hand constant but decreasing sales.
(d) Decreasing the amount of inventory on hand and increasing sales.

***14.** In a perpetual inventory system: (LO 5)
(a) LIFO cost of goods sold will be the same as in a periodic inventory system.

(b) average costs are a simple average of unit costs incurred.
(c) a new average is computed under the average-cost method after each sale.
(d) FIFO cost of goods sold will be the same as in a periodic inventory system.

*15. King Company has sales of $150,000 and cost of goods available for sale of $135,000. If the gross profit rate is 30%, the estimated cost of the ending inventory under the gross profit method is: (LO 6)
(a) $15,000.
(b) $30,000.
(c) $45,000.
(d) $75,000.

Solutions

1. (a) Goods held on consignment should not be included because another company has title (ownership) to the goods. The other choices are incorrect because (b) goods shipped on consignment to another company and (c) goods in transit from another company shipped FOB shipping point should be included in a company's ending inventory. Choice (d) is incorrect as there is a correct answer for this question.

2. (b) The inventory held on consignment by Rogers should be included in Railway's inventory balance at cost ($35,000). The purchased goods of $13,000 should not be included in inventory until January 3 because the goods are shipped FOB destination. Therefore, the correct amount of inventory is $215,000 ($180,000 + $35,000), not (a) $230,000, (c) $228,000, or (d) $193,000.

3. (b) Cost of goods available for sale consists of beginning inventory and cost of goods purchased, not (a) ending inventory or (c) cost of goods sold. Therefore, choice (d) All of the above is also incorrect.

4. (c) Under FIFO, ending inventory will consist of 5,000 units from the Nov. 8 purchase and 4,000 units from the June 19 purchase. Therefore, ending inventory is (5,000 × $13) + (4,000 × $12) = $113,000, not (a) $99,000, (b) $108,000, or (d) $117,000.

5. (d) Under LIFO, ending inventory will consist of 8,000 units from the inventory at Jan. 1 and 1,000 units from the June 19 purchase. Therefore, ending inventory is (8,000 × $11) + (1,000 × $12) = $100,000, not (a) $113,000, (b) $108,000, or (c) $99,000.

6. (d) Under the average-cost method, total cost of goods available for sale needs to be calculated in order to determine average cost per unit. The total cost of goods available is $430,000 = (5,000 × $8) + (15,000 × $10) + (20,000 × $12). The average cost per unit = ($430,000/40,000 total units available for sale) = $10.75. Therefore, ending inventory is ($10.75 × 7,000) = $75,250, not (a) $84,000, (b) $70,000, or (c) $56,000.

7. (c) In periods of rising prices, LIFO will produce lower net income than FIFO, not (a) higher than FIFO or (b) the same as FIFO. Choice (d) is incorrect because in periods of rising prices, LIFO will produce lower net income than average-cost. LIFO therefore charges the highest inventory cost against revenues in a period of rising prices.

8. (d) Perpetual vs. periodic inventory system is not one of the factors that affect the selection of an inventory costing method. The other choices are incorrect because (a) tax effects, (b) balance sheet effects, and (c) income statement effects all affect the selection of an inventory costing method.

9. (b) Because ending inventory is too low, cost of goods sold will be too high (overstated) and since cost of goods sold (an expense) is too high, net income will be too low (understated). Therefore, the other choices are incorrect.

10. (b) Owner's equity is overstated by $15,000 at December 31, 2016, and is properly stated at December 31, 2017. An ending inventory error in one period will have an equal and opposite effect on cost of goods sold and net income in the next period; after two years, the errors have offset each other. The other choices are incorrect because owner's equity (a) is properly stated, not understated, at December 31,2017; (c) is overstated, not understated, by $15,000 at December 31, 2016, and is properly stated, not understated, at December 31, 2017; and (d) is properly stated at December 31, 2017, not overstated.

11. (d) Under the LCM basis, "market" is defined as the current replacement cost. Therefore, ending inventory would be valued at 200 widgets × $80 each = $16,000, not (a) $91,000, (b) $80,000, or (c) $18,200.

12. (b) Santana's days in inventory = 365/Inventory turnover = 365/[$285,000/ ($80,000 + $110,000)/2)] = 121.7 days, not (a) 73 days, (c) 102.5 days, or (d) 84.5 days.

13. (d) Decreasing the amount of inventory on hand will cause the denominator to decrease, causing inventory turnover to increase. Increasing sales will cause the numerator of the ratio to increase (higher sales means higher COGS), thus causing inventory turnover to increase even more. The other choices are incorrect because (a) increasing the amount of inventory on hand causes the denominator of the ratio to increase while the numerator stays the same, causing inventory turnover to decrease; (b) keeping the amount of inventory on hand constant but increasing sales will cause inventory turnover to increase because the numerator of the ratio will increase (higher sales means higher COGS) while the denominator stays the same, which will result in a lesser inventory increase than decreasing amount of inventory on hand and increasing sales; and (c) keeping the amount of inventory on hand constant but decreasing sales will cause inventory turnover to decrease because the numerator of the ratio will decrease (lower sales means lower COGS) while the denominator stays the same.

***14. (d)** FIFO cost of goods sold is the same under both a periodic and a perpetual inventory system. The other choices are incorrect because (a) LIFO cost of goods sold is not the same under a periodic and a perpetual inventory system; (b) average costs are based on a moving average of unit costs, not an average of unit costs; and (c) a new average is computed under the average-cost method after each purchase, not sale.

***15. (b)** COGS = Sales ($150,000) − Gross profit ($150,000 × 30%) = $105,000. Ending inventory = Cost of goods available for sale ($135,000) − COGS ($105,000) = $30,000, not (a) $15,000, (c) $45,000, or (d) $75,000.

PRACTICE EXERCISES

Determine the correct inventory amount.

(LO 1)

1. Matt Clark, an auditor with Grant CPAs, is performing a review of Parson Company's inventory account. Parson did not have a good year and top management is under pressure to boost reported income. According to its records. the inventory balance at year-end was $600,000. However, the following information was not considered when determining that amount.

1. The physical count did not include goods purchased by Parson with a cost of $30,000 that were shipped FOB destination on December 28 and did not arrive at Parson's warehouse until January 3.
2. Included in the company's count were goods with a cost of $150,000 that the company is holding on consignment. The goods belong to Alvarez Corporation.
3. Included in the inventory account was $21,000 of office supplies that were stored in the warehouse and were to be used by the company's supervisors and managers during the coming year.
4. The company received an order on December 28 that was boxed and was sitting on the loading dock awaiting pick-up on December 31. The shipper picked up the goods on January 1 and delivered them on January 6. The shipping terms were FOB shipping point. The goods had a selling price of $29,000 and a cost of $19,000. The goods were not included in the count because they were sitting on the dock.
5. On December 29, Parson shipped goods with a selling price of $56,000 and a cost of $40,000 to Decco Corporation FOB shipping point. The goods arrived on January 3. Decco had only ordered goods with a selling price of $10,000 and a cost of $6,000. However, a Parson's sales manager had authorized the shipment and said that if Decco wanted to ship the goods back next week, it could.
6. Included in the count was $27,000 of goods that were parts for a machine that the company no longer made. Given the high-tech nature of Parson's products, it was unlikely that these obsolete parts had any other use. However, management would prefer to keep them on the books at cost, "since that is what we paid for them, after all."

Instructions

Prepare a schedule to determine the correct inventory amount. Provide explanations for each item above, saying why you did or did not make an adjustment for each item.

Solution

1. Ending inventory—as reported	$600,000
1. No effect—title does not pass to Parson until goods are received (Jan. 3).	0
2. Subtract from inventory: The goods belong to Alvarez Corporation. Parson is merely holding them as a consignee.	(150,000)
3. Subtract from inventory: Office supplies should be carried in a separate account. They are not considered inventory held for resale.	(21,000)
4. Add to inventory: The goods belong to Parson until they are shipped (Jan. 1).	19,000
5. Add to inventory: Decco ordered goods with a cost of $6,000. Parson should record the corresponding sales revenue of $10,000. Parson's decision to ship extra "unordered" goods does not constitute a sale. The manager's statement that Decco could ship the goods back indicates that Parson knows this over-shipment is not a legitimate sale. The manager acted unethically in an attempt to improve Parson's reported income by overshipping.	34,000
6. Subtract from inventory: GAAP require that inventory be valued at the lower-of-cost-or-market. Obsolete parts should be adjusted from cost to zero if they have no other use.	(27,000)
Correct inventory	$455,000

2. Rhode Software reported cost of goods sold as follows.

Determine effects of inventory errors.

(LO 3)

	2016	2017
Beginning inventory	$ 27,000	$ 40,000
Cost of goods purchased	200,000	235,000
Cost of goods available for sale	227,000	275,000
Ending inventory	40,000	45,000
Cost of goods sold	$187,000	$230,000

Rhode made two errors: (1) 2016 ending inventory was overstated $4,000, and (2) 2017 ending inventory was understated $9,000.

Instructions

Compute the correct cost of goods sold for each year.

Solution

2.

	2016	2017
Beginning inventory	$ 27,000	$ 36,000
Cost of goods purchased	200,000	235,000
Cost of goods available for sale	227,000	271,000
Corrected ending inventory	(36,000)[a]	(54,000)[b]
Cost of goods sold	$191,000	$217,000

[a]$40,000 − $4,000 = $36,000; [b]$45,000 + $9,000 = $54,000

PRACTICE PROBLEMS

1. Gerald D. Englehart Company has the following inventory, purchases, and sales data for the month of March.

Compute inventory and cost of goods sold using three cost flow methods in a periodic inventory system.

(LO 2)

Inventory:	March 1	200 units @ $4.00	$ 800
Purchases:	March 10	500 units @ $4.50	2,250
	March 20	400 units @ $4.75	1,900
	March 30	300 units @ $5.00	1,500
Sales:	March 15	500 units	
	March 25	400 units	

The physical inventory count on March 31 shows 500 units on hand.

Instructions

Under a **periodic inventory system**, determine the cost of inventory on hand at March 31 and the cost of goods sold for March under (a) FIFO, (b) LIFO, and (c) average-cost.

Solution

1. The cost of goods available for sale is $6,450, as follows.

Inventory:		200 units @ $4.00	$ 800
Purchases:	March 10	500 units @ $4.50	2,250
	March 20	400 units @ $4.75	1,900
	March 30	300 units @ $5.00	1,500
Total:		1,400	$6,450

Under a **periodic inventory system**, the cost of goods sold under each cost flow method is as follows.

(a) **FIFO Method**

Ending inventory:

Date	Units	Unit Cost	Total Cost	
March 30	300	$5.00	$1,500	
March 20	200	4.75	950	$2,450

Cost of goods sold: $6,450 − $2,450 = $4,000

(b) **LIFO Method**

Ending inventory:

Date	Units	Unit Cost	Total Cost	
March 1	200	$4.00	$ 800	
March 10	300	4.50	1,350	$2,150

Cost of goods sold: $6,450 − $2,150 = $4,300

(c) **Average-Cost Method**

Average unit cost: $6,450 ÷ 1,400 = $4.607
Ending inventory: 500 × $4.607 = $2,303.50

Cost of goods sold: $6,450 − $2,303.50 = $4,146.50

Compute inventory and cost of goods sold using three cost flow methods in a perpetual inventory system.

(LO 5)

***2. Practice Problem 1** on page 291 showed cost of goods sold computations under a periodic inventory system. Now let's assume that Gerald D. Englehart Company uses a perpetual inventory system. The company has the same inventory, purchases, and sales data for the month of March as shown earlier:

Inventory:	March 1	200 units @ $4.00	$ 800
Purchases:	March 10	500 units @ $4.50	2,250
	March 20	400 units @ $4.75	1,900
	March 30	300 units @ $5.00	1,500
Sales:	March 15	500 units	
	March 25	400 units	

The physical inventory count on March 31 shows 500 units on hand.

Instructions

Under a **perpetual inventory system**, determine the cost of inventory on hand at March 31 and the cost of goods sold for March under (a) FIFO, (b) LIFO, and (c) moving-average cost.

Solution

2. The cost of goods available for sale is $6,450, as follows.

Inventory:		200 units @ $4.00	$ 800
Purchases:	March 10	500 units @ $4.50	2,250
	March 20	400 units @ $4.75	1,900
	March 30	300 units @ $5.00	1,500
Total:		1,400	$6,450

Under a **perpetual inventory system**, the cost of goods sold under each cost flow method is as follows.

(a) **FIFO Method**

Date	Purchases	Cost of Goods Sold	Balance
March 1			(200 @ $4.00) $ 800
March 10	(500 @ $4.50) $2,250		(200 @ $4.00) (500 @ $4.50) } $3,050
March 15		(200 @ $4.00) (300 @ $4.50) $2,150	(200 @ $4.50) $ 900
March 20	(400 @ $4.75) $1,900		(200 @ $4.50) (400 @ $4.75) } $2,800
March 25		(200 @ $4.50) (200 @ $4.75) $1,850	(200 @ $4.75) $ 950
March 30	(300 @ $5.00) $1,500		(200 @ $4.75) (300 @ $5.00) } $2,450

Ending inventory $2,450 Cost of goods sold: $2,150 + $1,850 = $4,000

(b) **LIFO Method**

Date	Purchases		Cost of Goods Sold		Balance	
March 1					(200 @ $4.00)	$ 800
March 10	(500 @ $4.50)	$2,250			(200 @ $4.00) (500 @ $4.50)	$3,050
March 15			(500 @ $4.50)	$2,250	(200 @ $4.00)	$ 800
March 20	(400 @ $4.75)	$1,900			(200 @ $4.00) (400 @ $4.75)	$2,700
March 25			(400 @ $4.75)	$1,900	(200 @ $4.00)	$ 800
March 30	(300 @ $5.00)	$1,500			(200 @ $4.00) (300 @ $5.00)	$2,300

Ending inventory $2,300 Cost of goods sold: $2,250 + $1,900 = $4,150

(c) **Moving-Average Cost Method**

Date	Purchases		Cost of Goods Sold		Balance	
March 1					(200 @ $ 4.00)	$ 800
March 10	(500 @ $4.50)	$2,250			(700 @ $4.357)	$3,050
March 15			(500 @ $4.357)	$2,179	(200 @ $4.357)	$ 871
March 20	(400 @ $4.75)	$1,900			(600 @ $4.618)	$2,771
March 25			(400 @ $4.618)	$1,847	(200 @ $4.618)	$ 924
March 30	(300 @ $5.00)	$1,500			(500 @ $4.848)	$2,424

Ending inventory $2,424 Cost of goods sold: $2,179 + $1,847 = $4,026

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NOTE: All asterisked Questions, Exercises, and Problems relate to material in the appendices to the chapter.

QUESTIONS

1. "The key to successful business operations is effective inventory management." Do you agree? Explain.
2. An item must possess two characteristics to be classified as inventory by a merchandiser. What are these two characteristics?
3. Your friend Ben Johnson has been hired to help take the physical inventory in Pearson Hardware Store. Explain to Ben what this job will entail.
4. (a) Jovad Company ships merchandise to Martin Company on December 30. The merchandise reaches the buyer on January 6. Indicate the terms of sale that will result in the goods being included in (1) Jovad's December 31 inventory, and (2) Martin's December 31 inventory.
   (b) Under what circumstances should Jovad Company include consigned goods in its inventory?
5. Topp Hat Shop received a shipment of hats for which it paid the wholesaler $2,970. The price of the hats was $3,000 but Topp was given a $30 cash discount and required to pay freight charges of $50. In addition, Topp paid $130 to cover the travel expenses of an employee who negotiated the purchase of the hats. What amount will Topp record for inventory? Why?
6. Explain the difference between the terms FOB shipping point and FOB destination.
7. Leah Clement believes that the allocation of inventoriable costs should be based on the actual physical flow of the goods. Explain to Leah why this may be both impractical and inappropriate.
8. What is a major advantage and a major disadvantage of the specific identification method of inventory costing?
9. "The selection of an inventory cost flow method is a decision made by accountants." Do you agree? Explain. Once a method has been selected, what accounting requirement applies?
10. Which assumed inventory cost flow method:
    (a) usually parallels the actual physical flow of merchandise?
    (b) assumes that goods available for sale during an accounting period are identical?
    (c) assumes that the latest units purchased are the first to be sold?
11. In a period of rising prices, the inventory reported in Bert Company's balance sheet is close to the current cost of the inventory. Ernie Company's inventory is considerably below its current cost. Identify the inventory cost flow method being used by each company. Which company has probably been reporting the higher gross profit?
12. Oscar Company has been using the FIFO cost flow method during a prolonged period of rising prices. During the same time period, Oscar has been paying out all of its net income as dividends. What adverse effects may result from this policy?
13. Kyle Adams is studying for the next accounting midterm examination. What should Kyle know about (a) departing from the cost basis of accounting for

inventories and (b) the meaning of "market" in the lower-of-cost-or-market method?

14. Hendrix Entertainment Center has 5 televisions on hand at the balance sheet date. Each cost $400. The current replacement cost is $380 per unit. Under the lower-of-cost-or-market basis of accounting for inventories, what value should be reported for the televisions on the balance sheet? Why?

15. Warnke Stores has 20 toasters on hand at the balance sheet date. Each costs $27. The current replacement cost is $30 per unit. Under the lower-of-cost-or-market basis of accounting for inventories, what value should Warnke report for the toasters on the balance sheet? Why?

16. Sayaovang Company discovers in 2017 that its ending inventory at December 31, 2016, was $7,000 understated. What effect will this error have on (a) 2016 net income, (b) 2017 net income, and (c) the combined net income for the 2 years?

17. Dreher Company's balance sheet shows Inventory $162,800. What additional disclosures should be made?

18. Under what circumstances might inventory turnover be too high? That is, what possible negative consequences might occur?

19. What inventory cost flow does Apple use for its inventories? (*Hint:* You will need to examine the notes for Apple's financial statements.)

***20.** "When perpetual inventory records are kept, the results under the FIFO and LIFO methods are the same as they would be in a periodic inventory system." Do you agree? Explain.

***21.** How does the average-cost method of inventory costing differ between a perpetual inventory system and a periodic inventory system?

***22.** When is it necessary to estimate inventories?

***23.** Both the gross profit method and the retail inventory method are based on averages. For each method, indicate the average used, how it is determined, and how it is applied.

***24.** Pawlowski Company has net sales of $400,000 and cost of goods available for sale of $300,000. If the gross profit rate is 35%, what is the estimated cost of the ending inventory? Show computations.

***25.** Cinderella Shoe Shop had goods available for sale in 2017 with a retail price of $120,000. The cost of these goods was $84,000. If sales during the period were $80,000, what is the ending inventory at cost using the retail inventory method?

BRIEF EXERCISES

Identify items to be included in taking a physical inventory.
(LO 1)

BE6-1 Peosta Company identifies the following items for possible inclusion in the taking of a physical inventory. Indicate whether each item should be included or excluded from the inventory taking.

(a) Goods shipped on consignment by Peosta to another company.
(b) Goods in transit from a supplier shipped FOB destination.
(c) Goods sold but being held for customer pickup.
(d) Goods held on consignment from another company.

Determine ending inventory amount.
(LO 1)

BE6-2 Stallman Company took a physical inventory on December 31 and determined that goods costing $200,000 were on hand. Not included in the physical count were $25,000 of goods purchased from Pelzer Corporation, FOB shipping point, and $22,000 of goods sold to Alvarez Company for $30,000, FOB destination. Both the Pelzer purchase and the Alvarez sale were in transit at year-end. What amount should Stallman report as its December 31 inventory?

Compute ending inventory using FIFO and LIFO.
(LO 2)

BE6-3 In its first month of operations, Weatherall Company made three purchases of merchandise in the following sequence: (1) 300 units at $6, (2) 400 units at $7, and (3) 200 units at $8. Assuming there are 380 units on hand, compute the cost of the ending inventory under the (a) FIFO method and (b) LIFO method. Weatherall uses a periodic inventory system.

Compute the ending inventory using average-cost.
(LO 2)

BE6-4 Data for Weatherall Company are presented in BE6-3. Compute the cost of the ending inventory under the average-cost method, assuming there are 380 units on hand.

Explain the financial statement effect of inventory cost flow assumptions.
(LO 2)

BE6-5 The management of Mastronardo Corp. is considering the effects of inventory-costing methods on its financial statements and its income tax expense. Assuming that the price the company pays for inventory is increasing, which method will:

(a) Provide the highest net income?
(b) Provide the highest ending inventory?
(c) Result in the lowest income tax expense?
(d) Result in the most stable earnings over a number of years?

Determine correct income statement amounts.
(LO 3)

BE6-6 Larkin Company reports net income of $90,000 in 2017. However, ending inventory was understated $7,000. What is the correct net income for 2017? What effect, if any, will this error have on total assets as reported in the balance sheet at December 31, 2017?

BE6-7 Cruz Video Center accumulates the following cost and market data at December 31.

Determine the LCM valuation using inventory categories. (LO 4)

Inventory Categories	Cost Data	Market Data
Cameras	$12,000	$12,300
Camcorders	9,500	9,700
Blu-ray players	14,000	12,900

Compute the lower-of-cost-or-market valuation for the company's total inventory.

BE6-8 At December 31, 2017, the following information was available for E. Hetzel Company: ending inventory $40,000, beginning inventory $56,000, cost of goods sold $270,000, and sales revenue $380,000. Calculate inventory turnover and days in inventory for E. Hetzel Company.

Compute inventory turnover and days in inventory. (LO 4)

***BE6-9** Rosario Department Store uses a perpetual inventory system. Data for product E2-D2 include the following purchases.

Apply cost flow methods to perpetual inventory records. (LO 5)

Date	Number of Units	Unit Price
May 7	50	$10
July 28	30	13

On June 1, Rosario sold 26 units, and on August 27, 40 more units. Prepare the perpetual inventory schedule for the above transactions using (a) FIFO, (b) LIFO, and (c) moving-average cost.

***BE6-10** At May 31, Brunet Company has net sales of $340,000 and cost of goods available for sale of $230,000. Compute the estimated cost of the ending inventory, assuming the gross profit rate is 35%.

Apply the gross profit method. (LO 6)

***BE6-11** On June 30, Joanna Fabrics has the following data pertaining to the retail inventory method. Goods available for sale: at cost $38,000; at retail $50,000; net sales $40,000; and ending inventory at retail $10,000. Compute the estimated cost of the ending inventory using the retail inventory method.

Apply the retail inventory method. (LO 6)

DO IT! Exercises

DO IT! 6-1 Gresa Company just took its physical inventory. The count of inventory items on hand at the company's business locations resulted in a total inventory cost of $300,000. In reviewing the details of the count and related inventory transactions, you have discovered the following.

Apply rules of ownership to determine inventory cost. (LO 1)

1. Gresa has sent inventory costing $26,000 on consignment to Alissa Company. All of this inventory was at Alissa's showrooms on December 31.
2. The company did not include in the count inventory (cost, $20,000) that was sold on December 28, terms FOB shipping point. The goods were in transit on December 31.
3. The company did not include in the count inventory (cost, $14,000) that was purchased with terms of FOB shipping point. The goods were in transit on December 31.

Compute the correct December 31 inventory.

DO IT! 6-2 The accounting records of Americo Electronics show the following data.

Compute cost of goods sold under different cost flow methods. (LO 2)

Beginning inventory	3,000 units at $5
Purchases	8,000 units at $7
Sales	9,400 units at $10

Determine cost of goods sold during the period under a periodic inventory system using (a) the FIFO method, (b) the LIFO method, and (c) the average-cost method. (Round unit cost to nearest tenth of a cent.)

Determine effect of inventory error.

(LO 3)

DO IT! 6-3 Vanida Company understated its 2016 ending inventory by $27,000. Determine the impact this error has on ending inventory, cost of goods sold, and owner's equity in 2016 and 2017.

Compute inventory value under LCM and assess inventory level.

(LO 4)

DO IT! 6-4 (a) Cody Company sells three different categories of tools (small, medium, and large). The cost and market value of its inventory of tools are as follows.

	Cost	Market
Small	$ 64,000	$ 73,000
Medium	290,000	260,000
Large	152,000	171,000

Determine the value of the company's inventory under the lower-of-cost-or-market approach.

(b) Early in 2017, Yeng Company switched to a just-in-time inventory system. Its sales, cost of goods sold, and inventory amounts for 2016 and 2017 are shown below.

	2016	2017
Sales	$3,120,000	$3,713,000
Cost of goods sold	1,200,000	1,425,000
Beginning inventory	180,000	220,000
Ending inventory	220,000	100,000

Determine the inventory turnover and days in inventory for 2016 and 2017. Discuss the changes in the amount of inventory, the inventory turnover and days in inventory, and the amount of sales across the two years.

EXERCISES

Determine the correct inventory amount.

(LO 1)

E6-1 Tri-State Bank and Trust is considering giving Wilfred Company a loan. Before doing so, management decides that further discussions with Wilfred's accountant may be desirable. One area of particular concern is the inventory account, which has a year-end balance of $297,000. Discussions with the accountant reveal the following.

1. Wilfred sold goods costing $38,000 to Lilja Company, FOB shipping point, on December 28. The goods are not expected to arrive at Lilja until January 12. The goods were not included in the physical inventory because they were not in the warehouse.
2. The physical count of the inventory did not include goods costing $95,000 that were shipped to Wilfred FOB destination on December 27 and were still in transit at year-end.
3. Wilfred received goods costing $22,000 on January 2. The goods were shipped FOB shipping point on December 26 by Brent Co. The goods were not included in the physical count.
4. Wilfred sold goods costing $35,000 to Jesse Co., FOB destination, on December 30. The goods were received at Jesse on January 8. They were not included in Wilfred's physical inventory.
5. Wilfred received goods costing $44,000 on January 2 that were shipped FOB destination on December 29. The shipment was a rush order that was supposed to arrive December 31. This purchase was included in the ending inventory of $297,000.

Instructions

Determine the correct inventory amount on December 31.

Determine the correct inventory amount.

(LO 1)

E6-2 Kari Downs, an auditor with Wheeler CPAs, is performing a review of Depue Company's inventory account. Depue did not have a good year, and top management is under pressure to boost reported income. According to its records, the inventory balance at year-end was $740,000. However, the following information was not considered when determining that amount.

1. Included in the company's count were goods with a cost of $250,000 that the company is holding on consignment. The goods belong to Kroeger Corporation.
2. The physical count did not include goods purchased by Depue with a cost of $40,000 that were shipped FOB destination on December 28 and did not arrive at Depue warehouse until January 3.

3. Included in the inventory account was $14,000 of office supplies that were stored in the warehouse and were to be used by the company's supervisors and managers during the coming year.
4. The company received an order on December 29 that was boxed and sitting on the loading dock awaiting pick-up on December 31. The shipper picked up the goods on January 1 and delivered them on January 6. The shipping terms were FOB shipping point. The goods had a selling price of $40,000 and a cost of $28,000. The goods were not included in the count because they were sitting on the dock.
5. On December 29, Depue shipped goods with a selling price of $80,000 and a cost of $60,000 to Macchia Sales Corporation FOB shipping point. The goods arrived on January 3. Macchia had only ordered goods with a selling price of $10,000 and a cost of $8,000. However, a sales manager at Depue had authorized the shipment and said that if Machia wanted to ship the goods back next week, it could.
6. Included in the count was $40,000 of goods that were parts for a machine that the company no longer made. Given the high-tech nature of Depue's products, it was unlikely that these obsolete parts had any other use. However, management would prefer to keep them on the books at cost, "since that is what we paid for them, after all."

Instructions

Prepare a schedule to determine the correct inventory amount. Provide explanations for each item above, saying why you did or did not make an adjustment for each item.

Calculate cost of goods sold using specific identification and FIFO.

(LO 2)

E6-3 On December 1, Kiyak Electronics Ltd. has three DVD players left in stock. All are identical, all are priced to sell at $150. One of the three DVD players left in stock, with serial #1012, was purchased on June 1 at a cost of $100. Another, with serial #1045, was purchased on November 1 for $88. The last player, serial #1056, was purchased on November 30 for $80.

Instructions

(a) Calculate the cost of goods sold using the FIFO periodic inventory method assuming that two of the three players were sold by the end of December, Kiyak Electronics' year-end.

(b) If Kiyak Electronics used the specific identification method instead of the FIFO method, how might it alter its earnings by "selectively choosing" which particular players to sell to the two customers? What would Kiyak's cost of goods sold be if the company wished to minimize earnings? Maximize earnings?

(c) Which of the two inventory methods do you recommend that Kiyak use? Explain why.

Compute inventory and cost of goods sold using FIFO and LIFO.

(LO 2)

E6-4 Elsa's Boards sells a snowboard, Xpert, that is popular with snowboard enthusiasts. Information relating to Elsa's purchases of Xpert snowboards during September is shown below. During the same month, 121 Xpert snowboards were sold. Elsa's uses a periodic inventory system.

Date	Explanation	Units	Unit Cost	Total Cost
Sept. 1	Inventory	26	$ 97	$ 2,522
Sept. 12	Purchases	45	102	4,590
Sept. 19	Purchases	20	104	2,080
Sept. 26	Purchases	50	105	5,250
	Totals	141		$14,442

Instructions

(a) Compute the ending inventory at September 30 and cost of goods sold using the FIFO and LIFO methods. Prove the amount allocated to cost of goods sold under each method.

(b) For both FIFO and LIFO, calculate the sum of ending inventory and cost of goods sold. What do you notice about the answers you found for each method?

Compute inventory and cost of goods sold using FIFO and LIFO.

(LO 2)

E6-5 Ballas Co. uses a periodic inventory system. Its records show the following for the month of May, in which 68 units were sold.

		Units	Unit Cost	Total Cost
May 1	Inventory	30	$ 8	$240
15	Purchases	25	11	275
24	Purchases	35	12	420
	Totals	90		$935

Instructions

Compute the ending inventory at May 31 and cost of goods sold using the FIFO and LIFO methods. Prove the amount allocated to cost of goods sold under each method.

Compute inventory and cost of goods sold using FIFO and LIFO.

(LO 2)

E6-6 Moath Company reports the following for the month of June.

		Units	Unit Cost	Total Cost
June 1	Inventory	200	$5	$1,000
12	Purchase	400	6	2,400
23	Purchase	300	7	2,100
30	Inventory	100		

Instructions

(a) Compute the cost of the ending inventory and the cost of goods sold under (1) FIFO and (2) LIFO.
(b) Which costing method gives the higher ending inventory? Why?
(c) Which method results in the higher cost of goods sold? Why?

Compute inventory under FIFO, LIFO, and average-cost.

(LO 2)

E6-7 Shawn Company had 100 units in beginning inventory at a total cost of $10,000. The company purchased 200 units at a total cost of $26,000. At the end of the year, Shawn had 75 units in ending inventory.

Instructions

(a) Compute the cost of the ending inventory and the cost of goods sold under (1) FIFO, (2) LIFO, and (3) average-cost.
(b) Which cost flow method would result in the highest net income?
(c) Which cost flow method would result in inventories approximating current cost in the balance sheet?
(d) Which cost flow method would result in Shawn paying the least taxes in the first year?

Compute inventory and cost of goods sold using average-cost.

(LO 2)

E6-8 Inventory data for Moath Company are presented in E6-6.

Instructions

(a) Compute the cost of the ending inventory and the cost of goods sold using the average-cost method.
(b) Will the results in (a) be higher or lower than the results under (1) FIFO and (2) LIFO?
(c) Why is the average unit cost not $6?

Determine effects of inventory errors.

(LO 3)

E6-9 Elliott's Hardware reported cost of goods sold as follows.

	2016	2017
Beginning inventory	$ 20,000	$ 30,000
Cost of goods purchased	150,000	175,000
Cost of goods available for sale	170,000	205,000
Ending inventory	30,000	35,000
Cost of goods sold	$140,000	$170,000

Elliott's made two errors: (1) 2016 ending inventory was overstated $3,000, and (2) 2017 ending inventory was understated $5,000.

Instructions

Compute the correct cost of goods sold for each year.

Prepare correct income statements.

(LO 3)

E6-10 Smart Watch Company reported the following income statement data for a 2-year period.

	2016	2017
Sales revenue	$220,000	$250,000
Cost of goods sold		
Beginning inventory	32,000	44,000
Cost of goods purchased	173,000	202,000
Cost of goods available for sale	205,000	246,000
Ending inventory	44,000	52,000
Cost of goods sold	161,000	194,000
Gross profit	$ 59,000	$ 56,000

Smart uses a periodic inventory system. The inventories at January 1, 2016, and December 31, 2017, are correct. However, the ending inventory at December 31, 2016, was overstated $6,000.

Instructions

(a) Prepare correct income statement data for the 2 years.

(b) What is the cumulative effect of the inventory error on total gross profit for the 2 years?

(c) Explain in a letter to the president of Smart Watch Company what has happened, i.e., the nature of the error and its effect on the financial statements.

Determine ending inventory under LCM.

(LO 4)

E6-11 Freeze Frame Camera Shop uses the lower-of-cost-or-market basis for its inventory. The following data are available at December 31.

Item	Units	Unit Cost	Market
Cameras:			
Minolta	5	$170	$156
Canon	6	150	152
Light meters:			
Vivitar	10	125	115
Kodak	14	120	135

Instructions

Determine the amount of the ending inventory by applying the lower-of-cost-or-market basis.

Compute lower-of-cost-or-market

(LO 4)

E6-12 Charapata Company applied FIFO to its inventory and got the following results for its ending inventory.

Cameras	100 units at a cost per unit of $65
Blu-ray players	150 units at a cost per unit of $75
iPods	125 units at a cost per unit of $80

The cost of purchasing units at year-end was cameras $71, Blu-ray players $67, and iPods $78.

Instructions

Determine the amount of ending inventory at lower-of-cost-or-market.

Compute inventory turnover, days in inventory, and gross profit rate.

(LO 4)

E6-13 This information is available for Abdullah's Photo Corporation for 2015, 2016, and 2017.

	2015	2016	2017
Beginning inventory	$ 100,000	$ 300,000	$ 400,000
Ending inventory	300,000	400,000	480,000
Cost of goods sold	900,000	1,152,000	1,300,000
Sales revenue	1,200,000	1,600,000	1,900,000

Instructions

Calculate inventory turnover, days in inventory, and gross profit rate (from Chapter 5) for Abdullah's Photo Corporation for 2015, 2016, and 2017. Comment on any trends.

Compute inventory turnover and days in inventory.

(LO 4)

E6-14 The cost of goods sold computations for Sooner Company and Later Company are shown below.

	Sooner Company	Later Company
Beginning inventory	$ 45,000	$ 71,000
Cost of goods purchased	200,000	290,000
Cost of goods available for sale	245,000	361,000
Ending inventory	55,000	69,000
Cost of goods sold	$190,000	$292,000

Instructions

(a) Compute inventory turnover and days in inventory for each company.

(b) Which company moves its inventory more quickly?

Apply cost flow methods to perpetual records.
(LO 5)

***E6-15** Ehrhart Appliance uses a perpetual inventory system. For its flat-screen television sets, the January 1 inventory was 3 sets at $600 each. On January 10, Ehrhart purchased 6 units at $660 each. The company sold 2 units on January 8 and 5 units on January 15.

Instructions
Compute the ending inventory under (a) FIFO, (b) LIFO, and (c) moving-average cost.

Calculate inventory and cost of goods sold using three cost flow methods in a perpetual inventory system.
(LO 5)

***E6-16** Moath Company reports the following for the month of June.

Date	Explanation	Units	Unit Cost	Total Cost
June 1	Inventory	200	$5	$1,000
12	Purchase	400	6	2,400
23	Purchase	300	7	2,100
30	Inventory	100		

Instructions
(a) Calculate the cost of the ending inventory and the cost of goods sold for each cost flow assumption, using a perpetual inventory system. Assume a sale of 440 units occurred on June 15 for a selling price of $8 and a sale of 360 units on June 27 for $9.
(b) How do the results differ from E6-6 and E6-8?
(c) Why is the average unit cost not $6 [($5 + $6 + $7) ÷ 3 = $6]?

Apply cost flow methods to perpetual records.
(LO 5)

***E6-17** Information about Elsa's Boards is presented in E6-4. Additional data regarding Elsa's sales of Xpert snowboards are provided below. Assume that Elsa's uses a perpetual inventory system.

Date		Units	Unit Price	Total Revenue
Sept. 5	Sale	12	$199	$ 2,388
Sept. 16	Sale	50	199	9,950
Sept. 29	Sale	59	209	12,331
	Totals	121		$24,669

Instructions
(a) Compute ending inventory at September 30 using FIFO, LIFO, and moving-average cost.
(b) Compare ending inventory using a perpetual inventory system to ending inventory using a periodic inventory system (from E6-4).
(c) Which inventory cost flow method (FIFO, LIFO) gives the same ending inventory value under both periodic and perpetual? Which method gives different ending inventory values?

Use the gross profit method to estimate inventory.
(LO 6)

***E6-18** Shereen Company reported the following information for November and December 2017.

	November	December
Cost of goods purchased	$536,000	$ 610,000
Inventory, beginning-of-month	130,000	120,000
Inventory, end-of-month	120,000	?
Sales revenue	840,000	1,000,000

Shereen's ending inventory at December 31 was destroyed in a fire.

Instructions
(a) Compute the gross profit rate for November.
(b) Using the gross profit rate for November, determine the estimated cost of inventory lost in the fire.

Determine merchandise lost using the gross profit method of estimating inventory.
(LO 6)

***E6-19** The inventory of Hang Company was destroyed by fire on March 1. From an examination of the accounting records, the following data for the first 2 months of the year are obtained: Sales Revenue $51,000, Sales Returns and Allowances $1,000, Purchases $31,200, Freight-In $1,200, and Purchase Returns and Allowances $1,400.

Instructions
Determine the merchandise lost by fire, assuming:
(a) A beginning inventory of $20,000 and a gross profit rate of 30% on net sales.
(b) A beginning inventory of $30,000 and a gross profit rate of 40% on net sales.

***E6-20** Kicks Shoe Store uses the retail inventory method for its two departments, Women's Shoes and Men's Shoes. The following information for each department is obtained.

Determine ending inventory at cost using retail method.

(LO 6)

Item	Women's Shoes	Men's Shoes
Beginning inventory at cost	$ 25,000	$ 45,000
Cost of goods purchased at cost	110,000	136,300
Net sales	178,000	185,000
Beginning inventory at retail	46,000	60,000
Cost of goods purchased at retail	179,000	185,000

Instructions

Compute the estimated cost of the ending inventory for each department under the retail inventory method.

EXERCISES: SET B AND CHALLENGE EXERCISES

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Exercises: Set B and Challenge Exercises.

PROBLEMS: SET A

P6-1A Houghton Limited is trying to determine the value of its ending inventory as of February 28, 2017, the company's year-end. The following transactions occurred, and the accountant asked your help in determining whether they should be recorded or not.

Determine items and amounts to be recorded in inventory.

(LO 1)

(a) On February 26, Houghton shipped goods costing $800 to a customer and charged the customer $1,000. The goods were shipped with terms FOB shipping point and the receiving report indicates that the customer received the goods on March 2.
(b) On February 26, Crain Inc. shipped goods to Houghton under terms FOB shipping point. The invoice price was $450 plus $30 for freight. The receiving report indicates that the goods were received by Houghton on March 2.
(c) Houghton had $720 of inventory isolated in the warehouse. The inventory is designated for a customer who has requested that the goods be shipped on March 10.
(d) Also included in Houghton's warehouse is $700 of inventory that Korenic Producers shipped to Houghton on consignment.
(e) On February 26, Houghton issued a purchase order to acquire goods costing $900. The goods were shipped with terms FOB destination on February 27. Houghton received the goods on March 2.
(f) On February 26, Houghton shipped goods to a customer under terms FOB destination. The invoice price was $390; the cost of the items was $240. The receiving report indicates that the goods were received by the customer on March 2.

Instructions

For each of the above transactions, specify whether the item in question should be included in ending inventory, and if so, at what amount.

P6-2A Glee Distribution markets CDs of the performing artist Unique. At the beginning of October, Glee had in beginning inventory 2,000 of Unique's CDs with a unit cost of $7. During October, Glee made the following purchases of Unique's CDs.

Determine cost of goods sold and ending inventory using FIFO, LIFO, and average-cost with analysis.

(LO 2)

Oct. 3	2,500 @ $8	Oct. 19	3,000 @ $10
Oct. 9	3,500 @ $9	Oct. 25	4,000 @ $11

During October, 10,900 units were sold. Glee uses a periodic inventory system.

Instructions

(a) Determine the cost of goods available for sale.
(b) Determine (1) the ending inventory and (2) the cost of goods sold under each of the assumed cost flow methods (FIFO, LIFO, and average-cost). Prove the accuracy of the cost of goods sold under the FIFO and LIFO methods.
(c) Which cost flow method results in (1) the highest inventory amount for the balance sheet and (2) the highest cost of goods sold for the income statement?

(b)(2) Cost of goods sold:

FIFO	$ 94,500
LIFO	$108,700
Average	$101,370

Determine cost of goods sold and ending inventory, using FIFO, LIFO, and average-cost with analysis.

(LO 2)

P6-3A Sekhon Company had a beginning inventory on January 1 of 160 units of Product 4-18-15 at a cost of $20 per unit. During the year, the following purchases were made.

Mar. 15	400 units at $23	Sept. 4	330 units at $26
July 20	250 units at $24	Dec. 2	100 units at $29

1,000 units were sold. Sekhon Company uses a periodic inventory system.

Instructions

(a) Determine the cost of goods available for sale.

(b) Determine (1) the ending inventory, and (2) the cost of goods sold under each of the assumed cost flow methods (FIFO, LIFO, and average-cost). Prove the accuracy of the cost of goods sold under the FIFO and LIFO methods.

(c) Which cost flow method results in (1) the highest inventory amount for the balance sheet, and (2) the highest cost of goods sold for the income statement?

(b)(2) Cost of goods sold:
FIFO $23,340
LIFO $24,840
Average $24,097

Compute ending inventory, prepare income statements, and answer questions using FIFO and LIFO.

(LO 2)

P6-4A The management of Gresa Inc. is reevaluating the appropriateness of using its present inventory cost flow method, which is average-cost. The company requests your help in determining the results of operations for 2017 if either the FIFO or the LIFO method had been used. For 2017, the accounting records show these data:

Inventories		**Purchases and Sales**	
Beginning (7,000 units)	$14,000	Total net sales (180,000 units)	$747,000
Ending (17,000 units)		Total cost of goods purchased (190,000 units)	466,000

Purchases were made quarterly as follows.

Quarter	**Units**	**Unit Cost**	**Total Cost**
1	50,000	$2.20	$110,000
2	40,000	2.35	94,000
3	40,000	2.50	100,000
4	60,000	2.70	162,000
	190,000		$466,000

Operating expenses were $130,000, and the company's income tax rate is 40%.

Instructions

(a) Prepare comparative condensed income statements for 2017 under FIFO and LIFO. (Show computations of ending inventory.)

(b) Answer the following questions for management.

(1) Which cost flow method (FIFO or LIFO) produces the more meaningful inventory amount for the balance sheet? Why?

(2) Which cost flow method (FIFO or LIFO) produces the more meaningful net income? Why?

(3) Which cost flow method (FIFO or LIFO) is more likely to approximate the actual physical flow of goods? Why?

(4) How much more cash will be available for management under LIFO than under FIFO? Why?

(5) Will gross profit under the average-cost method be higher or lower than FIFO? Than LIFO? (*Note:* It is not necessary to quantify your answer.)

(a) Gross profit:
FIFO $312,900
LIFO $303,000

Calculate ending inventory, cost of goods sold, gross profit, and gross profit rate under periodic method; compare results.

(LO 2)

P6-5A You are provided with the following information for Koetteritz Inc. for the month ended June 30, 2017. Koetteritz uses the periodic method for inventory.

Date	**Description**	**Quantity**	**Unit Cost or Selling Price**
June 1	Beginning inventory	40	$40
June 4	Purchase	135	43
June 10	Sale	110	70
June 11	Sale return	15	70
June 18	Purchase	55	46
June 18	Purchase return	10	46
June 25	Sale	65	76
June 28	Purchase	35	50

Instructions

(a) Calculate (i) ending inventory, (ii) cost of goods sold, (iii) gross profit, and (iv) gross profit rate under each of the following methods.
  (1) LIFO. (2) FIFO. (3) Average-cost.

(b) Compare results for the three cost flow assumptions.

(a)(iii) Gross profit:
LIFO $4,330
FIFO $4,830
Average $4,546.90

P6-6A You are provided with the following information for Gobler Inc. Gobler Inc. uses the periodic method of accounting for its inventory transactions.

Compare specific identification, FIFO, and LIFO under periodic method; use cost flow assumption to justify price increase.

(LO 2)

March 1	Beginning inventory 2,000 liters at a cost of 60¢ per liter.
March 3	Purchased 2,500 liters at a cost of 65¢ per liter.
March 5	Sold 2,300 liters for $1.05 per liter.
March 10	Purchased 4,000 liters at a cost of 72¢ per liter.
March 20	Purchased 2,500 liters at a cost of 80¢ per liter.
March 30	Sold 5,200 liters for $1.25 per liter.

Instructions

(a) Prepare partial income statements through gross profit, and calculate the value of ending inventory that would be reported on the balance sheet, under each of the following cost flow assumptions. (Round ending inventory and cost of goods sold to the nearest dollar.)
  (1) Specific identification method assuming:
    (i) The March 5 sale consisted of 1,000 liters from the March 1 beginning inventory and 1,300 liters from the March 3 purchase; and
    (ii) The March 30 sale consisted of the following number of units sold from beginning inventory and each purchase: 450 liters from March 1; 550 liters from March 3; 2,900 liters from March 10; 1,300 liters from March 20.
  (2) FIFO.
  (3) LIFO.

(b) How can companies use a cost flow method to justify price increases? Which cost flow method would best support an argument to increase prices?

(a) Gross profit:
(1) Specific identification $3,715
(2) FIFO $3,930
(3) LIFO $3,385

P6-7A The management of Danica Co. asks your help in determining the comparative effects of the FIFO and LIFO inventory cost flow methods. For 2017, the accounting records provide the following data.

Compute ending inventory, prepare income statements, and answer questions using FIFO and LIFO.

(LO 2)

Inventory, January 1 (10,000 units)	$ 47,000
Cost of 100,000 units purchased	532,000
Selling price of 84,000 units sold	735,000
Operating expenses	140,000

Units purchased consisted of 35,000 units at $5.10 on May 10; 35,000 units at $5.30 on August 15; and 30,000 units at $5.60 on November 20. Income taxes are 30%.

Instructions

(a) Prepare comparative condensed income statements for 2017 under FIFO and LIFO. (Show computations of ending inventory.)

(b) Answer the following questions for management.
  (1) Which inventory cost flow method produces the most meaningful inventory amount for the balance sheet? Why?
  (2) Which inventory cost flow method produces the most meaningful net income? Why?
  (3) Which inventory cost flow method is most likely to approximate actual physical flow of the goods? Why?
  (4) How much additional cash will be available for management under LIFO than under FIFO? Why?
  (5) How much of the gross profit under FIFO is illusory in comparison with the gross profit under LIFO?

(a) Net income
FIFO $113,120
LIFO $101,220

Calculate cost of goods sold and ending inventory under LIFO, FIFO, and moving-average cost under the perpetual system; compare gross profit under each assumption.

(LO 5)

***P6-8A** Dempsey Inc. is a retailer operating in British Columbia. Dempsey uses the perpetual inventory method. All sales returns from customers result in the goods being returned to inventory; the inventory is not damaged. Assume that there are no credit transactions;

all amounts are settled in cash. You are provided with the following information for Dempsey Inc. for the month of January 2017.

Date	Description	Quantity	Unit Cost or Selling Price
January 1	Beginning inventory	100	$15
January 5	Purchase	140	18
January 8	Sale	110	28
January 10	Sale return	10	28
January 15	Purchase	55	20
January 16	Purchase return	5	20
January 20	Sale	90	32
January 25	Purchase	20	22

(a)(iii) Gross profit:
LIFO $2,160
FIFO $2,560
Average $2,421

Instructions

(a) For each of the following cost flow assumptions, calculate (i) cost of goods sold, (ii) ending inventory, and (iii) gross profit.
   (1) LIFO.
   (2) FIFO.
   (3) Moving-average cost. (Round cost per unit to three decimal places.)
(b) Compare results for the three cost flow assumptions.

Determine ending inventory under a perpetual inventory system.

(LO 5)

***P6-9A** Wittmann Co. began operations on July 1. It uses a perpetual inventory system. During July, the company had the following purchases and sales.

	Purchases		
Date	**Units**	**Unit Cost**	**Sales Units**
July 1	5	$122	
July 6			3
July 11	7	$136	
July 14			5
July 21	8	$147	
July 27			5

(a) Ending inventory
FIFO $1,029
Avg. $996
LIFO $957

Instructions

(a) Determine the ending inventory under a perpetual inventory system using (1) FIFO, (2) moving-average cost, and (3) LIFO.
(b) Which costing method produces the highest ending inventory valuation?

Compute gross profit rate and inventory loss using gross profit method.

(LO 6)

***P6-10A** Bao Company lost all of its inventory in a fire on December 26, 2017. The accounting records showed the following gross profit data for November and December.

	November	December (to 12/26)
Net sales	$600,000	$700,000
Beginning inventory	32,000	36,000
Purchases	389,000	420,000
Purchase returns and allowances	13,300	14,900
Purchase discounts	8,500	9,500
Freight-in	8,800	9,900
Ending inventory	36,000	?

Bao is fully insured for fire losses but must prepare a report for the insurance company.

(a) Gross profit rate 38%

Instructions

(a) Compute the gross profit rate for November.
(b) Using the gross profit rate for November, determine the estimated cost of the inventory lost in the fire.

Compute ending inventory using retail method.

(LO 6)

***P6-11A** Rayre Books uses the retail inventory method to estimate its monthly ending inventories. The following information is available for two of its departments at October 31, 2017.

	Hardcovers Cost	Hardcovers Retail	Paperbacks Cost	Paperbacks Retail
Beginning inventory	$ 420,000	$ 640,000	$ 280,000	$ 360,000
Purchases	2,135,000	3,200,000	1,155,000	1,540,000
Freight-in	24,000		12,000	
Purchase discounts	44,000		22,000	
Net sales		3,100,000		1,570,000

At December 31, Rayre Books takes a physical inventory at retail. The actual retail values of the inventories in each department are Hardcovers $744,000 and Paperbacks $335,000.

Instructions

(a) Determine the estimated cost of the ending inventory for each department at **October 31**, 2017, using the retail inventory method.

(a) Hardcovers: End. Inv. $488,400

(b) Compute the ending inventory at cost for each department at **December 31**, assuming the cost-to-retail ratios for the year are 65% for Hardcovers and 75% for Paperbacks.

PROBLEMS: SET B AND SET C

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Problems: Set B and Set C.

COMPREHENSIVE PROBLEM

CP6 On December 1, 2017, Annalise Company had the account balances shown below.

	Debit		Credit
Cash	$ 4,800	Accumulated Depreciation—Equipment	$ 1,500
Accounts Receivable	3,900	Accounts Payable	3,000
Inventory	1,800*	Owner's Capital	27,000
Equipment	21,000		$31,500
	$31,500		

*(3,000 × $0.60)

The following transactions occurred during December.

Dec. 3 Purchased 4,000 units of inventory on account at a cost of $0.74 per unit.

5 Sold 4,400 units of inventory on account for $0.90 per unit. (It sold 3,000 of the $0.60 units and 1,400 of the $0.74.)

7 Granted the December 5 customer $180 credit for 200 units of inventory returned costing $120. These units were returned to inventory.

17 Purchased 2,200 units of inventory for cash at $0.80 each.

22 Sold 2,100 units of inventory on account for $0.95 per unit. (It sold 2,100 of the $0.74 units.)

Adjustment data:

1. Accrued salaries payable $400.
2. Depreciation $200 per month.

Instructions

(a) Journalize the December transactions and adjusting entries, assuming Annalise uses the perpetual inventory method.

(b) Enter the December 1 balances in the ledger T-accounts and post the December transactions. In addition to the accounts mentioned above, use the following additional accounts: Cost of Goods Sold, Depreciation Expense, Salaries and Wages Expense, Salaries and Wages Payable, Sales Revenue, and Sales Returns and Allowances.

(c) Prepare an adjusted trial balance as of December 31, 2017.

(d) Prepare an income statement for December 2017 and a classified balance sheet at December 31, 2017.

(e) Compute ending inventory and cost of goods sold under FIFO, assuming Annalise Company uses the periodic inventory system.

(f) Compute ending inventory and cost of goods sold under LIFO, assuming Annalise Company uses the periodic inventory system.

CONTINUING PROBLEM

COOKIE CREATIONS: AN ENTREPRENEURIAL JOURNEY


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(*Note:* This is a continuation of the Cookie Creations problem from Chapters 1 through 5.)

CC6 Natalie is busy establishing both divisions of her business (cookie classes and mixer sales) and completing her business degree. Her goals for the next 11 months are to sell one mixer per month and to give two to three classes per week.

The cost of the fine European mixers is expected to increase. Natalie has just negotiated new terms with Kzinski that include shipping costs in the negotiated purchase price (mixers will be shipped FOB destination). Natalie must choose a cost flow assumption for her mixer inventory.

Go to the book's companion website, **www.wiley.com/college/weygandt**, *to see the completion of this problem.*

BROADENING YOUR PERSPECTIVE

FINANCIAL REPORTING AND ANALYSIS

Financial Reporting Problem: Apple Inc.

BYP6-1 The notes that accompany a company's financial statements provide informative details that would clutter the amounts and descriptions presented in the statements. Refer to the financial statements of Apple Inc. in Appendix A as well as its annual report. Instructions for accessing and using the company's complete annual report, including the notes to the financial statements, are also provided in Appendix A.

Instructions

Answer the following questions. Complete the requirements in millions of dollars, as shown in Apple's annual report.

(a) What did Apple report for the amount of inventories in its consolidated balance sheet at September 29, 2012? At September 28, 2013?
(b) Compute the dollar amount of change and the percentage change in inventories between 2012 and 2013. Compute inventory as a percentage of current assets at September 28, 2013.
(c) How does Apple value its inventories? Which inventory cost flow method does Apple use? (See Notes to the Financial Statements.)
(d) What is the cost of sales (cost of goods sold) reported by Apple for 2013, 2012, and 2011? Compute the percentage of cost of sales to net sales in 2013.

Comparative Analysis Problem: PepsiCo, Inc. vs. The Coca-Cola Company

BYP6-2 PepsiCo's financial statements are presented in Appendix B. Financial statements of The Coca-Cola Company are presented in Appendix C. Instructions for accessing and using the complete annual reports of PepsiCo and Coca-Cola, including the notes to the financial statements, are also provided in Appendices B and C, respectively.

Instructions

(a) Based on the information contained in these financial statements, compute the following 2013 ratios for each company.
    (1) Inventory turnover.
    (2) Days in inventory.
(b) What conclusions concerning the management of the inventory can you draw from these data?

Comparative Analysis Problem: Amazon.com, Inc. vs. Wal-Mart Stores, Inc.

BYP6-3 Amazon.com, Inc.'s financial statements are presented in Appendix D. Financial statements of Wal-Mart Stores, Inc. are presented in Appendix E. Instructions for accessing and using the complete annual reports of Amazon and Wal-Mart, including the notes to the financial statements, are also provided in Appendices D and E, respectively.

Instructions

(a) Based on the information contained in these financial statements, compute the following 2013 ratios for each company.
  (1) Inventory turnover.
  (2) Days in inventory.

(b) What conclusions concerning the management of the inventory can you draw from these data?

Real-World Focus

BYP6-4 A company's annual report usually will identify the inventory method used. Knowing that, you can analyze the effects of the inventory method on the income statement and balance sheet.

Address: **www.cisco.com**, or go to **www.wiley.com/college/weygandt**

Instructions

Answer the following questions based on the current year's annual report on Cisco's website.

(a) At Cisco's fiscal year-end, what was the inventory on the balance sheet?
(b) How has this changed from the previous fiscal year-end?
(c) How much of the inventory was finished goods?
(d) What inventory method does Cisco use?

CRITICAL THINKING

Decision-Making Across the Organization

BYP6-5 On April 10, 2017, fire damaged the office and warehouse of Corvet Company. Most of the accounting records were destroyed, but the following account balances were determined as of March 31, 2017: Inventory (January 1, 2017), $80,000; Sales Revenue (January 1–March 31, 2017), $180,000; Purchases (January 1–March 31, 2017), $94,000.

The company's fiscal year ends on December 31. It uses a periodic inventory system.

From an analysis of the April bank statement, you discover cancelled checks of $4,200 for cash purchases during the period April 1–10. Deposits during the same period totaled $18,500. Of that amount, 60% were collections on accounts receivable, and the balance was cash sales.

Correspondence with the company's principal suppliers revealed $12,400 of purchases on account from April 1 to April 10. Of that amount, $1,600 was for merchandise in transit on April 10 that was shipped FOB destination.

Correspondence with the company's principal customers produced acknowledgments of credit sales totaling $37,000 from April 1 to April 10. It was estimated that $5,600 of credit sales will never be acknowledged or recovered from customers.

Corvet Company reached an agreement with the insurance company that its fire-loss claim should be based on the average of the gross profit rates for the preceding 2 years. The financial statements for 2015 and 2016 showed the following data.

	2016	**2015**
Net sales	$600,000	$480,000
Cost of goods purchased	404,000	356,000
Beginning inventory	60,000	40,000
Ending inventory	80,000	60,000

Inventory with a cost of $17,000 was salvaged from the fire.

Instructions

With the class divided into groups, answer the following.

(a) Determine the balances in (1) Sales Revenue and (2) Purchases at April 10.

*__(b)__ Determine the average gross profit rate for the years 2015 and 2016. (*Hint:* Find the gross profit rate for each year and divide the sum by 2.)

*__(c)__ Determine the inventory loss as a result of the fire, using the gross profit method.

Communication Activity

BYP6-6 You are the controller of Small Toys Inc. Pamela Bames, the president, recently mentioned to you that she found an error in the 2016 financial statements which she believes has corrected itself.

She determined, in discussions with the Purchasing Department, that 2016 ending inventory was overstated by $1 million. Pamela says that the 2017 ending inventory is correct. Thus, she assumes that 2017 income is correct. Pamela says to you, "What happened has happened—there's no point in worrying about it anymore."

Instructions
You conclude that Pamela is incorrect. Write a brief, tactful memo to Pamela, clarifying the situation.

Ethics Case

BYP6-7 R. J. Graziano Wholesale Corp. uses the LIFO method of inventory costing. In the current year, profit at R. J. Graziano is running unusually high. The corporate tax rate is also high this year, but it is scheduled to decline significantly next year. In an effort to lower the current year's net income and to take advantage of the changing income tax rate, the president of R. J. Graziano Wholesale instructs the plant accountant to recommend to the purchasing department a large purchase of inventory for delivery 3 days before the end of the year. The price of the inventory to be purchased has doubled during the year, and the purchase will represent a major portion of the ending inventory value.

Instructions
(a) What is the effect of this transaction on this year's and next year's income statement and income tax expense? Why?
(b) If R. J. Graziano Wholesale had been using the FIFO method of inventory costing, would the president give the same directive?
(c) Should the plant accountant order the inventory purchase to lower income? What are the ethical implications of this order?

All About You

BYP6-8 Some of the largest business frauds ever perpetrated have involved the misstatement of inventory. Two classics were at Leslie Fay and McKesson Corporation.

Instructions
There is considerable information regarding inventory frauds available on the Internet. Search for information about one of the two cases mentioned above, or inventory fraud at any other company, and prepare a short explanation of the nature of the inventory fraud.

FASB Codification Activity

BYP6-9 If your school has a subscription to the FASB Codification, go to **http://aaahq.org/ascLogin.cfm** to log in and prepare responses to the following.

Instructions
(a) The primary basis for accounting for inventories is cost. How is cost defined in the Codification?
(b) What does the Codification state regarding the use of consistency in the selection or employment of a basis for inventory?

A Look at IFRS

LEARNING OBJECTIVE 7 **Compare the accounting for inventories under GAAP and IFRS.**

The major IFRS requirements related to accounting and reporting for inventories are the same as GAAP. The major differences are that IFRS prohibits the use of the LIFO cost flow assumption and determines market in the lower-of-cost-or-market inventory valuation differently.

Relevant Facts

Following are the key similarities and differences between GAAP and IFRS related to inventories.

Similarities

- IFRS and GAAP account for inventory acquisitions at historical cost and value inventory at the lower-of-cost-or-market subsequent to acquisition.
- Who owns the goods—goods in transit or consigned goods—as well as the costs to include in inventory are essentially accounted for the same under IFRS and GAAP.

Differences

- The requirements for accounting for and reporting inventories are more principles-based under IFRS. That is, GAAP provides more detailed guidelines in inventory accounting.
- A major difference between IFRS and GAAP relates to the LIFO cost flow assumption. GAAP permits the use of LIFO for inventory valuation. IFRS prohibits its use. FIFO and average-cost are the only two acceptable cost flow assumptions permitted under IFRS. Both sets of standards permit specific identification where appropriate.
- In the lower-of-cost-or-market test for inventory valuation, IFRS defines market as net realizable value. GAAP, on the other hand, defines market as replacement cost.

Looking to the Future

One convergence issue that will be difficult to resolve relates to the use of the LIFO cost flow assumption. As indicated, IFRS specifically prohibits its use. Conversely, the LIFO cost flow assumption is widely used in the United States because of its favorable tax advantages. In addition, many argue that LIFO from a financial reporting point of view provides a better matching of current costs against revenue and, therefore, enables companies to compute a more realistic income.

IFRS Practice

IFRS Self-Test Questions

1. Which of the following should **not** be included in the inventory of a company using IFRS?
   (a) Goods held on consignment from another company.
   (b) Goods shipped on consignment to another company.
   (c) Goods in transit from another company shipped FOB shipping point.
   (d) None of the above.
2. Which method of inventory costing is prohibited under IFRS?
   (a) Specific identification.
   (b) LIFO.
   (c) FIFO.
   (d) Average-cost.

IFRS Exercises

IFRS6-1 Briefly describe some of the similarities and differences between GAAP and IFRS with respect to the accounting for inventories.

IFRS6-2 LaTour Inc. is based in France and prepares its financial statements (in euros) in accordance with IFRS. In 2017, it reported cost of goods sold of €578 million and average inventory of €154 million. Briefly discuss how analysis of LaTour's inventory turnover (and comparisons to a company using GAAP) might be affected by differences in inventory accounting between IFRS and GAAP.

International Financial Reporting Problem: Louis Vuitton

IFRS6-3 The financial statements of Louis Vuitton are presented in Appendix F. Instructions for accessing and using the company's complete annual report, including the notes to its financial statements, are also provided in Appendix F.

Instructions
Using the notes to the company's financial statements, answer the following questions.

(a) What cost flow assumption does the company use to value inventory?
(b) What amount of goods purchased for retail and finished products did the company report at December 31, 2013?

Answers to IFRS Self-Test Questions

1. a **2.** b

8 Fraud, Internal Control, and Cash

CHAPTER PREVIEW As the Feature Story about recording cash sales at Barriques indicates below, control of cash is important to ensure that fraud does not occur. Companies also need controls to safeguard other types of assets. For example, Barriques undoubtedly has controls to prevent the theft of food and supplies, and controls to prevent the theft of tableware and dishes from its kitchen.

In this chapter, we explain the essential features of an internal control system and how it prevents fraud. We also describe how those controls apply to a specific asset—cash. The applications include some controls with which you may be already familiar, such as the use of a bank.

FEATURE STORY

Minding the Money in Madison

For many years, Barriques in Madison, Wisconsin, has been named the city's favorite coffeehouse. Barriques not only does a booming business in coffee but also has wonderful baked goods, delicious sandwiches, and a fine selection of wines.

"Our customer base ranges from college students to neighborhood residents as well as visitors to our capital city," says bookkeeper Kerry Stoppleworth, who joined the company shortly after it was founded in 1998. "We are unique because we have customers who come in early on their way to work for a cup of coffee and then will stop back after work to pick up a bottle of wine for dinner. We stay very busy throughout all three parts of the day."

Like most businesses where purchases are low-cost and high-volume, cash control has to be simple. "We use a computerized point-of-sale (POS) system to keep track of our inventory and allow us to efficiently ring through an order for a customer," explains Stoppleworth. "You can either scan a barcode for an item or enter in a code for items that don't have a barcode such as cups of coffee or bakery items." The POS system also automatically tracks sales by department and maintains an electronic journal of all the sales transactions that occur during the day.

"There are two POS stations at each store, and throughout the day any of the staff may operate them," says Stoppleworth. At the end of the day, each POS station is reconciled separately. The staff counts the cash in the drawer and enters this amount into the closing totals in the POS system. The POS system then compares the cash and credit amounts, less the cash being carried forward to the next day (the float), to the shift total in the electronic journal. If there are discrepancies, a recount is done and the journal is reviewed transaction by transaction to identify the problem. The staff then creates a deposit ticket for the cash less the float and puts this in a drop safe with the electronic journal summary report for the manager to review and take to the bank the next day. Ultimately, the bookkeeper reviews all of these documents as well as the deposit receipt that the bank produces to make sure they are all in agreement.

As Stoppleworth concludes, "We keep the closing process and accounting simple so that our staff can concentrate on taking care of our customers and making great coffee and food."

CHAPTER OUTLINE

Learning Objectives

1	Discuss fraud and the principles of internal control.	• Fraud • The Sarbanes-Oxley Act • Internal control • Principles of internal control activities • Limitations of internal control	DO IT! 1 Control Activities
2	Apply internal control principles to cash.	• Cash receipts controls • Cash disbursements controls • Petty cash fund	DO IT! 2a Control over Cash Receipts 2b Petty Cash Fund
3	Identify the control features of a bank account.	• Making bank deposits • Writing checks • Bank statements • Reconciling the bank account • EFT system	DO IT! 3 Bank Reconciliation
4	Explain the reporting of cash.	• Cash equivalents • Restricted cash	DO IT! 4 Reporting Cash

Go to the ***REVIEW AND PRACTICE*** section at the end of the chapter for a review of key concepts and practice applications with solutions.

Visit **WileyPLUS with ORION** for additional tutorials and practice opportunities.

LEARNING OBJECTIVE **1**

Discuss fraud and the principles of internal control.

The Feature Story describes many of the internal control procedures used by Barriques. These procedures are necessary to discourage employees from fraudulent activities.

Fraud

A **fraud** is a dishonest act by an employee that results in personal benefit to the employee at a cost to the employer. Examples of fraud reported in the financial press include the following.

- A bookkeeper in a small company diverted $750,000 of bill payments to a personal bank account over a three-year period.
- A shipping clerk with 28 years of service shipped $125,000 of merchandise to himself.
- A computer operator embezzled $21 million from Wells Fargo Bank over a two-year period.
- A church treasurer "borrowed" $150,000 of church funds to finance a friend's business dealings.

Why does fraud occur? The three main factors that contribute to fraudulent activity are depicted by the **fraud triangle** in Illustration 8-1 (in the margin).

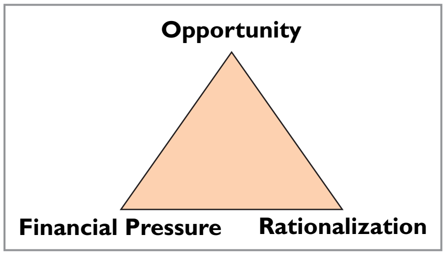

Illustration 8-1
Fraud triangle

The most important element of the fraud triangle is **opportunity**. For an employee to commit fraud, the workplace environment must provide opportunities that an employee can take advantage of. Opportunities occur when the workplace lacks sufficient controls to deter and detect fraud. For example, inadequate monitoring of employee actions can create opportunities for theft and can embolden employees because they believe they will not be caught.

A second factor that contributes to fraud is **financial pressure**. Employees sometimes commit fraud because of personal financial problems caused by too much debt. Or, they might commit fraud because they want to lead a lifestyle that they cannot afford on their current salary.

The third factor that contributes to fraud is **rationalization**. In order to justify their fraud, employees rationalize their dishonest actions. For example, employees sometimes justify fraud because they believe they are underpaid while the employer is making lots of money. Employees feel justified in stealing because they believe they deserve to be paid more.

The Sarbanes-Oxley Act

What can be done to prevent or to detect fraud? After numerous corporate scandals came to light in the early 2000s, Congress addressed this issue by passing the **Sarbanes-Oxley Act (SOX)**. Under SOX, all publicly traded U.S. corporations are required to maintain an adequate system of internal control. Corporate executives and boards of directors must ensure that these controls are reliable and effective. In addition, independent outside auditors must attest to the adequacy of the internal control system. Companies that fail to comply are subject to fines, and company officers can be imprisoned. SOX also created the Public Company Accounting Oversight Board (PCAOB) to establish auditing standards and regulate auditor activity.

One poll found that 60% of investors believe that SOX helps safeguard their stock investments. Many say they would be unlikely to invest in a company that fails to follow SOX requirements. Although some corporate executives have criticized the time and expense involved in following the SOX requirements, SOX appears to be working well. For example, the chief accounting officer of Eli Lily noted that SOX triggered a comprehensive review of how the company documents its controls. This review uncovered redundancies and pointed out controls that needed to be added. In short, it added up to time and money well spent.

Internal Control

Internal control is a process designed to provide reasonable assurance regarding the achievement of objectives related to operations, reporting, and compliance. In more detail, it consists of all the related methods and measures adopted within an organization to safeguard assets, enhance the reliability of accounting records, increase efficiency of operations, and ensure compliance with laws and regulations. Internal control systems have five primary components as listed below.[1]

- **A control environment.** It is the responsibility of top management to make it clear that the organization values integrity and that unethical activity will not be tolerated. This component is often referred to as the "tone at the top."
- **Risk assessment.** Companies must identify and analyze the various factors that create risk for the business and must determine how to manage these risks.
- **Control activities.** To reduce the occurrence of fraud, management must design policies and procedures to address the specific risks faced by the company.
- **Information and communication.** The internal control system must capture and communicate all pertinent information both down and up the organization, as well as communicate information to appropriate external parties.
- **Monitoring.** Internal control systems must be monitored periodically for their adequacy. Significant deficiencies need to be reported to top management and/or the board of directors.

People, Planet, and Profit Insight

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And the Controls Are . . .

Internal controls are important for an effective financial reporting system. The same is true for sustainability reporting. An effective system of internal controls for sustainability reporting will help in the following ways: (1) prevent the unauthorized use of data; (2) provide reasonable assurance that the information is accurate, valid, and complete; and (3) report information that is consistent with overall sustainability accounting policies. With these types of controls, users will have the confidence that they can use the sustainability information effectively.

Some regulators are calling for even more assurance through audits of this information. Companies that potentially can cause environmental damage through greenhouse gases, as well as companies in the mining and extractive industries, are subject to reporting requirements. And, as demand for more information in the sustainability area expands, the need for audits of this information will grow.

Why is sustainability information important to investors? (Go to **WileyPLUS** for this answer and additional questions.)

[1]The Committee of Sponsoring Organizations of the Treadway Commission, "Internal Control—Integrated Framework," *www.coso.org/documents/990025P_executive_summary_final_May20_e.pdf.*

Principles of Internal Control Activities

Each of the five components of an internal control system is important. Here, we will focus on one component, the control activities. The reason? These activities are the backbone of the company's efforts to address the risks it faces, such as fraud. The specific control activities used by a company will vary, depending on management's assessment of the risks faced. This assessment is heavily influenced by the size and nature of the company.

The six principles of control activities are as follows.

- Establishment of responsibility
- Segregation of duties
- Documentation procedures
- Physical controls
- Independent internal verification
- Human resource controls

We explain these principles in the following sections. You should recognize that they apply to most companies and are relevant to both manual and computerized accounting systems.

ESTABLISHMENT OF RESPONSIBILITY

Transfer of cash drawers

An essential principle of internal control is to assign responsibility to specific employees. **Control is most effective when only one person is responsible for a given task.**

To illustrate, assume that the cash on hand at the end of the day in a Safeway supermarket is $10 short of the cash entered in the cash register. If only one person has operated the register, the shift manager can quickly determine responsibility for the shortage. If two or more individuals have worked the register, it may be impossible to determine who is responsible for the error.

Many retailers solve this problem by having registers with multiple drawers. This makes it possible for more than one person to operate a register but still allows identification of a particular employee with a specific drawer. Only the signed-in cashier has access to his or her drawer.

Establishing responsibility often requires limiting access only to authorized personnel, and then identifying those personnel. For example, the automated systems used by many companies have mechanisms such as identifying passcodes that keep track of who made a journal entry, who entered a sale, or who went into an inventory storeroom at a particular time. Use of identifying passcodes enables the company to establish responsibility by identifying the particular employee who carried out the activity.

ANATOMY OF A FRAUD

Maureen Frugali was a training supervisor for claims processing at Colossal Healthcare. As a standard part of the claims-processing training program, Maureen created fictitious claims for use by trainees. These fictitious claims were then sent to the accounts payable department. After the training claims had been processed, she was to notify Accounts Payable of all fictitious claims, so that they would not be paid. However, she did not inform Accounts Payable about every fictitious claim. She created some fictitious claims for entities that she controlled (that is, she would receive the payment), and she let Accounts Payable pay her.

Total take: $11 million

THE MISSING CONTROL

Establishment of responsibility. The healthcare company did not adequately restrict the responsibility for authorizing and approving claims transactions. The training supervisor should not have been authorized to create claims in the company's "live" system.

Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 61–70.

SEGREGATION OF DUTIES

Segregation of duties is indispensable in an internal control system. There are two common applications of this principle:

1. Different individuals should be responsible for related activities.
2. The responsibility for recordkeeping for an asset should be separate from the physical custody of that asset.

The rationale for segregation of duties is this: **The work of one employee should, without a duplication of effort, provide a reliable basis for evaluating the work of another employee.** For example, the personnel that design and program computerized systems should not be assigned duties related to day-to-day use of the system. Otherwise, they could design the system to benefit them personally and conceal the fraud through day-to-day use.

SEGREGATION OF RELATED ACTIVITIES **Making one individual responsible for related activities increases the potential for errors and irregularities.** Instead, companies should, for example, assign related **purchasing activities** to different individuals. Related purchasing activities include ordering merchandise, order approval, receiving goods, authorizing payment, and paying for goods or services. Various frauds are possible when one person handles related purchasing activities:

- If a purchasing agent is allowed to order goods without obtaining supervisory approval, the likelihood of the purchasing agent receiving kickbacks from suppliers increases.
- If an employee who orders goods also handles the invoice and receipt of the goods, as well as payment authorization, he or she might authorize payment for a fictitious invoice.

These abuses are less likely to occur when companies divide the purchasing tasks.

Similarly, companies should assign related **sales activities** to different individuals. Related selling activities include making a sale, shipping (or delivering) the goods to the customer, billing the customer, and receiving payment. Various frauds are possible when one person handles related sales activities:

- If a salesperson can make a sale without obtaining supervisory approval, he or she might make sales at unauthorized prices to increase sales commissions.
- A shipping clerk who also has access to accounting records could ship goods to himself.
- A billing clerk who handles billing and receipt could understate the amount billed for sales made to friends and relatives.

These abuses are less likely to occur when companies divide the sales tasks. The salespeople make the sale, the shipping department ships the goods on the basis of the sales order, and the billing department prepares the sales invoice after comparing the sales order with the report of goods shipped.

ANATOMY OF A FRAUD

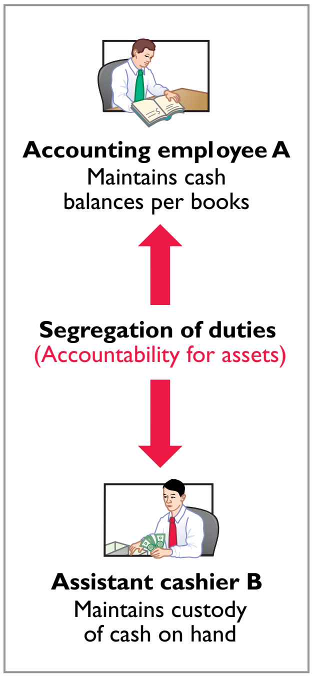
Lawrence Fairbanks, the assistant vice-chancellor of communications at Aesop University, was allowed to make purchases of under $2,500 for his department without external approval. Unfortunately, he also sometimes bought items for himself, such as expensive antiques and other collectibles. How did he do it? He replaced the vendor invoices he received with fake vendor invoices that he created. The fake invoices had descriptions that were more consistent with the communications department's purchases. He submitted these fake invoices to the accounting department as the basis for their journal entries and to the accounts payable department as the basis for payment.

Total take: $475,000

THE MISSING CONTROL

Segregation of duties. The university had not properly segregated related purchasing activities. Lawrence was ordering items, receiving the items, and receiving the invoice. By receiving the invoice, he had control over the documents that were used to account for the purchase and thus was able to substitute a fake invoice.

Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 3–15.



SEGREGATION OF RECORDKEEPING FROM PHYSICAL CUSTODY The accountant should have neither physical custody of the asset nor access to it. Likewise, the custodian of the asset should not maintain or have access to the accounting records. **The custodian of the asset is not likely to convert the asset to personal use when one employee maintains the record of the asset, and a different employee has physical custody of the asset.** The separation of accounting responsibility from the custody of assets is especially important for cash and inventories because these assets are very vulnerable to fraud.

ANATOMY OF A FRAUD

Angela Bauer was an accounts payable clerk for Aggasiz Construction Company. Angela prepared and issued checks to vendors and reconciled bank statements. She perpetrated a fraud in this way: She wrote checks for costs that the company had not actually incurred (e.g., fake taxes). A supervisor then approved and signed the checks. Before issuing the check, though, Angela would "white-out" the payee line on the check and change it to personal accounts that she controlled. She was able to conceal the theft because she also reconciled the bank account. That is, nobody else ever saw that the checks had been altered.

Total take: $570,000

THE MISSING CONTROL

Segregation of duties. Aggasiz Construction Company did not properly segregate recordkeeping from physical custody. Angela had physical custody of the checks, which essentially was control of the cash. She also had recordkeeping responsibility because she prepared the bank reconciliation.

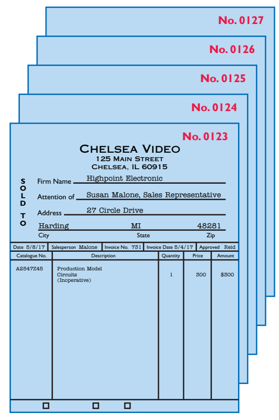
Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 100–107.

DOCUMENTATION PROCEDURES

Documents provide evidence that transactions and events have occurred. For example, Barriques' point-of-sale terminals are networked with the company's computing and accounting records, which results in direct documentation.

Similarly, a shipping document indicates that the goods have been shipped, and a sales invoice indicates that the company has billed the customer for the goods. By requiring signatures (or initials) on the documents, the company can identify the individual(s) responsible for the transaction or event. Companies should document transactions when they occur.

Companies should establish procedures for documents. First, whenever possible, companies should use **prenumbered documents, and all documents should be accounted for**. Prenumbering helps to prevent a transaction from being recorded more than once, or conversely, from not being recorded at all. Second, the control system should require that employees **promptly forward source documents for accounting entries to the accounting department**. **This control measure helps to ensure timely recording of the transaction** and contributes directly to the accuracy and reliability of the accounting records.



Prenumbered invoices

ANATOMY OF A FRAUD

To support their reimbursement requests for travel costs incurred, employees at Mod Fashions Corporation's design center were required to submit receipts. The receipts could include the detailed bill provided for a meal, the credit card receipt provided when the credit card payment is made, or a copy of the employee's monthly credit card bill that listed the item. A number of the designers who frequently traveled together came up with a fraud scheme: They submitted claims for the same expenses. For example, if they had a meal together that cost $200, one person submitted the detailed meal bill, another submitted the credit card receipt, and a third submitted a monthly credit card bill showing the meal as a line item. Thus, all three received a $200 reimbursement.

Total take: $75,000

THE MISSING CONTROL

Documentation procedures. Mod Fashions should require the original, detailed receipt. It should not accept photocopies, and it should not accept credit card statements. In addition, documentation procedures could be further improved by requiring the use of a corporate credit card (rather than a personal credit card) for all business expenses.

Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 79–90.

PHYSICAL CONTROLS

Use of physical controls is essential. **Physical controls** relate to the safeguarding of assets and enhance the accuracy and reliability of the accounting records. Illustration 8-2 shows examples of these controls.

Illustration 8-2
Physical controls

Physical Controls

Safes, vaults, and safety deposit boxes for cash and business papers

Locked warehouses and storage cabinets for inventories and records

Computer facilities with pass key access or fingerprint or eyeball scans

Alarms to prevent break-ins

Television monitors and garment sensors to deter theft

Time clocks for recording time worked

ANATOMY OF A FRAUD

At Centerstone Health, a large insurance company, the mailroom each day received insurance applications from prospective customers. Mailroom employees scanned the applications into electronic documents before the applications were processed. Once the applications were scanned, they could be accessed online by authorized employees.

Insurance agents at Centerstone Health earn commissions based upon successful applications. The sales agent's name is listed on the application. However, roughly 15% of the applications are from customers who did not work with a sales agent. Two friends—Alex, an employee in recordkeeping, and Parviz, a sales agent—thought up a way to perpetrate a fraud. Alex identified scanned applications that did not list a sales agent. After business hours, he entered the mailroom and found the hard-copy applications that did not show a sales agent. He wrote in Parviz's name as the sales agent and then rescanned the application for processing. Parviz received the commission, which the friends then split.

Total take: $240,000

THE MISSING CONTROL

Physical controls. Centerstone Health lacked two basic physical controls that could have prevented this fraud. First, the mailroom should have been locked during non-business hours, and access during business hours should have been tightly controlled. Second, the scanned applications supposedly could be accessed only by authorized employees using their passwords. However, the password for each employee was the same as the employee's user ID. Since employee user-ID numbers were available to all other employees, all employees knew all other employees' passwords. Unauthorized employees could access the scanned applications. Thus, Alex could enter the system using another employee's password and access the scanned applications.

Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 316–326.

INDEPENDENT INTERNAL VERIFICATION

Most internal control systems provide for **independent internal verification**. This principle involves the review of data prepared by employees. To obtain maximum benefit from independent internal verification:

1. Companies should verify records periodically or on a surprise basis.
2. An employee who is independent of the personnel responsible for the information should make the verification.
3. Discrepancies and exceptions should be reported to a management level that can take appropriate corrective action.

Independent internal verification is especially useful in comparing recorded accountability with existing assets. The reconciliation of the electronic journal with the cash in the point-of-sale terminal at Barriques is an example of this internal control principle. Other common examples are the reconciliation of a company's cash balance per books with the cash balance per bank, and the verification of the perpetual inventory records through a count of physical inventory. Illustration 8-3 shows the relationship between this principle and the segregation of duties principle.

ANATOMY OF A FRAUD

Bobbi Jean Donnelly, the office manager for Mod Fashions Corporation's design center, was responsible for preparing the design center budget and reviewing expense reports submitted by design center employees. Her desire to upgrade her wardrobe got the better of her, and she enacted a fraud that involved filing expense-reimbursement requests for her own personal clothing purchases. Bobbi Jean was able to conceal the fraud because she was responsible for reviewing all expense reports, including her

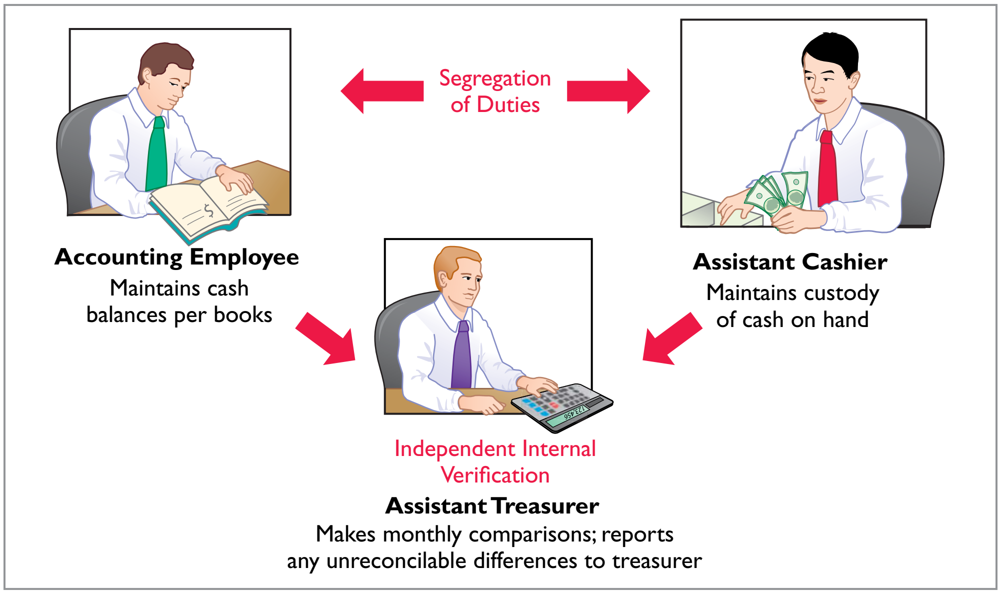


Illustration 8-3
Comparison of segregation of duties principle with independent internal verification principle

own. In addition, she sometimes was given ultimate responsibility for signing off on the expense reports when her boss was "too busy." Also, because she controlled the budget, when she submitted her expenses, she coded them to budget items that she knew were running under budget, so that they would not catch anyone's attention.

Total take: $275,000

THE MISSING CONTROL

Independent internal verification. Bobbi Jean's boss should have verified her expense reports. When asked what he thought her expenses for a year were, the boss said about $10,000. At $115,000 per year, her actual expenses were more than 10 times what would have been expected. However, because he was "too busy" to verify her expense reports or to review the budget, he never noticed.

Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 79–90.

Large companies often assign independent internal verification to internal auditors. **Internal auditors** are company employees who continuously evaluate the effectiveness of the company's internal control systems. They review the activities of departments and individuals to determine whether prescribed internal controls are being followed. They also recommend improvements when needed. For example, **WorldCom** was at one time the second largest U.S. telecommunications company. The fraud that caused its bankruptcy (the largest ever when it occurred) involved billions of dollars. It was uncovered by an internal auditor.

HUMAN RESOURCE CONTROLS

Human resource control activities include the following.

1. **Bond employees who handle cash. Bonding** involves obtaining insurance protection against theft by employees. It contributes to the safeguarding of cash in two ways. First, the insurance company carefully screens all individuals before adding them to the policy and may reject risky applicants. Second, bonded employees know that the insurance company will vigorously prosecute all offenders.

2. **Rotate employees' duties and require employees to take vacations.** These measures deter employees from attempting thefts since they will not be able to permanently conceal their improper actions. Many banks, for example,

have discovered employee thefts when the employee was on vacation or assigned to a new position.

3. **Conduct thorough background checks.** Many believe that the most important and inexpensive measure any business can take to reduce employee theft and fraud is for the human resources department to conduct thorough background checks. Two tips: (1) Check to see whether job applicants actually graduated from the schools they list. (2) Never use telephone numbers for previous employers provided by the applicant. Always look them up yourself.

ANATOMY OF A FRAUD

Ellen Lowry was the desk manager and Josephine Rodriguez was the head of housekeeping at the Excelsior Inn, a luxury hotel. The two best friends were so dedicated to their jobs that they never took vacations, and they frequently filled in for other employees. In fact, Ms. Rodriguez, whose job as head of housekeeping did not include cleaning rooms, often cleaned rooms herself, "just to help the staff keep up." These two "dedicated" employees, working as a team, found a way to earn a little more cash. Ellen, the desk manager, provided significant discounts to guests who paid with cash. She kept the cash and did not register the guest in the hotel's computerized system. Instead, she took the room out of circulation "due to routine maintenance." Because the room did not show up as being used, it did not receive a normal housekeeping assignment. Instead, Josephine, the head of housekeeping, cleaned the rooms during the guests' stay.

Total take: $95,000

THE MISSING CONTROL

Human resource controls. Ellen, the desk manager, had been fired by a previous employer after being accused of fraud. If the Excelsior Inn had conducted a thorough background check, it would not have hired her. The hotel fraud was detected when Ellen missed work for a few days due to illness. A system of mandatory vacations and rotating days off would have increased the chances of detecting the fraud before it became so large.

Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 145–155.

Accounting Across the Organization

Stockbyte/Getty Images, Inc.

SOX Boosts the Role of Human Resources

Under SOX, a company needs to keep track of employees' degrees and certifications to ensure that employees continue to meet the specified requirements of a job. Also, to ensure proper employee supervision and proper separation of duties, companies must develop and monitor an organizational chart. When one corporation went through this exercise, it found that out of 17,000 employees, there were 400 people who did not report to anyone. The corporation also had 35 people who reported to each other. In addition, if an employee complains of an unfair firing and mentions financial issues at the company, HR should refer the case to the company audit committee and possibly to its legal counsel.

Why would unsupervised employees or employees who report to each other represent potential internal control threats? (Go to **WileyPLUS** for this answer and additional questions.)

Limitations of Internal Control

Companies generally design their systems of internal control to provide **reasonable assurance** of proper safeguarding of assets and reliability of the accounting records. The concept of reasonable assurance rests on the premise that the costs of establishing control procedures should not exceed their expected benefit.

To illustrate, consider shoplifting losses in retail stores. Stores could eliminate such losses by having a security guard stop and search customers as they leave the store. But store managers have concluded that the negative effects of such a procedure cannot be justified. Instead, they have attempted to control shoplifting losses by less costly procedures. They post signs saying, "We reserve the right to inspect all packages" and "All shoplifters will be prosecuted." They use hidden cameras and store detectives to monitor customer activity, and they install sensor equipment at exits.

Helpful Hint
Controls may vary with the risk level of the activity. For example, management may consider cash to be high risk and maintaining inventories in the stockroom as low risk. Thus, management would have stricter controls for cash.

The **human element** is an important factor in every system of internal control. A good system can become ineffective as a result of employee fatigue, carelessness, or indifference. For example, a receiving clerk may not bother to count goods received and may just "fudge" the counts. Occasionally, two or more individuals may work together to get around prescribed controls. Such **collusion** can significantly reduce the effectiveness of a system, eliminating the protection offered by segregation of duties. No system of internal control is perfect.

The **size of the business** also may impose limitations on internal control. Small companies often find it difficult to segregate duties or to provide for independent internal verification. A study by the Association of Certified Fraud Examiners (*Report to the Nation on Occupational Fraud and Abuse*) indicates that businesses with fewer than 100 employees are most at risk for employee theft. In fact, 29% of frauds occurred at companies with fewer than 100 employees. The median loss at small companies was $154,000, which was close to the median fraud at companies with more than 10,000 employees ($160,000). A $154,000 loss can threaten the very existence of a small company.

DO IT! 1 Control Activities

Identify which control activity is violated in each of the following situations, and explain how the situation creates an opportunity for a fraud.

1. The person with primary responsibility for reconciling the bank account and making all bank deposits is also the company's accountant.
2. Wellstone Company's treasurer received an award for distinguished service because he had not taken a vacation in 30 years.
3. In order to save money spent on order slips and to reduce time spent keeping track of order slips, a local bar/restaurant does not buy prenumbered order slips.

Action Plan
✔ Familiarize yourself with each of the control activities summarized on page 358.
✔ Understand the nature of the frauds that each control activity is intended to address.

Solution

1. Violates the control activity of segregation of duties. Recordkeeping should be separate from physical custody. As a consequence, the employee could embezzle cash and make journal entries to hide the theft.
2. Violates the control activity of human resource controls. Key employees must take vacations. Otherwise, the treasurer, who manages the company's cash, might embezzle cash and use his position to conceal the theft.
3. Violates the control activity of documentation procedures. If prenumbered documents are not used, then it is virtually impossible to account for the documents. As a consequence, an employee could write up a dinner sale, receive the cash from the customer, and then throw away the order slip and keep the cash.

Related exercise material: **BE8-1, BE8-2, BE8-3, BE8-4, E8-1, and DO IT! 8-1.**

LEARNING OBJECTIVE 2

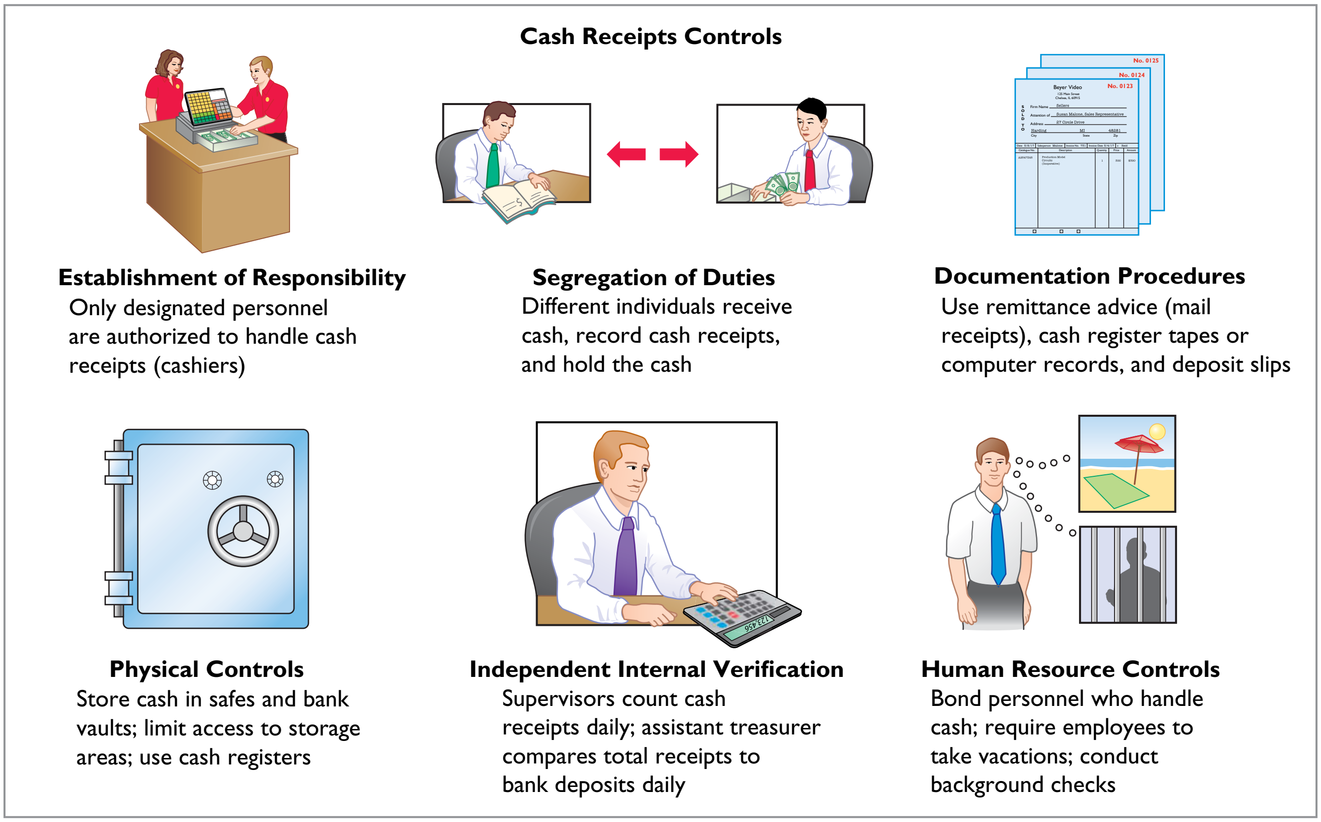
Apply internal control principles to cash.

Cash is the one asset that is readily convertible into any other type of asset. It also is easily concealed and transported, and is highly desired. Because of these characteristics, **cash is the asset most susceptible to fraudulent activities**. In addition, because of the large volume of cash transactions, numerous errors may occur in executing and recording them. To safeguard cash and to ensure the accuracy of the accounting records for cash, effective internal control over cash is critical.

Cash Receipts Controls

Illustration 8-4 shows how the internal control principles explained earlier apply to cash receipts transactions. As you might expect, companies vary considerably in how they apply these principles. To illustrate internal control over cash receipts, we will examine control activities for a retail store with both over-the-counter and mail receipts.

Illustration 8-4
Application of internal control principles to cash receipts



OVER-THE-COUNTER RECEIPTS

In retail businesses, control of over-the-counter receipts centers on cash registers that are visible to customers. A cash sale is entered in a cash register (or point-of-sale terminal), with the amount clearly visible to the customer. This activity prevents the sales clerk from entering a lower amount and pocketing the difference. The customer receives an itemized cash register receipt slip and is expected to count the change received. (One weakness at Barriques in the Feature Story is that customers are only given a receipt if requested.) The cash register's tape is locked in the register until a supervisor removes it. This tape accumulates the daily transactions and totals.

At the end of the clerk's shift, the clerk counts the cash and sends the cash and the count to the cashier. The cashier counts the cash, prepares a deposit slip, and deposits the cash at the bank. The cashier also sends a duplicate of the deposit slip to the accounting department to indicate cash received. The supervisor removes the cash register tape and sends it to the accounting department as the basis for a journal entry to record the cash received. (For point-of-sale systems, the accounting department receives information on daily transactions and totals through the computer network.) Illustration 8-5 summarizes this process.

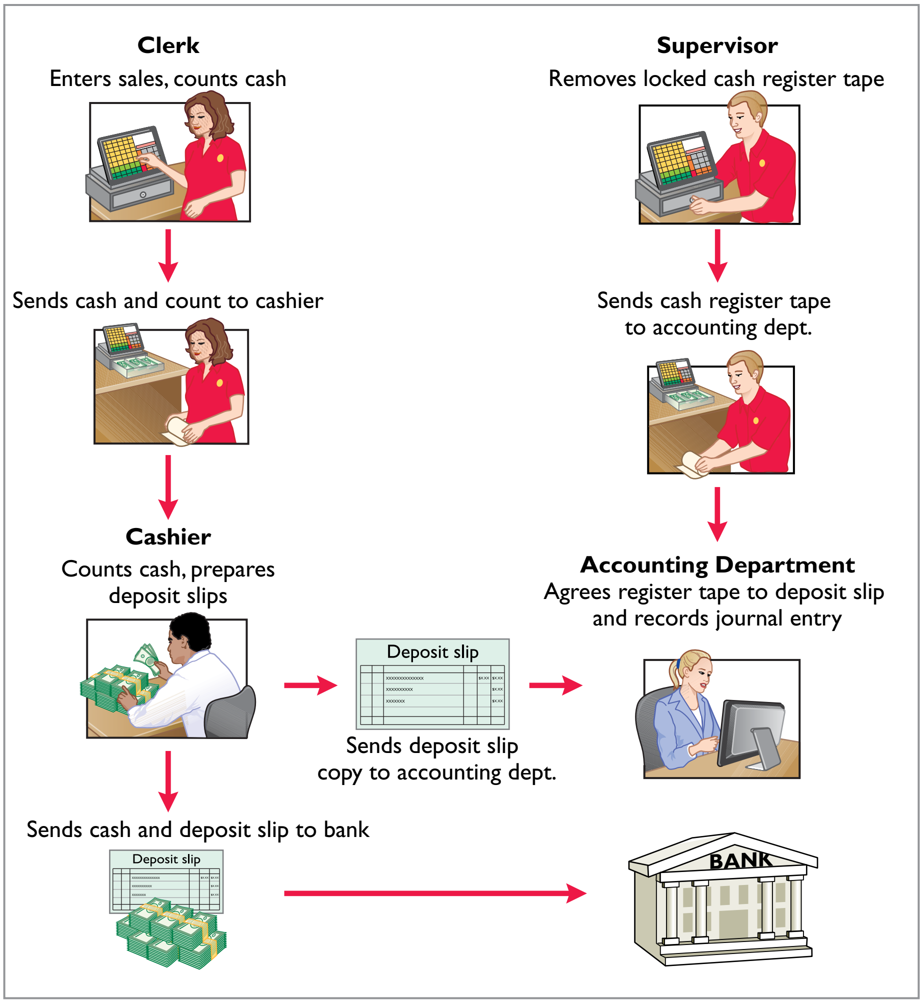


Illustration 8-5
Control of over-the-counter receipts

Helpful Hint
Flowcharts such as this one enhance the understanding of the flow of documents, the processing steps, and the internal control procedures.

This system for handling cash receipts uses an important internal control principle—segregation of recordkeeping from physical custody. The supervisor has access to the cash register tape but **not** to the cash. The clerk and the cashier have access to the cash but **not** to the register tape. In addition, the cash register tape provides documentation and enables independent internal verification. Use of these three principles of internal control (segregation of recordkeeping from physical custody, documentation, and independent internal verification) provides an effective system of internal control. Any attempt at fraudulent activity should be detected unless there is collusion among the employees.

In some instances, the amount deposited at the bank will not agree with the cash recorded in the accounting records based on the cash register tape. These differences often result because the clerk hands incorrect change back to the retail customer. In this case, the difference between the actual cash and the amount reported on the cash register tape is reported in a Cash Over and Short account. For example, suppose that the cash register tape indicated sales of $6,956.20 but the amount of cash was only $6,946.10. A cash shortfall of $10.10 exists. To account for this cash shortfall and related cash, the company makes the following entry.

A	=	L	+	OE
+6,946.10				
				−10.10
				+6,956.20

Cash Flows
+6,946.10

Cash	6,946.10	
Cash Over and Short	10.10	
Sales Revenue		6,956.20
(To record cash shortfall)		

Cash Over and Short is an income statement item. It is reported as miscellaneous expense when there is a cash shortfall, and as miscellaneous revenue when there is an overage. Clearly, the amount should be small. Any material amounts in this account should be investigated.

MAIL RECEIPTS

All mail receipts should be opened in the presence of at least two mail clerks. These receipts are generally in the form of checks. A mail clerk should endorse each check "For Deposit Only." This restrictive endorsement reduces the likelihood that someone could divert the check to personal use. Banks will not give an individual cash when presented with a check that has this type of endorsement.

The mail clerks prepare, in triplicate, a list of the checks received each day. This list shows the name of the check issuer, the purpose of the payment, and the amount of the check. Each mail clerk signs the list to establish responsibility for the data. The original copy of the list, along with the checks, is then sent to the cashier's department. A copy of the list is sent to the accounting department for recording in the accounting records. The clerks also keep a copy.

This process provides excellent internal control for the company. By employing two clerks, the chance of fraud is reduced. Each clerk knows he or she is being observed by the other clerk(s). To engage in fraud, they would have to collude. The customers who submit payments also provide control because they will contact the company with a complaint if they are not properly credited for payment. Because the cashier has access to cash but not the records, and the accounting department has access to records but not cash, neither can engage in undetected fraud.

DO IT! 2a Control over Cash Receipts

L. R. Cortez is concerned about the control over cash receipts in his fast-food restaurant, Big Cheese. The restaurant has two cash registers. At no time do more than two employees take customer orders and enter sales. Work shifts for employees range from 4 to 8 hours. Cortez asks your help in installing a good system of internal control over cash receipts.

Action Plan

✔ Differentiate among the internal control principles of (1) establishing responsibility, (2) using physical controls, and (3) independent internal verification.

✔ Design an effective system of internal control over cash receipts.

Solution

Cortez should assign a separate cash register drawer to each employee at the start of each work shift, with register totals set at zero. Each employee should have access to only the assigned register drawer to enter all sales. Each customer should be given a receipt. At the end of the shift, the employee should do a cash count. A separate employee should compare the cash count with the register tape to be sure they agree. In addition, Cortez should install an automated system that would enable the company to compare orders entered in the register to orders processed by the kitchen.

Related exercise material: **BE8-5, BE8-6, BE8-7, E8-2, and DO IT! 8-2a.**

Cash Disbursements Controls

Companies disburse cash for a variety of reasons, such as to pay expenses and liabilities or to purchase assets. **Generally, internal control over cash disbursements is more effective when companies pay by check or electronic funds transfer (EFT) rather than by cash.** One exception is **payments for incidental amounts that are paid out of petty cash**.[2]

Companies generally issue checks only after following specified control procedures. Illustration 8-6 shows how principles of internal control apply to cash disbursements.

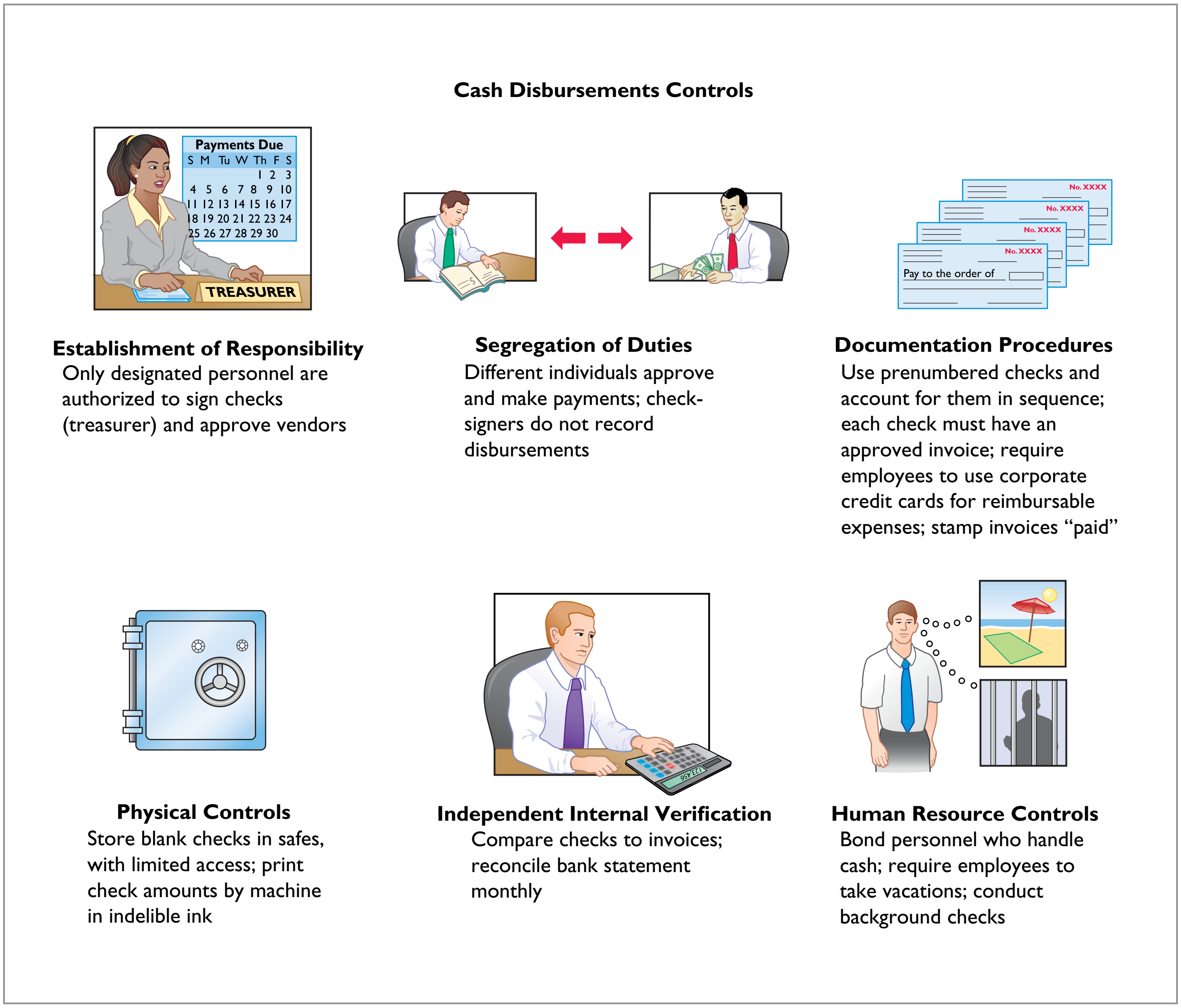


Illustration 8-6
Application of internal control principles to cash disbursements

VOUCHER SYSTEM CONTROLS

Most medium and large companies use vouchers as part of their internal control over cash disbursements. A **voucher system** is a network of approvals by authorized individuals, acting independently, to ensure that all disbursements by check are proper.

The system begins with the authorization to incur a cost or expense. It ends with the issuance of a check for the liability incurred. A **voucher** is an authorization form prepared for each expenditure. Companies require vouchers for all types of cash disbursements except those from petty cash.

[2]We explain the operation of a petty cash fund on pages 370–372.

The starting point in preparing a voucher is to fill in the appropriate information about the liability on the face of the voucher. The vendor's invoice provides most of the needed information. Then, an employee in accounts payable records the voucher (in a journal called a **voucher register**) and files it according to the date on which it is to be paid. The company issues and sends a check on that date, and stamps the voucher "paid." The paid voucher is sent to the accounting department for recording (in a journal called the **check register**). A voucher system involves two journal entries, one to record the liability when the voucher is issued and a second to pay the liability that relates to the voucher.

The use of a voucher system, whether done manually or electronically, improves internal control over cash disbursements. First, the authorization process inherent in a voucher system establishes responsibility. Each individual has responsibility to review the underlying documentation to ensure that it is correct. In addition, the voucher system keeps track of the documents that back up each transaction. By keeping these documents in one place, a supervisor can independently verify the authenticity of each transaction. Consider, for example, the case of Aesop University presented on page 360. Aesop did not use a voucher system for transactions under $2,500. As a consequence, there was no independent verification of the documents, which enabled the employee to submit fake invoices to hide his unauthorized purchases.

Petty Cash Fund

As you just learned, better internal control over cash disbursements is possible when companies make payments by check. However, using checks to pay small amounts is both impractical and a nuisance. For instance, a company would not want to write checks to pay for postage due, working lunches, or taxi fares. A common way of handling such payments, while maintaining satisfactory control, is to use a **petty cash fund** to pay relatively small amounts. The operation of a petty cash fund, often called an **imprest system**, involves (1) establishing the fund, (2) making payments from the fund, and (3) replenishing the fund.[3]

ESTABLISHING THE PETTY CASH FUND

Two essential steps in establishing a petty cash fund are (1) appointing a petty cash custodian who will be responsible for the fund, and (2) determining the size of the fund. Ordinarily, a company expects the amount in the fund to cover anticipated disbursements for a three- to four-week period.

To establish the fund, a company issues a check payable to the petty cash custodian for the stipulated amount. For example, if Laird Company decides to establish a $100 fund on March 1, the general journal entry is:

A	=	L	+	OE
+100				
−100				

Cash Flows
no effect

Mar. 1	Petty Cash	100	
	Cash		100
	(To establish a petty cash fund)		

The fund custodian cashes the check and places the proceeds in a locked petty cash box or drawer. Most petty cash funds are established on a fixed-amount basis. The company will make no additional entries to the Petty Cash account unless management changes the stipulated amount of the fund. For example, if Laird Company decides on July 1 to increase the size of the fund to $250, it would debit Petty Cash $150 and credit Cash $150.

ETHICS NOTE

Petty cash funds are authorized and legitimate. In contrast, "slush" funds are unauthorized and hidden (under the table).

MAKING PAYMENTS FROM THE PETTY CASH FUND

The petty cash custodian has the authority to make payments from the fund that conform to prescribed management policies. Usually, management limits the size of

[3]The term "imprest" means an advance of money for a designated purpose.

expenditures that come from petty cash. Likewise, it may not permit use of the fund for certain types of transactions (such as making short-term loans to employees).

Each payment from the fund must be documented on a prenumbered petty cash receipt (or petty cash voucher), as shown in Illustration 8-7. The signatures of both the fund custodian and the person receiving payment are required on the receipt. If other supporting documents such as a freight bill or invoice are available, they should be attached to the petty cash receipt.

Helpful Hint
The petty cash receipt satisfies two internal control procedures: (1) establishing responsibility (signature of custodian), and (2) documentation procedures.

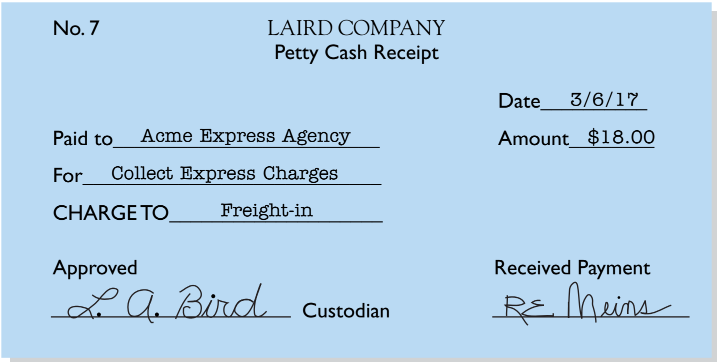

No. 7
LAIRD COMPANY
Petty Cash Receipt
Date 3/6/17
Paid to Acme Express Agency
Amount $18.00
For Collect Express Charges
CHARGE TO Freight-in
Approved
L. A. Bird Custodian
Received Payment
R E Meins

Illustration 8-7
Petty cash receipt

The petty cash custodian keeps the receipts in the petty cash box until the fund is replenished. The sum of the petty cash receipts and the money in the fund should equal the established total at all times. Management can (and should) make surprise counts at any time to determine whether the fund is being maintained correctly.

The company does not make an accounting entry to record a payment when it is made from petty cash. It is considered both inexpedient and unnecessary to do so. Instead, the company recognizes the accounting effects of each payment when it replenishes the fund.

ETHICS NOTE

Internal control over a petty cash fund is strengthened by (1) having a supervisor make surprise counts of the fund to confirm whether the paid petty cash receipts and fund cash equal the imprest amount, and (2) canceling or mutilating the paid petty cash receipts so they cannot be resubmitted for reimbursement.

REPLENISHING THE PETTY CASH FUND

When the money in the petty cash fund reaches a minimum level, the company replenishes the fund. The petty cash custodian initiates a request for reimbursement. The individual prepares a schedule (or summary) of the payments that have been made and sends the schedule, supported by petty cash receipts and other documentation, to the treasurer's office. The treasurer's office examines the receipts and supporting documents to verify that proper payments from the fund were made. The treasurer then approves the request and issues a check to restore the fund to its established amount. At the same time, all supporting documentation is stamped "paid" so that it cannot be submitted again for payment.

To illustrate, assume that on March 15 Laird's petty cash custodian requests a check for $87. The fund contains $13 cash and petty cash receipts for postage $44, freight-out $38, and miscellaneous expenses $5. The general journal entry to record the check is as follows.

Mar. 15	Postage Expense	44	
	Freight-Out	38	
	Miscellaneous Expense	5	
	Cash		87
	(To replenish petty cash fund)		

A	=	L	+	OE
				−44 Exp
				−38 Exp
				−5 Exp
−87				

Cash Flows
−87

Note that the reimbursement entry does not affect the Petty Cash account. Replenishment changes the composition of the fund by replacing the petty cash receipts with cash. It does not change the balance in the fund.

A	=	L	+	OE
				−44 Exp
				−38 Exp
				−5 Exp
				−1 Exp
−88				

Cash Flows
−88

Occasionally, in replenishing a petty cash fund, the company may need to recognize a cash shortage or overage. This results when the total of the cash plus receipts in the petty cash box does not equal the established amount of the petty cash fund. To illustrate, assume that Laird's petty cash custodian has only $12 in cash in the fund plus the receipts as listed. The request for reimbursement would therefore be for $88, and Laird would make the following entry.

Mar. 15	Postage Expense	44	
	Freight-Out	38	
	Miscellaneous Expense	5	
	Cash Over and Short	1	
	Cash		88
	(To replenish petty cash fund)		

Conversely, if the custodian has $14 in cash, the reimbursement request would be for $86. The company would credit Cash Over and Short for $1 (overage). A company reports a debit balance in Cash Over and Short in the income statement as miscellaneous expense. It reports a credit balance in the account as miscellaneous revenue. The company closes Cash Over and Short to Income Summary at the end of the year.

Companies should replenish a petty cash fund at the end of the accounting period, regardless of the cash in the fund. Replenishment at this time is necessary in order to recognize the effects of the petty cash payments on the financial statements.

Helpful Hint
Cash over and short situations result from mathematical errors or from failure to keep accurate records.

Ethics Insight

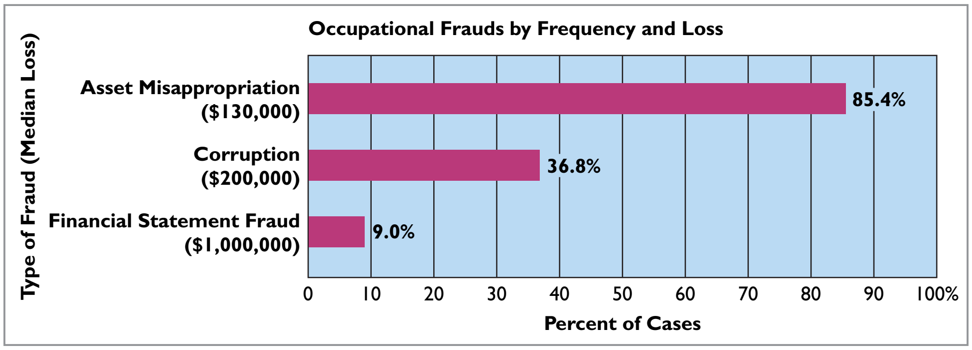
© Chris Fernig/iStockphoto

How Employees Steal

Occupational fraud is using your own occupation for personal gain through the misuse or misapplication of the company's resources or assets. This type of fraud is one of three types:

1. **Asset misappropriation**, such as theft of cash on hand, fraudulent disbursements, false refunds, ghost employees, personal purchases, and fictitious employees. This fraud is the most common but the least costly.
2. **Corruption**, such as bribery, illegal gratuities, and economic extortion. This fraud generally falls in the middle between asset misappropriation and financial statement fraud as regards frequency and cost.
3. **Financial statement fraud**, such as fictitious revenues, concealed liabilities and expenses, improper disclosures, and improper asset values. This fraud occurs less frequently than other types of fraud but it is the most costly.

The graph below shows the frequency and the median loss for each type of occupational fraud.



Source: *2014 Report to the Nations on Occupational Fraud and Abuse*, Association of Certified Fraud Examiners, pp. 10–12.

How can companies reduce the likelihood of occupational fraud? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 2b Petty Cash Fund

Bateer Company established a $50 petty cash fund on July 1. On July 30, the fund had $12 cash remaining and petty cash receipts for postage $14, office supplies $10, and delivery expense $15. Prepare journal entries to establish the fund on July 1 and to replenish the fund on July 30.

Solution

July 1	Petty Cash	50	
	Cash		50
	(To establish petty cash fund)		
30	Postage Expense	14	
	Supplies	10	
	Delivery Expense	15	
	Cash Over and Short		1
	Cash ($50 − $12)		38
	(To replenish petty cash)		

Related exercise material: **BE8-9, E8-7, E8-8, and DO IT! 8-2b.**

Action Plan

✔ To establish the fund, set up a separate general ledger account.

✔ Determine how much cash is needed to replenish the fund: subtract the cash remaining from the petty cash fund balance.

✔ Total the petty cash receipts. Determine any cash over or short—the difference between the cash needed to replenish the fund and the total of the petty cash receipts.

✔ Record the expenses incurred according to the petty cash receipts when replenishing the fund.

LEARNING OBJECTIVE 3 Identify the control features of a bank account.

The use of a bank contributes significantly to good internal control over cash. A company can safeguard its cash by using a bank as a depository and as a clearinghouse for checks received and written. Use of a bank minimizes the amount of currency that a company must keep on hand. Also, use of a bank facilitates the control of cash because it creates a double record of all bank transactions—one by the company and the other by the bank. The asset account Cash maintained by the company should have the same balance as the bank's liability account for that company. A **bank reconciliation** compares the bank's balance with the company's balance and explains any differences to make them agree.

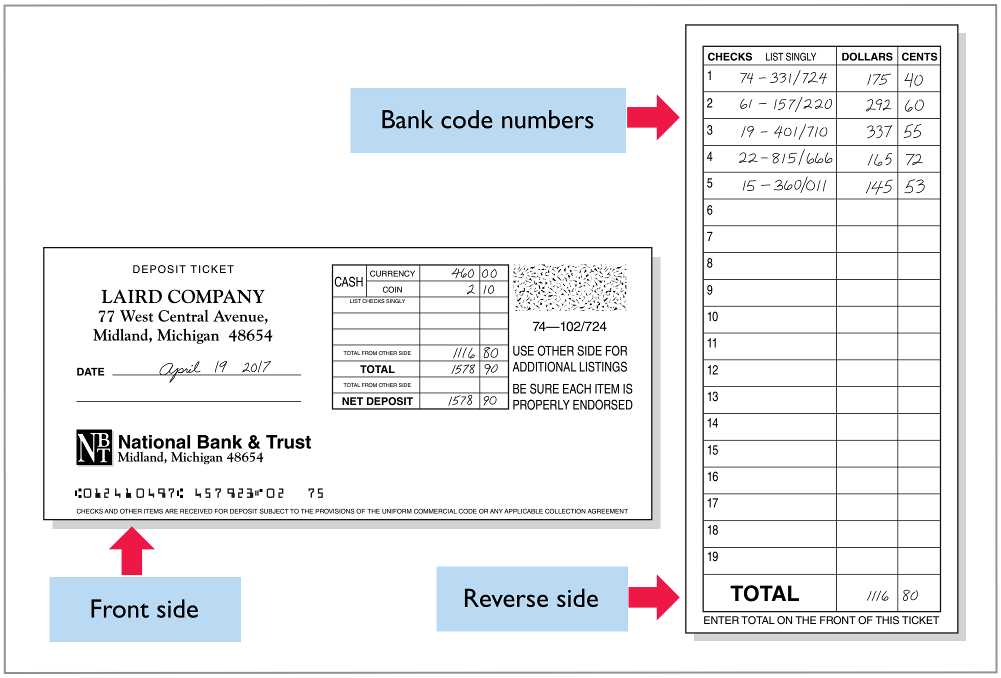
Many companies have more than one bank account. For efficiency of operations and better control, national retailers like Wal-Mart Stores, Inc. and Target may have regional bank accounts. Large companies, with tens of thousands of employees, may have a payroll bank account, as well as one or more general bank accounts. Also, a company may maintain several bank accounts in order to have more than one source for short-term loans when needed.

Making Bank Deposits

An authorized employee, such as the head cashier, should make a company's bank deposits. Each deposit must be documented by a deposit slip (ticket), as shown in Illustration 8-8 (page 374).

Deposit slips are prepared in duplicate. The bank retains the original; the depositor keeps the duplicate, machine-stamped by the bank to establish its authenticity.

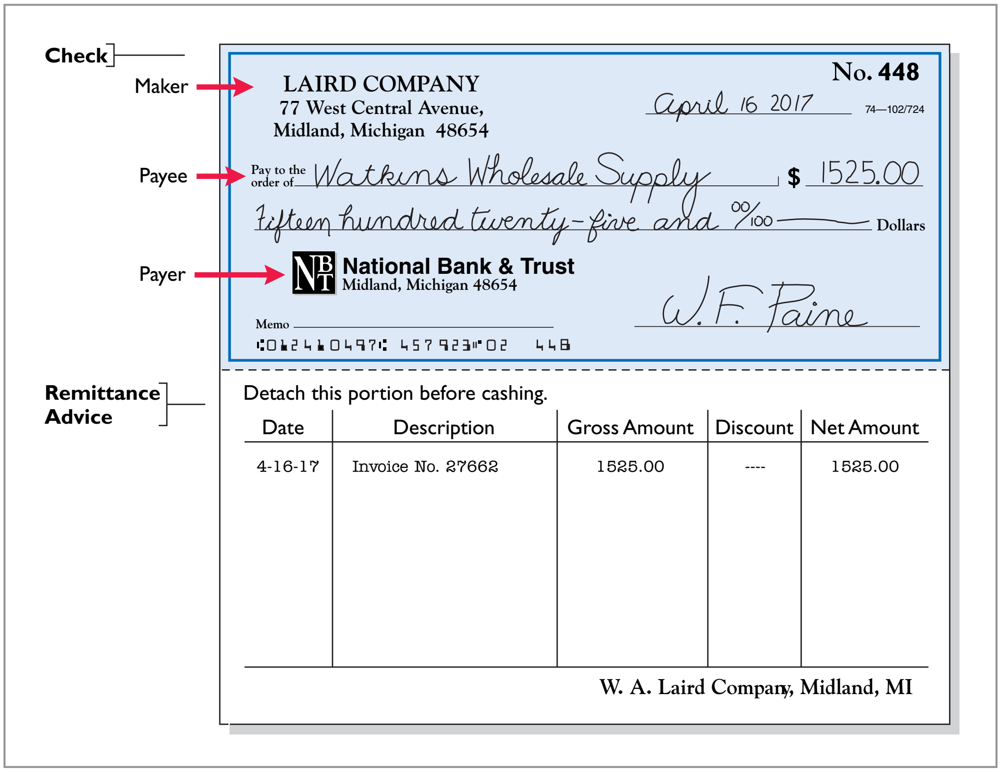
Illustration 8-8
Deposit slip



Writing Checks

A **check** is a written order signed by the depositor directing the bank to pay a specified sum of money to a designated recipient. There are three parties to a check: (1) the **maker** (or drawer) who issues the check, (2) the **bank** (or payer) on which the check is drawn, and (3) the **payee** to whom the check is payable. A check is a **negotiable instrument** that one party can transfer to another party by endorsement. Each check should be accompanied by an explanation of its purpose. In many companies, a remittance advice attached to the check, as shown in Illustration 8-9, explains the check's purpose.

Illustration 8-9
Check with remittance advice



It is important to know the balance in the checking account at all times. To keep the balance current, the depositor should enter each deposit and check on running-balance memo forms (or online statements) provided by the bank or on the check stubs in the checkbook.

Bank Statements

If you have a personal checking account, you are probably familiar with bank statements. A **bank statement** shows the depositor's bank transactions and balances.[4] Each month, a depositor receives a statement from the bank. Illustration 8-10 presents a typical bank statement for Laird Company. It shows (1) checks paid and other debits (such as debit card transactions or direct withdrawals for bill payments) that reduce the balance in the depositor's account, (2) deposits and other credits that increase the balance in the depositor's account, and (3) the account balance after each day's transactions.

Helpful Hint
Essentially, the bank statement is a copy of the bank's records sent to the customer (or available online) for review.

Illustration 8-10
Bank statement

National Bank & Trust
Midland, Michigan 48654 Member FDIC

ACCOUNT STATEMENT

LAIRD COMPANY
77 WEST CENTRAL AVENUE
MIDLAND, MICHIGAN 48654

Statement Date/Credit Line Closing Date
April 30, 2017

457923
ACCOUNT NUMBER

Balance Last Statement	Deposits and Credits No.	Deposits and Credits Total Amount	Checks and Debits No.	Checks and Debits Total Amount	Balance This Statement
13,256.90	20	34,805.10	26	32,154.55	15,907.45

CHECKS AND DEBITS			DEPOSITS AND CREDITS		DAILY BALANCE	
Date	No.	Amount	Date	Amount	Date	Amount
4–2	435	644.95	4–2	4,276.85	4–2	16,888.80
4–5	436	3,260.00	4–3	2,137.50	4–3	18,249.65
4–4	437	1,185.79	4–5	1,350.47	4–4	17,063.86
4–3	438	776.65	4–7	982.46	4–5	15,154.33
4–8	439	1,781.70	4–8	1,320.28	4–7	14,648.89
4–7	440	1,487.90	4–9 CM	1,035.00	4–8	11,767.47
4–8	441	2,420.00	4–11	2,720.00	4–9	12,802.47
4–11	442	1,585.60	4–12	757.41	4–11	13,936.87
4–12	443	1,226.00	4–13	1,218.56	4–12	13,468.28
4–29	NSF	425.60	4–27	1,545.57	4–27	13,005.45
4–29	459	1,080.30	4–29	2,929.45	4–29	14,429.00
4–30	DM	30.00	4–30	2,128.60	4–30	15,907.45
4–30	461	620.15				

Symbols: **CM** Credit Memo **EC** Error Correction **NSF** Not Sufficient Funds
DM Debit Memo **INT** Interest Earned **SC** Service Charge

Reconcile Your Account Promptly

Helpful Hint
The bank *credits* to the customer's account every deposit it receives. The reverse occurs when the bank "pays" a check issued by a company on its checking account balance. Payment reduces the bank's liability. Thus, the bank *debits* check payments to the customer's account with the bank.

The bank statement lists in numerical sequence all "paid" checks, along with the date the check was paid and its amount. Upon paying a check, the bank stamps the check "paid"; a paid check is sometimes referred to as a **canceled** check. On the statement, the bank also includes memoranda explaining other debits and credits it made to the depositor's account.

[4]Our presentation assumes that the depositor makes all adjustments at the end of the month. In practice, a company may also make journal entries during the month as it reviews information from the bank regarding its account.

DEBIT MEMORANDUM

Some banks charge a monthly fee for their services. Often, they charge this fee only when the average monthly balance in a checking account falls below a specified amount. They identify the fee, called a **bank service charge**, on the bank statement by a symbol such as **SC**. The bank also sends with the statement a debit memorandum explaining the charge noted on the statement. Other debit memoranda may also be issued for other bank services such as the cost of printing checks, issuing traveler's checks, and wiring funds to other locations. The symbol **DM** is often used for such charges.

Banks also use a debit memorandum when a deposited check from a customer "bounces" because of insufficient funds. For example, assume that J. R. Baron, a customer of Laird Company, sends a check for $425.60 to Laird Company for services performed. Unfortunately, Baron does not have sufficient funds at its bank to pay for these services. In such a case, Baron's bank marks the check **NSF** (not sufficient funds) and returns it to Laird's (the depositor's) bank. Laird's bank then debits Laird's account, as shown by the symbol NSF on the bank statement in Illustration 8-10. The bank sends the NSF check and debit memorandum to Laird as notification of the charge. Laird then records an Account Receivable from J. R. Baron (the writer of the bad check) and reduces cash for the NSF check.

CREDIT MEMORANDUM

Sometimes a depositor asks the bank to collect its notes receivable. In such a case, the bank will credit the depositor's account for the cash proceeds of the note. This is illustrated by the symbol **CM** on the Laird Company bank statement. The bank issues and sends with the statement a credit memorandum to explain the entry. Many banks also offer interest on checking accounts. The interest earned may be indicated on the bank statement by the symbol **CM** or **INT**.

Reconciling the Bank Account

The bank and the depositor maintain independent records of the depositor's checking account. People tend to assume that the respective balances will always agree. In fact, the two balances are seldom the same at any given time, and both balances differ from the "correct" or "true" balance. Therefore, it is necessary to make the balance per books and the balance per bank agree with the correct or true amount—a process called **reconciling the bank account**. The need for agreement has two causes:

1. **Time lags** that prevent one of the parties from recording the transaction in the same period as the other party.
2. **Errors** by either party in recording transactions.

Time lags occur frequently. For example, several days may elapse between the time a company mails a check to a payee and the date the bank pays the check. Similarly, when the depositor uses the bank's night depository to make its deposits, there will be a difference of at least one day between the time the depositor records the deposit and the time the bank does so. A time lag also occurs whenever the bank mails a debit or credit memorandum to the depositor.

The incidence of errors depends on the effectiveness of the internal controls maintained by the company and the bank. Bank errors are infrequent. However, either party could accidentally record a $450 check as $45 or $540. In addition, the bank might mistakenly charge a check drawn by C. D. Berg to the account of C. D. Burg.

RECONCILIATION PROCEDURE

The bank reconciliation should be prepared by an employee who has no other responsibilities pertaining to cash. If a company fails to follow this internal control principle of independent internal verification, cash embezzlements may go unnoticed. For example, a cashier who prepares the reconciliation can embezzle cash and conceal the embezzlement by misstating the reconciliation. Thus, the bank accounts would reconcile, and the embezzlement would not be detected.

In reconciling the bank account, it is customary to reconcile the balance per books and balance per bank to their adjusted (correct or true) cash balances. The starting point in preparing the reconciliation is to enter the balance per bank statement and balance per books on the reconciliation schedule. The company then makes various adjustments, as shown in Illustration 8-11.

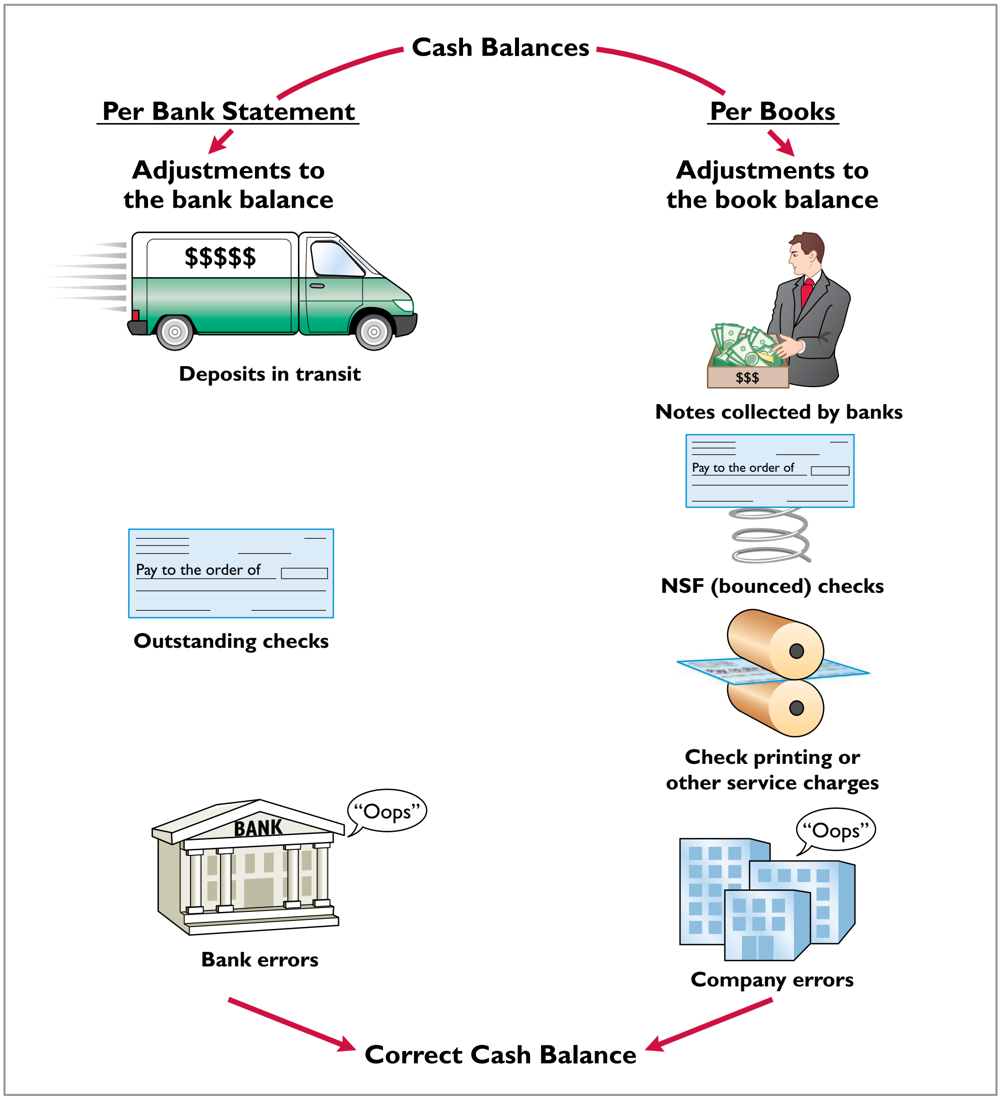


Illustration 8-11
Bank reconciliation adjustments

The following steps should reveal all the reconciling items that cause the difference between the two balances.

Step 1. Deposits in transit. Compare the individual deposits listed on the bank statement with deposits in transit from the preceding bank reconciliation and with the deposits per company records or duplicate deposit slips. Deposits recorded by the depositor that have not been recorded by the bank are the **deposits in transit**. Add these deposits to the balance per bank.

Helpful Hint
Deposits in transit and outstanding checks are reconciling items because of time lags.

Step 2. Outstanding checks. Compare the paid checks shown on the bank statement with (a) checks outstanding from the previous bank reconciliation, and (b) checks issued by the company as recorded in the cash payments journal (or in the check register in your personal checkbook). Issued checks recorded by the company but that have not yet been paid by the bank are **outstanding checks**. Deduct outstanding checks from the balance per bank.

Step 3. Errors. Note any errors discovered in the foregoing steps and list them in the appropriate section of the reconciliation schedule. For example, if the company mistakenly recorded as $169 a paid check correctly written for $196, it would deduct the error of $27 from the balance per books. All errors made by the depositor are reconciling items in determining the adjusted cash balance per books. In contrast, all errors made by the bank are reconciling items in determining the adjusted cash balance per bank.

Step 4. Bank memoranda. Trace bank memoranda to the depositor's records. List in the appropriate section of the reconciliation schedule any unrecorded memoranda. For example, the company would deduct from the balance per books a $5 debit memorandum for bank service charges. Similarly, it would add to the balance per books $32 of interest earned.

BANK RECONCILIATION ILLUSTRATED

Helpful Hint
Note in the bank statement in Illustration 8-10 that checks no. 459 and 461 have been paid but check no. 460 is not listed. Thus, this check is outstanding. If a complete bank statement were provided, checks no. 453 and 457 would also not be listed. The amounts for these three checks are obtained from the company's cash payments records.

The bank statement for Laird Company (Illustration 8-10) shows a balance per bank of $15,907.45 on April 30, 2017. On this date the balance of cash per books is $11,589.45. Using the four reconciliation steps, Laird determines the following reconciling items.

Step 1.	**Deposits in transit:** April 30 deposit (received by bank on May 1).	$2,201.40
Step 2.	**Outstanding checks:** No. 453, $3,000.00; no. 457, $1,401.30; no. 460, $1,502.70.	5,904.00
Step 3.	**Errors:** Laird wrote check no. 443 for $1,226.00 and the bank correctly paid that amount. However, Laird recorded the check as $1,262.00.	36.00
Step 4.	**Bank memoranda:**	
	a. Debit—NSF check from J. R. Baron for $425.60.	425.60
	b. Debit—Charge for printing company checks $30.00.	30.00
	c. Credit—Collection of note receivable for $1,000 plus interest earned $50, less bank collection fee $15.00.	1,035.00

Illustration 8-12 shows Laird's bank reconciliation.

Illustration 8-12
Bank reconciliation

LAIRD COMPANY
Bank Reconciliation
April 30, 2017

Cash balance per bank statement		$ 15,907.45
Add: Deposits in transit		2,201.40
		18,108.85
Less: Outstanding checks		
No. 453	$3,000.00	
No. 457	1,401.30	
No. 460	1,502.70	5,904.00
Adjusted cash balance per bank		**$12,204.85**
Cash balance per books		$ 11,589.45
Add: Collection of note receivable $1,000, plus interest earned $50, less collection fee $15	$1,035.00	
Error in recording check no. 443	36.00	1,071.00
		12,660.45
Less: NSF check	425.60	
Bank service charge	30.00	455.60
Adjusted cash balance per books		**$12,204.85**

Alternative Terminology
The terms *adjusted cash balance, true cash balance,* and *correct cash balance* are used interchangeably.

ENTRIES FROM BANK RECONCILIATION

The company records each reconciling item used to determine the **adjusted cash balance per books**. **If the company does not journalize and post these items, the Cash account will not show the correct balance.** Laird Company would make the following entries on April 30.

Helpful Hint
The entries that follow are adjusting entries. In prior chapters, Cash was an account that did not require adjustment. That was a simplifying assumption for learning purposes because we had not yet explained a bank reconciliation.

COLLECTION OF NOTE RECEIVABLE This entry involves four accounts. Assuming that the interest of $50 has not been accrued and the collection fee is charged to Miscellaneous Expense, the entry is:

Apr. 30	Cash	1,035.00	
	Miscellaneous Expense	15.00	
	Notes Receivable		1,000.00
	Interest Revenue		50.00
	(To record collection of note receivable by bank)		

A	=	L	+	OE
+1,035				
				−15 Exp
−1,000				
				+50 Rev

Cash Flows
+1,035

BOOK ERROR The cash disbursements journal shows that check no. 443 was a payment on account to Andrea Company, a supplier. The correcting entry is:

Apr. 30	Cash	36.00	
	Accounts Payable—Andrea Company		36.00
	(To correct error in recording check no. 443)		

A	=	L	+	OE
+36				
		+36		

Cash Flows
+36

NSF CHECK As indicated earlier, an NSF check becomes an account receivable to the depositor. The entry is:

Apr. 30	Accounts Receivable—J. R. Baron	425.60	
	Cash		425.60
	(To record NSF check)		

A	=	L	+	OE
+425.60				
−425.60				

Cash Flows
−425.60

BANK SERVICE CHARGES Depositors debit check printing charges (DM) and other bank service charges (SC) to Miscellaneous Expense because they are usually nominal in amount. The entry is:

Apr. 30	Miscellaneous Expense	30.00	
	Cash		30.00
	(To record charge for printing company checks)		

A	=	L	+	OE
				−30 Exp
−30				

Cash Flows
−30

Instead of making four separate entries, Laird could combine them into one compound entry.

After Laird has posted the entries, the Cash account will show the following.

Illustration 8-13
Adjusted balance in Cash account

Cash

Apr. 30 Bal.	11,589.45	Apr. 30	425.60
30	1,035.00	30	30.00
30	36.00		
Apr. 30 Bal.	**12,204.85**		

The adjusted cash balance in the ledger should agree with the adjusted cash balance per books in the bank reconciliation in Illustration 8-12 (page 378).

What entries does the bank make? If the company discovers any bank errors in preparing the reconciliation, it should notify the bank. The bank then can make the necessary corrections in its records. The bank does not make any entries for deposits in transit or outstanding checks. Only when these items reach the bank will the bank record these items.

Electronic Funds Transfer (EFT) System

It is not surprising that companies and banks have developed approaches to transfer funds among parties without the use of paper (deposit tickets, checks, etc.). Such procedures, called **electronic funds transfers (EFT)**, are disbursement systems that use wire, telephone, or computers to transfer cash balances from one location to another. Use of EFT is quite common. For example, many employees receive no formal payroll checks from their employers. Instead, employers send electronic payroll data to the appropriate banks. Also, individuals and companies now frequently make regular payments such as those for house, car, and utilities by EFT.

EFT transactions normally result in better internal control since no cash or checks are handled by company employees. This does not mean that opportunities for fraud are eliminated. In fact, the same basic principles related to internal control apply to EFT transfers. For example, without proper segregation of duties and authorizations, an employee might be able to redirect electronic payments into a personal bank account and conceal the theft with fraudulent accounting entries.

Investor Insight

Mary Altaffer/©AP/Wide World Photos

Madoff's Ponzi Scheme

No recent fraud has generated more interest and rage than the one perpetrated by Bernard Madoff. Madoff was an elite New York investment fund manager who was highly regarded by securities regulators. Investors flocked to him because he delivered very steady returns of between 10% and 15%, no matter whether the market was going up or going down. However, for many years, Madoff did not actually invest the cash that people gave to him. Instead, he was running a Ponzi scheme: He paid returns to existing investors using cash received from new investors. As long as the size of his investment fund continued to grow from new investments at a rate that exceeded the amounts that he needed to pay out in returns, Madoff was able to operate his fraud smoothly.

To conceal his misdeeds, Madoff fabricated false investment statements that were provided to investors. In addition, Madoff hired an auditor that never verified the accuracy of the investment records but automatically issued unqualified opinions each year. Although a competing fund manager warned the SEC a number of times over a nearly 10-year period that he thought Madoff was engaged in fraud, the SEC never aggressively investigated the allegations. Investors, many of which were charitable organizations, lost more than $18 billion. Madoff was sentenced to a jail term of 150 years.

How was Madoff able to conceal such a giant fraud? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 3 Bank Reconciliation

Sally Kist owns Linen Kist Fabrics. Sally asks you to explain how she should treat the following reconciling items when reconciling the company's bank account: (1) a debit memorandum for an NSF check, (2) a credit memorandum for a note collected by the bank, (3) outstanding checks, and (4) a deposit in transit.

Solution

Sally should treat the reconciling items as follows.
(1) NSF check: Deduct from balance per books.
(2) Collection of note: Add to balance per books.
(3) Outstanding checks: Deduct from balance per bank.
(4) Deposit in transit: Add to balance per bank.

Related exercise material: **BE8-11, BE8-12, BE8-13, BE8-14, E8-9, E8-10, E8-11, E8-12, E8-13, and DO IT! 8-3.**

Action Plan

✔ Understand the purpose of a bank reconciliation.

✔ Identify time lags and explain how they cause reconciling items.

LEARNING OBJECTIVE 4

Explain the reporting of cash.

Cash consists of coins, currency (paper money), checks, money orders, and money on hand or on deposit in a bank or similar depository. Companies report cash in two different statements: the balance sheet and the statement of cash flows. The balance sheet reports the amount of cash available at a given point in time. The statement of cash flows shows the sources and uses of cash during a period of time. The statement of cash flows was introduced in Chapter 1 and will be discussed in much detail in Chapter 17. In this section, we discuss some important points regarding the presentation of cash in the balance sheet.

When presented in a balance sheet, cash on hand, cash in banks, and petty cash are often combined and reported simply as **Cash**. Because it is the most liquid asset owned by the company, cash is listed first in the current assets section of the balance sheet.

Cash Equivalents

Many companies use the designation "Cash and cash equivalents" in reporting cash. (See Illustration 8-14 for an example.) **Cash equivalents** are short-term, highly liquid investments that are both:

1. Readily convertible to known amounts of cash, and
2. So near their maturity that their market value is relatively insensitive to changes in interest rates. Generally, only investments with original maturities of three months or less qualify under this definition.

Illustration 8-14
Balance sheet presentation of cash

Real World

DELTA AIR LINES, INC.
Balance Sheet (partial)
December 31, 2013 (in millions)

Assets	
Current assets	
Cash and cash equivalents	**$2,844**
Short-term investments	959
Restricted cash	**122**

Examples of cash equivalents are Treasury bills, commercial paper (short-term corporate notes), and money market funds. All typically are purchased with cash that is in excess of immediate needs.

ETHICS NOTE

Recently, some companies were forced to restate their financial statements because they had too broadly interpreted which types of investments could be treated as cash equivalents. By reporting these items as cash equivalents, the companies made themselves look more liquid.

Occasionally, a company will have a net negative balance in its bank account. In this case, the company should report the negative balance among current liabilities. For example, farm equipment manufacturer Ag-Chem recently reported "Checks outstanding in excess of cash balances" of $2,145,000 among its current liabilities.

Restricted Cash

A company may have **restricted cash**, cash that is not available for general use but rather is restricted for a special purpose. For example, landfill companies are often required to maintain a fund of restricted cash to ensure they will have adequate resources to cover closing and clean-up costs at the end of a landfill site's useful life. McKesson Corp. recently reported restricted cash of $962 million to be paid out as the result of investor lawsuits.

Cash restricted in use should be reported separately on the balance sheet as restricted cash. If the company expects to use the restricted cash within the next year, it reports the amount as a current asset. When this is not the case, it reports the restricted funds as a noncurrent asset.

Illustration 8-14 shows restricted cash reported in the financial statements of Delta Air Lines. The company is required to maintain restricted cash as collateral to support insurance obligations related to workers' compensation claims. Delta does not have access to these funds for general use, and so it must report them separately, rather than as part of cash and cash equivalents.

DO IT! 4 Reporting Cash

Indicate whether each of the following statements is true or false.

1. Cash and cash equivalents are comprised of coins, currency (paper money), money orders, and NSF checks.
2. Restricted cash is classified as either a current asset or noncurrent asset, depending on the circumstances.
3. A company may have a negative balance in its bank account. In this case, it should offset this negative balance against cash and cash equivalents on the balance sheet.
4. Because cash and cash equivalents often includes short-term investments, accounts receivable should be reported as the first item on the balance sheet.

Action Plan

✔ Understand how companies present cash and restricted cash on the balance sheet.

✔ Review the designations of cash equivalents and restricted cash, and how companies typically handle them.

Solution

1. False. NSF checks should be reported as receivables, not cash and cash equivalents. **2.** True. **3.** False. Companies that have a negative balance in their bank accounts should report the negative balance as a current liability. **4.** False. Cash equivalents are readily convertible to known amounts of cash, and so near maturity (less than 3 months) that they are considered more liquid than accounts receivable and therefore are reported before accounts receivable on the balance sheet.

Related exercise material: **E8-14, E8-15, and DO IT! 8-4.**

REVIEW AND PRACTICE

LEARNING OBJECTIVES REVIEW

1 Discuss fraud and the principles of internal control. A fraud is a dishonest act by an employee that results in personal benefit to the employee at a cost to the employer. The fraud triangle refers to the three factors that contribute to fraudulent activity by employees: opportunity, financial pressure, and rationalization. Internal control consists of all the related methods and measures adopted within an organization to safeguard its assets, enhance the reliability of its accounting records, increase efficiency of operations, and ensure compliance with laws and regulations.

The principles of internal control are establishment of responsibility, segregation of duties, documentation procedures, physical controls, independent internal verification, and human resource controls such as bonding and requiring employees to take vacations.

2 **Apply internal control principles to cash.** Internal controls over cash receipts include (a) designating specific personnel to handle cash; (b) assigning different individuals to receive cash, record cash, and maintain custody of cash; (c) using remittance advices for mail receipts, cash register tapes for over-the-counter receipts, and deposit slips for bank deposits; (d) using company safes and bank vaults to store cash with access limited to authorized personnel, and using cash registers in executing over-the-counter receipts; (e) making independent daily counts of register receipts and daily comparison of total receipts with total deposits; and (f) bonding personnel that handle cash and requiring them to take vacations.

Internal controls over cash disbursements include (a) having specific individuals such as the treasurer authorized to sign checks and approve vendors; (b) assigning different individuals to approve items for payment, make the payment, and record the payment; (c) using prenumbered checks and accounting for all checks, with each check supported by an approved invoice; (d) storing blank checks in a safe or vault with access restricted to authorized personnel, and using a check-writing machine to imprint amounts on checks; (e) comparing each check with the approved invoice before issuing the check, and making monthly reconciliations of bank and book balances; and (f) bonding personnel who handle cash, requiring employees to take vacations, and conducting background checks.

Companies operate a petty cash fund to pay relatively small amounts of cash. They must establish the fund, make payments from the fund, and replenish the fund when the cash in the fund reaches a minimum level.

3 **Identify the control features of a bank account.** A bank account contributes to good internal control by providing physical controls for the storage of cash. It minimizes the amount of currency that a company must keep on hand, and it creates a double record of a depositor's bank transactions. It is customary to reconcile the balance per books and balance per bank to their adjusted balances. The steps in the reconciling process are to determine deposits in transit, outstanding checks, errors by the depositor or the bank, and unrecorded bank memoranda.

4 **Explain the reporting of cash.** Companies list cash first in the current assets section of the balance sheet. In some cases, they report cash together with cash equivalents. Cash restricted for a special purpose is reported separately as a current asset or as a noncurrent asset, depending on when the cash is expected to be used.

GLOSSARY REVIEW

Bank reconciliation The process of comparing the bank's balance of an account with the company's balance and explaining any differences to make them agree. (p. 373).

Bank service charge A fee charged by a bank for the use of its services. (p. 376).

Bank statement A monthly statement from the bank that shows the depositor's bank transactions and balances. (p. 375).

Bonding Obtaining insurance protection against theft by employees. (p. 363).

Cash Resources that consist of coins, currency, checks, money orders, and money on hand or on deposit in a bank or similar depository. (p. 381).

Cash equivalents Short-term, highly liquid investments that can be converted to a specific amount of cash. (p. 381).

Check A written order signed by a bank depositor, directing the bank to pay a specified sum of money to a designated recipient. (p. 374).

Deposits in transit Deposits recorded by the depositor but not yet recorded by the bank. (p. 377).

Electronic funds transfer (EFT) A disbursement system that uses wire, telephone, or computers to transfer funds from one location to another. (p. 380).

Fraud A dishonest act by an employee that results in personal benefit to the employee at a cost to the employer. (p. 356).

Fraud triangle The three factors that contribute to fraudulent activity by employees: opportunity, financial pressure, and rationalization. (p. 356).

Internal auditors Company employees who continuously evaluate the effectiveness of the company's internal control system. (p. 363).

Internal control A process designed to provide reasonable assurance regarding the achievement of objectives related to operations, reporting, and compliance. (p. 357).

NSF check A check that is not paid by a bank because of insufficient funds in a customer's bank account. (p. 376).

Outstanding checks Checks issued and recorded by a company but not yet paid by the bank. (p. 377).

Petty cash fund A cash fund used to pay relatively small amounts. (p. 370).

Restricted cash Cash that must be used for a special purpose. (p. 382).

Sarbanes-Oxley Act (SOX) Regulations passed by Congress to try to reduce unethical corporate behavior. (p. 356).

Voucher An authorization form prepared for each payment in a voucher system. (p. 369).

Voucher system A network of approvals by authorized individuals acting independently to ensure that all disbursements by check are proper. (p. 369).

PRACTICE MULTIPLE-CHOICE QUESTIONS

(LO 1) **1.** Which of the following is **not** an element of the fraud triangle?
(a) Rationalization.
(b) Financial pressure.
(c) Segregation of duties.
(d) Opportunity.

(LO 1) **2.** An organization uses internal control to enhance the accuracy and reliability of accounting records and to:
(a) safeguard assets.
(b) prevent fraud.
(c) produce correct financial statements.
(d) deter employee dishonesty.

(LO 1) **3.** Which of the following was **not** a result of the Sarbanes-Oxley Act?
(a) Companies must file financial statements with the Internal Revenue Service.
(b) All publicly traded companies must maintain adequate internal controls.
(c) The Public Company Accounting Oversight Board was created to establish auditing standards and regulate auditor activity.
(d) Corporate executives and board of directors must ensure that controls are reliable and effective, and they can be fined or imprisoned for failure to do so.

(LO 1) **4.** The principles of internal control do **not** include:
(a) establishment of responsibility.
(b) documentation procedures.
(c) management responsibility.
(d) independent internal verification.

(LO 1) **5.** Physical controls do **not** include:
(a) safes and vaults to store cash.
(b) independent bank reconciliations.
(c) locked warehouses for inventories.
(d) bank safety deposit boxes for important papers.

(LO 1) **6.** Which of the following control activities is **not** relevant when a company uses a computerized (rather than manual) accounting system?
(a) Establishment of responsibility.
(b) Segregation of duties.
(c) Independent internal verification.
(d) All of these control activities are relevant to a computerized system.

(LO 2) **7.** Permitting only designated personnel to handle cash receipts is an application of the principle of:
(a) segregation of duties.
(b) establishment of responsibility.
(c) independent internal verification.
(d) human resource controls.

8. The use of prenumbered checks in disbursing cash is an application of the principle of: (LO 2)
(a) establishment of responsibility.
(b) segregation of duties.
(c) physical controls.
(d) documentation procedures.

9. A company writes a check to replenish a $100 petty cash fund when the fund contains receipts of $94 and $4 in cash. In recording the check, the company should: (LO 2)
(a) debit Cash Over and Short for $2.
(b) debit Petty Cash for $94.
(c) credit Cash for $94.
(d) credit Petty Cash for $2.

10. The control features of a bank account do **not** include:
(a) having bank auditors verify the correctness of the bank balance per books. (LO 3)
(b) minimizing the amount of cash that must be kept on hand.
(c) providing a double record of all bank transactions.
(d) safeguarding cash by using a bank as a depository.

11. In a bank reconciliation, deposits in transit are: (LO 3)
(a) deducted from the book balance.
(b) added to the book balance.
(c) added to the bank balance.
(d) deducted from the bank balance.

12. The reconciling item in a bank reconciliation that will result in an adjusting entry by the depositor is: (LO 3)
(a) outstanding checks. (c) a bank error.
(b) deposit in transit. (d) bank service charges.

13. Which of the following items in a cash drawer at November 30 is **not** cash? (LO 4)
(a) Money orders.
(b) Coins and currency.
(c) An NSF check.
(d) A customer check dated November 28.

14. Which of the following statements correctly describes the reporting of cash? (LO 4)
(a) Cash cannot be combined with cash equivalents.
(b) Restricted cash funds may be combined with cash.
(c) Cash is listed first in the current assets section.
(d) Restricted cash funds cannot be reported as a current asset.

Solutions

1. (c) Segregation of duties is not an element of the fraud triangle. The other choices are fraud triangle elements.

2. (a) Safeguarding assets is one of the purposes of using internal control. The other choices are incorrect because while internal control can help to (b) prevent fraud, (c) produce correct financial statements, and (d) deter employee dishonesty, it is not one of the main purposes of using it.

3. (a) Filing financial statements with the IRS is not a result of the Sarbanes-Oxley Act (SOX); SOX focuses on the prevention or detection of fraud. The other choices are results of SOX.

4. (c) Management responsibility is not one of the principles of internal control. The other choices are true statements.

5. (b) Independent bank reconciliations are not a physical control. The other choices are true statements.

6. (d) Establishment of responsibility, segregation of duties and independent internal verification are all relevant to a computerized system.

7. (b) Permitting only designated personnel to handle cash receipts is an application of the principle of establishment of responsibility, not (a) segregation of duties, (c) independent internal verification, or (d) human resource controls.

8. (d) The use of prenumbered checks in disbursing cash is an application of the principle of documentation procedures, not (a) establishment of responsibility, (b) segregation of duties, or (c) physical controls.

9. (a) When this check is recorded, the company should debit Cash Over and Short for the shortage of $2 (total of the receipts plus cash in the drawer ($98) versus $100), not (b) debit Petty Cash for $94, (c) credit Cash for $94, or (d) credit Petty Cash for $2.

10. (a) Having bank auditors verify the correctness of the bank balance per books is not one of the control features of a bank account. The other choices are true statements.

11. (c) Deposits in transit are added to the bank balance on a bank reconciliation, not (a) deducted from the book balance, (b) added to the book balance, or (d) deducted from the bank balance.

12. (d) Because the depositor does not know the amount of the bank service charges until the bank statements is received, an adjusting entry must be made when the statement is received. The other choices are incorrect because (a) outstanding checks do not require an adjusting entry by the depositor because the checks have already been recorded in the depositor's books, (b) deposits in transit do not require an adjusting entry by the depositor because the deposits have already been recorded in the depositor's books, and (c) bank errors do not require an adjusting entry by the depositor, but the depositor does need to inform the bank of the error so it can be corrected.

13. (c) An NSF check should not be considered cash. The other choices are true statements.

14. (c) Cash is listed first in the current assets section. The other choices are incorrect because (a) cash and cash equivalents can be appropriately combined when reporting cash on the balance sheet, (b) restricted cash is not to be combined with cash when reporting cash on the balance sheet, and (d) restricted funds can be reported as current assets if they will be used within one year.

PRACTICE EXERCISES

Indicate good or weak internal control procedures. (LO 1, 2)

1. Listed below are five procedures followed by Viel Company.

1. Total cash receipts are compared to bank deposits daily by Vonda Marshall, who receives cash over the counter.
2. Employees write down hours worked and turn in the sheet to the cashier's office.
3. As a cost-saving measure, employees do not take vacations.
4. Only the sales manager can approve credit sales.
5. Three different employees are assigned one task each related to inventory: ship goods to customers, bill customers, and receive payment from customers.

Instructions

Indicate whether each procedure is an example of good internal control or of weak internal control. If it is an example of good internal control, indicate which internal control principle is being followed. If it is an example of weak internal control, indicate which internal control principles is violated. Use the table below.

Procedure	IC Good or Weak?	Related Internal Control Principle
1.		
2.		
3.		
4.		
5.		

Solution

1.

Procedure	IC Good or Weak?	Related Internal Control Principle
1.	Weak	Independent internal verification
2.	Weak	Physical controls
3.	Weak	Human resource controls
4.	Good	Establishment of responsibility
5.	Good	Segregation of duties

Prepare bank reconciliation and adjusting entries.

(LO 3)

2. The information below relates to the Cash account in the ledger of Hillfarms Company.

Balance June 1—$9,947; Cash deposited—$37,120.
Balance June 30—$10,094; Checks written—$36,973.

The June bank statement shows a balance of $9,525 on June 30 and the following memoranda.

Credits		Debits	
Collection of $850 note plus interest $34	$884	NSF check: R. Doll	$245
Interest earned on checking accounts	$26	Safety deposit box rent	$35

At June 30, deposits in transit were $2,581, and outstanding checks totaled $1,382.

Instructions

(a) Prepare the bank reconciliation at June 30.

(b) Prepare the adjusting entries at June 30, assuming (1) the NFS check was from a customer on account, and (2) no interest had been accrued on the note.

Solution

2. (a)

HILLFARMS COMPANY
Bank Reconciliation
June 30

Cash balance per bank statement		$ 9,525
Add: Deposits in transit		2,581
		12,106
Less: Outstanding checks		1,382
Adjusted cash balance per bank		$10,724
Cash balance per books		$10,094
Add: Collection of note receivable ($850 + $34)	$884	
Interest earned	26	910
		11,004
Less: NSF check	245	
Safety deposit box rent	35	280
Adjusted cash balance per books		$10,724

(b)

Date	Account	Debit	Credit
June 30	Cash	884	
	Notes Receivable		850
	Interest Revenue		34
30	Cash	26	
	Interest Revenue		26
30	Miscellaneous Expense	35	
	Cash		35
30	Accounts Receivable (R. Doll)	245	
	Cash		245

PRACTICE PROBLEM

Prepare bank reconciliation and journalize entries.
(LO 3)

Poorten Company's bank statement for May 2017 shows the following data.

Balance 5/1	$12,650	Balance 5/31	$14,280
Debit memorandum:		Credit memorandum:	
NSF check	$175	Collection of note receivable	$505

The cash balance per books at May 31 is $13,319. Your review of the data reveals the following.

1. The NSF check was from Copple Co., a customer.
2. The note collected by the bank was a $500, 3-month, 12% note. The bank charged a $10 collection fee. No interest has been accrued.
3. Outstanding checks at May 31 total $2,410.
4. Deposits in transit at May 31 total $1,752.
5. A Poorten Company check for $352, dated May 10, cleared the bank on May 25. The company recorded this check, which was a payment on account, for $325.

Instructions

(a) Prepare a bank reconciliation at May 31.

(b) Journalize the entries required by the reconciliation.

Solution

(a)

POORTEN COMPANY
Bank Reconciliation
May 31, 2017

Cash balance per bank statement		$14,280
Add: Deposits in transit		1,752
		16,032
Less: Outstanding checks		2,410
Adjusted cash balance per bank		$13,622
Cash balance per books		$13,319
Add: Collection of note receivable $500, plus $15 interest, less collection fee $10		505
		13,824
Less: NSF check	$175	
Error in recording check	27	202
Adjusted cash balance per books		$13,622

(b)

Date	Account	Debit	Credit
May 31	Cash	505	
	Miscellaneous Expense	10	
	Notes Receivable		500
	Interest Revenue		15
	(To record collection of note by bank)		
31	Accounts Receivable—Copple Co.	175	
	Cash		175
	(To record NSF check from Copple Co.)		
31	Accounts Payable	27	
	Cash		27
	(To correct error in recording check)		

WileyPLUS Brief Exercises, Exercises, DO IT! Exercises, and Problems and many additional resources are available for practice in WileyPLUS

QUESTIONS

1. A local bank reported that it lost $150,000 as the result of an employee fraud. Edward Jasso is not clear on what is meant by an "employee fraud." Explain the meaning of fraud to Edward and give an example of frauds that might occur at a bank.
2. Fraud experts often say that there are three primary factors that contribute to employee fraud. Identify the three factors and explain what is meant by each.
3. Identify and describe the five components of a good internal control system.
4. "Internal control is concerned only with enhancing the accuracy of the accounting records." Do you agree? Explain.
5. What principles of internal control apply to most organizations?
6. At the corner grocery store, all sales clerks make change out of one cash register drawer. Is this a violation of internal control? Why?
7. Liz Kelso is reviewing the principle of segregation of duties. What are the two common applications of this principle?
8. How do documentation procedures contribute to good internal control?
9. What internal control objectives are met by physical controls?
10. (a) Explain the control principle of independent internal verification. (b) What practices are important in applying this principle?
11. The management of Nickle Company asks you, as the company accountant, to explain (a) the concept of reasonable assurance in internal control and (b) the importance of the human factor in internal control.
12. Riverside Fertilizer Co. owns the following assets at the balance sheet date.

Cash in bank savings account	$ 8,000
Cash on hand	850
Cash refund due from the IRS	1,000
Checking account balance	14,000
Postdated checks	500

What amount should Riverside report as cash in the balance sheet?

13. What principle(s) of internal control is (are) involved in making daily cash counts of over-the-counter receipts?
14. Seaton Department Stores has just installed new electronic cash registers in its stores. How do cash registers improve internal control over cash receipts?
15. At Kellum Wholesale Company, two mail clerks open all mail receipts. How does this strengthen internal control?
16. "To have maximum effective internal control over cash disbursements, all payments should be made by check." Is this true? Explain.
17. Ken Deangelo Company's internal controls over cash disbursements provide for the treasurer to sign checks imprinted by a check-writing machine in indelible ink after comparing the check with the approved invoice. Identify the internal control principles that are present in these controls.
18. How do the principles of (a) physical controls and (b) documentation controls apply to cash disbursements?
19. (a) What is a voucher system? (b) What principles of internal control apply to a voucher system?
20. What is the essential feature of an electronic funds transfer (EFT) procedure?
21. (a) Identify the three activities that pertain to a petty cash fund, and indicate an internal control principle that is applicable to each activity. (b) When are journal entries required in the operation of a petty cash fund?
22. "The use of a bank contributes significantly to good internal control over cash." Is this true? Why or why not?
23. Anna Korte is confused about the lack of agreement between the cash balance per books and the balance per bank. Explain the causes for the lack of agreement to Anna, and give an example of each cause.
24. What are the four steps involved in finding differences between the balance per books and balance per bank?
25. Heather Kemp asks your help concerning an NSF check. Explain to Heather (a) what an NSF check is, (b) how it is treated in a bank reconciliation, and (c) whether it will require an adjusting entry.
26. (a) "Cash equivalents are the same as cash." Do you agree? Explain. (b) How should restricted cash funds be reported on the balance sheet?
27. At what amount does Apple report cash and cash equivalents in its 2013 consolidated balance sheet?

BRIEF EXERCISES

Identify fraud triangle concepts.

(LO 1)

BE8-1 Match each situation with the fraud triangle factor—opportunity, financial pressure, or rationalization—that best describes it.

1. An employee's monthly credit card payments are nearly 75% of his or her monthly earnings.
2. An employee earns minimum wage at a firm that has reported record earnings for each of the last five years.

3. An employee has an expensive gambling habit.
4. An employee has check-writing and signing responsibilities for a small company, as well as reconciling the bank account.

BE8-2 Shelly Eckert has prepared the following list of statements about internal control.

Indicate internal control concepts.
(LO 1)

1. One of the objectives of internal control is to safeguard assets from employee theft, robbery, and unauthorized use.
2. One of the objectives of internal control is to enhance the accuracy and reliability of the accounting records.
3. No laws require U.S. corporations to maintain an adequate system of internal control.

Identify each statement as true or false. If false, indicate how to correct the statement.

BE8-3 Jessica Mahan is the new owner of Penny Parking. She has heard about internal control but is not clear about its importance for her business. Explain to Jessica the four purposes of internal control and give her one application of each purpose for Penny Parking.

Explain the importance of internal control.
(LO 1)

BE8-4 The internal control procedures in Valentine Company provide that:

Identify internal control principles.
(LO 1)

1. Employees who have physical custody of assets do not have access to the accounting records.
2. Each month, the assets on hand are compared to the accounting records by an internal auditor.
3. A prenumbered shipping document is prepared for each shipment of goods to customers.

Identify the principles of internal control that are being followed.

BE8-5 Rosenquist Company has the following internal control procedures over cash receipts. Identify the internal control principle that is applicable to each procedure.

Identify the internal control principles applicable to cash receipts.
(LO 2)

1. All over-the-counter receipts are entered in cash registers.
2. All cashiers are bonded.
3. Daily cash counts are made by cashier department supervisors.
4. The duties of receiving cash, recording cash, and custody of cash are assigned to different individuals.
5. Only cashiers may operate cash registers.

BE8-6 The cash register tape for Bluestem Industries reported sales of $6,871.50. Record the journal entry that would be necessary for each of the following situations. (a) Cash to be accounted for exceeds cash on hand by $50.75. (b) Cash on hand exceeds cash to be accounted for by $28.32.

Make journal entries for cash overage and shortfall.
(LO 2)

BE8-7 While examining cash receipts information, the accounting department determined the following information: opening cash balance $160, cash on hand $1,125.74, and cash sales per register tape $980.83. Prepare the required journal entry based upon the cash count sheet.

Make journal entry using cash count sheet.
(LO 2)

BE8-8 Pennington Company has the following internal control procedures over cash disbursements. Identify the internal control principle that is applicable to each procedure.

Identify the internal control principles applicable to cash disbursements.
(LO 2)

1. Company checks are prenumbered.
2. The bank statement is reconciled monthly by an internal auditor.
3. Blank checks are stored in a safe in the treasurer's office.
4. Only the treasurer or assistant treasurer may sign checks.
5. Check-signers are not allowed to record cash disbursement transactions.

BE8-9 On March 20, Dody's petty cash fund of $100 is replenished when the fund contains $9 in cash and receipts for postage $52, freight-out $26, and travel expense $10. Prepare the journal entry to record the replenishment of the petty cash fund.

Prepare entry to replenish a petty cash fund.
(LO 2)

BE8-10 Lance Bachman is uncertain about the control features of a bank account. Explain the control benefits of (a) a check and (b) a bank statement.

Identify the control features of a bank account.
(LO 3)

Indicate location of reconciling items in a bank reconciliation.
(LO 3)

BE8-11 The following reconciling items are applicable to the bank reconciliation for Ellington Company: (1) outstanding checks, (2) bank debit memorandum for service charge, (3) bank credit memorandum for collecting a note for the depositor, and (4) deposits in transit. Indicate how each item should be shown on a bank reconciliation.

Identify reconciling items that require adjusting entries.
(LO 3)

BE8-12 Using the data in BE8-11, indicate (a) the items that will result in an adjustment to the depositor's records and (b) why the other items do not require adjustment.

Prepare partial bank reconciliation.
(LO 3)

BE8-13 At July 31, Ramirez Company has the following bank information: cash balance per bank $7,420, outstanding checks $762, deposits in transit $1,620, and a bank service charge $20. Determine the adjusted cash balance per bank at July 31.

Prepare partial bank reconciliation.
(LO 3)

BE8-14 At August 31, Pratt Company has a cash balance per books of $9,500 and the following additional data from the bank statement: charge for printing Pratt Company checks $35, interest earned on checking account balance $40, and outstanding checks $800. Determine the adjusted cash balance per books at August 31.

Explain the statement presentation of cash balances.
(LO 4)

BE8-15 Zhang Company has the following cash balances: Cash in Bank $15,742, Payroll Bank Account $6,000, and Plant Expansion Fund Cash $25,000 to be used two years from now. Explain how each balance should be reported on the balance sheet.

DO IT! Exercises

Identify violations of control activities.
(LO 1)

DO IT! 8-1 Identify which control activity is violated in each of the following situations, and explain how the situation creates an opportunity for fraud or inappropriate accounting practices.

1. Once a month, the sales department sends sales invoices to the accounting department to be recorded.
2. Leah Hutcherson orders merchandise for Rice Lake Company; she also receives merchandise and authorizes payment for merchandise.
3. Several clerks at Great Foods use the same cash register drawer.

Design system of internal control over cash receipts.
(LO 2)

DO IT! 8-2a Gary Stanten is concerned with control over mail receipts at Gary's Sporting Goods. All mail receipts are opened by Al Krane. Al sends the checks to the accounting department, where they are stamped "For Deposit Only." The accounting department records and deposits the mail receipts weekly. Gary asks for your help in installing a good system of internal control over mail receipts.

Make journal entries for petty cash fund.
(LO 2)

DO IT! 8-2b Wilkinson Company established a $100 petty cash fund on August 1. On August 31, the fund had $7 cash remaining and petty cash receipts for postage $31, office supplies $42, and miscellaneous expense $16. Prepare journal entries to establish the fund on August 1 and replenish the fund on August 31.

Explain treatment of items in bank reconciliation.
(LO 3)

DO IT! 8-3 Roger Richman owns Richman Blankets. He asks you to explain how he should treat the following reconciling items when reconciling the company's bank account.

1. Outstanding checks.
2. A deposit in transit.
3. The bank charged to the company account a check written by another company.
4. A debit memorandum for a bank service charge.

Analyze statements about the reporting of cash.
(LO 4)

DO IT! 8-4 Indicate whether each of the following statements is true or false.

1. A company has the following assets at the end of the year: cash on hand $40,000, cash refund due from customer $30,000, and checking account balance $22,000. Cash and cash equivalents is therefore $62,000.
2. A company that has received NSF checks should report these checks as a current liability on the balance sheet.
3. Restricted cash that is a current asset is reported as part of cash and cash equivalents.
4. A company has cash in the bank of $50,000, petty cash of $400, and stock investments of $100,000. Total cash and cash equivalents is therefore $50,400.

EXERCISES

Identify the principles of internal control.

(LO 1)

E8-1 Eve Herschel is the owner of Herschel's Pizza. Herschel's is operated strictly on a carryout basis. Customers pick up their orders at a counter where a clerk exchanges the pizza for cash. While at the counter, the customer can see other employees making the pizzas and the large ovens in which the pizzas are baked.

Instructions

Identify the six principles of internal control and give an example of each principle that you might observe when picking up your pizza. (*Note:* It may not be possible to observe all the principles.)

Identify internal control weaknesses over cash receipts and suggest improvements.

(LO 1, 2)

E8-2 The following control procedures are used at Torres Company for over-the-counter cash receipts.

1. To minimize the risk of robbery, cash in excess of $100 is stored in an unlocked attaché case in the stock room until it is deposited in the bank.
2. All over-the-counter receipts are processed by three clerks who use a cash register with a single cash drawer.
3. The company accountant makes the bank deposit and then records the day's receipts.
4. At the end of each day, the total receipts are counted by the cashier on duty and reconciled to the cash register total.
5. Cashiers are experienced; they are not bonded.

Instructions

(a) For each procedure, explain the weakness in internal control, and identify the control principle that is violated.

(b) For each weakness, suggest a change in procedure that will result in good internal control.

Identify internal control weaknesses over cash disbursements and suggest improvements.

(LO 1, 2)

E8-3 The following control procedures are used in Mendy Lang's Boutique Shoppe for cash disbursements.

1. The company accountant prepares the bank reconciliation and reports any discrepancies to the owner.
2. The store manager personally approves all payments before signing and issuing checks.
3. Each week, 100 company checks are left in an unmarked envelope on a shelf behind the cash register.
4. After payment, bills are filed in a paid invoice folder.
5. The company checks are unnumbered.

Instructions

(a) For each procedure, explain the weakness in internal control, and identify the internal control principle that is violated.

(b) For each weakness, suggest a change in the procedure that will result in good internal control.

Identify internal control weaknesses for cash disbursements and suggest improvements.

(LO 2)

E8-4 At Danner Company, checks are not prenumbered because both the purchasing agent and the treasurer are authorized to issue checks. Each signer has access to unissued checks kept in an unlocked file cabinet. The purchasing agent pays all bills pertaining to goods purchased for resale. Prior to payment, the purchasing agent determines that the goods have been received and verifies the mathematical accuracy of the vendor's invoice. After payment, the invoice is filed by the vendor name, and the purchasing agent records the payment in the cash disbursements journal. The treasurer pays all other bills following approval by authorized employees. After payment, the treasurer stamps all bills PAID, files them by payment date, and records the checks in the cash disbursements journal. Danner Company maintains one checking account that is reconciled by the treasurer.

Instructions

(a) List the weaknesses in internal control over cash disbursements.

(b) Write a memo to the company treasurer indicating your recommendations for improvement.

Indicate whether procedure is good or weak internal control.
(LO 1, 2)

E8-5 Listed below are five procedures followed by Eikenberry Company.

1. Several individuals operate the cash register using the same register drawer.
2. A monthly bank reconciliation is prepared by someone who has no other cash responsibilities.
3. Joe Cockrell writes checks and also records cash payment journal entries.
4. One individual orders inventory, while a different individual authorizes payments.
5. Unnumbered sales invoices from credit sales are forwarded to the accounting department every four weeks for recording.

Instructions

Indicate whether each procedure is an example of good internal control or of weak internal control. If it is an example of good internal control, indicate which internal control principle is being followed. If it is an example of weak internal control, indicate which internal control principle is violated. Use the table below.

Procedure	IC Good or Weak?	Related Internal Control Principle
1.		
2.		
3.		
4.		
5.		

Indicate whether procedure is good or weak internal control.
(LO 1, 2)

E8-6 Listed below are five procedures followed by Gilmore Company.

1. Employees are required to take vacations.
2. Any member of the sales department can approve credit sales.
3. Paul Jaggard ships goods to customers, bills customers, and receives payment from customers.
4. Total cash receipts are compared to bank deposits daily by someone who has no other cash responsibilities.
5. Time clocks are used for recording time worked by employees.

Instructions

Indicate whether each procedure is an example of good internal control or of weak internal control. If it is an example of good internal control, indicate which internal control principle is being followed. If it is an example of weak internal control, indicate which internal control principle is violated. Use the table below.

Procedure	IC Good or Weak?	Related Internal Control Principle
1.		
2.		
3.		
4.		
5.		

Prepare journal entries for a petty cash fund.
(LO 2)

E8-7 Setterstrom Company established a petty cash fund on May 1, cashing a check for $100. The company reimbursed the fund on June 1 and July 1 with the following results.

> June 1: Cash in fund $1.75. Receipts: delivery expense $31.25, postage expense $39.00, and miscellaneous expense $25.00.
> July 1: Cash in fund $3.25. Receipts: delivery expense $21.00, entertainment expense $51.00, and miscellaneous expense $24.75.

On July 10, Setterstrom increased the fund from $100 to $130.

Instructions

Prepare journal entries for Setterstrom Company for May 1, June 1, July 1, and July 10.

Prepare journal entries for a petty cash fund.
(LO 2)

E8-8 Horvath Company uses an imprest petty cash system. The fund was established on March 1 with a balance of $100. During March, the following petty cash receipts were found in the petty cash box.

Date	Receipt No.	For	Amount
3/5	1	Stamp Inventory	$39
7	2	Freight-Out	21
9	3	Miscellaneous Expense	6
11	4	Travel Expense	24
14	5	Miscellaneous Expense	5

The fund was replenished on March 15 when the fund contained $2 in cash. On March 20, the amount in the fund was increased to $175.

Instructions

Journalize the entries in March that pertain to the operation of the petty cash fund.

Prepare bank reconciliation and adjusting entries.

(LO 3)

E8-9 Don Wyatt is unable to reconcile the bank balance at January 31. Don's reconciliation is as follows.

Cash balance per bank	$3,560.20
Add: NSF check	490.00
Less: Bank service charge	25.00
Adjusted balance per bank	$4,025.20
Cash balance per books	$3,875.20
Less: Deposits in transit	530.00
Add: Outstanding checks	730.00
Adjusted balance per books	$4,075.20

Instructions

(a) Prepare a correct bank reconciliation.
(b) Journalize the entries required by the reconciliation.

Determine outstanding checks.

(LO 3)

E8-10 On April 30, the bank reconciliation of Westbrook Company shows three outstanding checks: no. 254, $650; no. 255, $620; and no. 257, $410. The May bank statement and the May cash payments journal show the following.

Bank Statement

Checks Paid		
Date	**Check No.**	**Amount**
5/4	254	$650
5/2	257	410
5/17	258	159
5/12	259	275
5/20	261	500
5/29	263	480
5/30	262	750

Cash Payments Journal

Checks Issued		
Date	**Check No.**	**Amount**
5/2	258	$159
5/5	259	275
5/10	260	890
5/15	261	500
5/22	262	750
5/24	263	480
5/29	264	560

Instructions

Using Step 2 in the reconciliation procedure, list the outstanding checks at May 31.

Prepare bank reconciliation and adjusting entries.

(LO 3)

E8-11 The following information pertains to Crane Video Company.

1. Cash balance per bank, July 31, $7,263.
2. July bank service charge not recorded by the depositor $28.
3. Cash balance per books, July 31, $7,284.
4. Deposits in transit, July 31, $1,300.
5. Bank collected $700 note for Crane in July, plus interest $36, less fee $20. The collection has not been recorded by Crane, and no interest has been accrued.
6. Outstanding checks, July 31, $591.

Instructions

(a) Prepare a bank reconciliation at July 31.
(b) Journalize the adjusting entries at July 31 on the books of Crane Video Company.

Prepare bank reconciliation and adjusting entries.

(LO 3)

E8-12 The information below relates to the Cash account in the ledger of Minton Company.

Balance September 1—$17,150; Cash deposited—$64,000.
Balance September 30—$17,404; Checks written—$63,746.

The September bank statement shows a balance of $16,422 on September 30 and the following memoranda.

Credits		Debits	
Collection of $2,500 note plus interest $30	$2,530	NSF check: Richard Nance	$425
Interest earned on checking account	$45	Safety deposit box rent	$65

At September 30, deposits in transit were $5,450, and outstanding checks totaled $2,383.

Instructions

(a) Prepare the bank reconciliation at September 30.
(b) Prepare the adjusting entries at September 30, assuming (1) the NSF check was from a customer on account, and (2) no interest had been accrued on the note.

Compute deposits in transit and outstanding checks for two bank reconciliations.

(LO 3)

E8-13 The cash records of Dawes Company show the following four situations.

1. The June 30 bank reconciliation indicated that deposits in transit total $920. During July, the general ledger account Cash shows deposits of $15,750, but the bank statement indicates that only $15,600 in deposits were received during the month.
2. The June 30 bank reconciliation also reported outstanding checks of $680. During the month of July, Dawes Company's books show that $17,200 of checks were issued. The bank statement showed that $16,400 of checks cleared the bank in July.
3. In September, deposits per the bank statement totaled $26,700, deposits per books were $26,400, and deposits in transit at September 30 were $2,100.
4. In September, cash disbursements per books were $23,700, checks clearing the bank were $25,000, and outstanding checks at September 30 were $2,100.

There were no bank debit or credit memoranda. No errors were made by either the bank or Dawes Company.

Instructions

Answer the following questions.

(a) In situation (1), what were the deposits in transit at July 31?
(b) In situation (2), what were the outstanding checks at July 31?
(c) In situation (3), what were the deposits in transit at August 31?
(d) In situation (4), what were the outstanding checks at August 31?

Show presentation of cash in financial statements.

(LO 4)

E8-14 Wynn Company has recorded the following items in its financial records.

Cash in bank	$ 42,000
Cash in plant expansion fund	100,000
Cash on hand	12,000
Highly liquid investments	34,000
Petty cash	500
Receivables from customers	89,000
Stock investments	61,000

The highly liquid investments had maturities of 3 months or less when they were purchased. The stock investments will be sold in the next 6 to 12 months. The plant expansion project will begin in 3 years.

Instructions

(a) What amount should Wynn report as "Cash and cash equivalents" on its balance sheet?
(b) Where should the items not included in part (a) be reported on the balance sheet?

EXERCISES: SET B AND CHALLENGE EXERCISES

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Exercises: Set B and Challenge Exercises.

PROBLEMS: SET A

P8-1A Bolz Office Supply Company recently changed its system of internal control over cash disbursements. The system includes the following features.

Identify internal control principles over cash disbursements.

(LO 1, 2)

Instead of being unnumbered and manually prepared, all checks must now be prenumbered and prepared by using the new accounts payable software purchased by the company. Before a check can be issued, each invoice must have the approval of Kathy Moon, the purchasing agent, and Robin Self, the receiving department supervisor. Checks must be signed by either Jennifer Edwards, the treasurer, or Rich Woodruff, the assistant treasurer. Before signing a check, the signer is expected to compare the amount of the check with the amount on the invoice.

After signing a check, the signer stamps the invoice PAID and inserts within the stamp, the date, check number, and amount of the check. The "paid" invoice is then sent to the accounting department for recording.

Blank checks are stored in a safe in the treasurer's office. The combination to the safe is known only by the treasurer and assistant treasurer. Each month, the bank statement is reconciled with the bank balance per books by the assistant chief accountant. All employees who handle or account for cash are bonded.

Instructions

Identify the internal control principles and their application to cash disbursements of Bolz Office Supply Company.

P8-2A Forney Company maintains a petty cash fund for small expenditures. The following transactions occurred over a 2-month period.

Journalize and post petty cash fund transactions.

(LO 2)

GLS

July	1	Established petty cash fund by writing a check on Scranton Bank for $200.
	15	Replenished the petty cash fund by writing a check for $196.00. On this date the fund consisted of $4.00 in cash and the following petty cash receipts: freight-out $92.00, postage expense $42.40, entertainment expense $46.60, and miscellaneous expense $11.20.
	31	Replenished the petty cash fund by writing a check for $192.00. At this date, the fund consisted of $8.00 in cash and the following petty cash receipts: freight-out $82.10, charitable contributions expense $45.00, postage expense $25.50, and miscellaneous expense $39.40.
Aug.	15	Replenished the petty cash fund by writing a check for $187.00. On this date, the fund consisted of $13.00 in cash and the following petty cash receipts: freight-out $77.60, entertainment expense $43.00, postage expense $33.00, and miscellaneous expense $37.00.
	16	Increased the amount of the petty cash fund to $300 by writing a check for $100.
	31	Replenished the petty cash fund by writing a check for $284.00. On this date, the fund consisted of $16 in cash and the following petty cash receipts: postage expense $140.00, travel expense $95.60, and freight-out $47.10.

Instructions

(a) Journalize the petty cash transactions.
(b) Post to the Petty Cash account.
(c) What internal control features exist in a petty cash fund?

(a) July 15, Cash short $3.80
(b) Aug. 31 balance $300

P8-3A On May 31, 2017, Reber Company had a cash balance per books of $6,781.50. The bank statement from New York State Bank on that date showed a balance of $6,404.60. A comparison of the statement with the Cash account revealed the following facts.

Prepare a bank reconciliation and adjusting entries.

(LO 3)

1. The statement included a debit memo of $40 for the printing of additional company checks.

2. Cash sales of $836.15 on May 12 were deposited in the bank. The cash receipts journal entry and the deposit slip were incorrectly made for $886.15. The bank credited Reber Company for the correct amount.
3. Outstanding checks at May 31 totaled $576.25. Deposits in transit were $2,416.15.
4. On May 18, the company issued check No. 1181 for $685 to Lynda Carsen on account. The check, which cleared the bank in May, was incorrectly journalized and posted by Reber Company for $658.
5. A $3,000 note receivable was collected by the bank for Reber Company on May 31 plus $80 interest. The bank charged a collection fee of $20. No interest has been accrued on the note.
6. Included with the cancelled checks was a check issued by Stiner Company to Ted Cress for $800 that was incorrectly charged to Reber Company by the bank.
7. On May 31, the bank statement showed an NSF charge of $680 for a check issued by Sue Allison, a customer, to Reber Company on account.

Instructions

(a) Adjusted cash balance per bank $9,044.50

(a) Prepare the bank reconciliation at May 31, 2017.
(b) Prepare the necessary adjusting entries for Reber Company at May 31, 2017.

Prepare a bank reconciliation and adjusting entries from detailed data.

(LO 3)

P8-4A The bank portion of the bank reconciliation for Langer Company at November 30, 2017, was as follows.

LANGER COMPANY
Bank Reconciliation
November 30, 2017

Cash balance per bank			$14,367.90
Add: Deposits in transit			2,530.20
			16,898.10
Less: Outstanding checks			
	Check Number	Check Amount	
	3451	$2,260.40	
	3470	720.10	
	3471	844.50	
	3472	1,426.80	
	3474	1,050.00	6,301.80
Adjusted cash balance per bank			$10,596.30

The adjusted cash balance per bank agreed with the cash balance per books at November 30.

The December bank statement showed the following checks and deposits.

Bank Statement

Checks			Deposits	
Date	**Number**	**Amount**	**Date**	**Amount**
12-1	3451	$ 2,260.40	12-1	$ 2,530.20
12-2	3471	844.50	12-4	1,211.60
12-7	3472	1,426.80	12-8	2,365.10
12-4	3475	1,640.70	12-16	2,672.70
12-8	3476	1,300.00	12-21	2,945.00
12-10	3477	2,130.00	12-26	2,567.30
12-15	3479	3,080.00	12-29	2,836.00
12-27	3480	600.00	12-30	1,025.00
12-30	3482	475.50	Total	$18,152.90
12-29	3483	1,140.00		
12-31	3485	540.80		
	Total	$15,438.70		

The cash records per books for December showed the following.

Cash Payments Journal

Date	Number	Amount	Date	Number	Amount
12-1	3475	$1,640.70	12-20	3482	$ 475.50
12-2	3476	1,300.00	12-22	3483	1,140.00
12-2	3477	2,130.00	12-23	3484	798.00
12-4	3478	621.30	12-24	3485	450.80
12-8	3479	3,080.00	12-30	3486	889.50
12-10	3480	600.00	Total		$13,933.20
12-17	3481	807.40			

Cash Receipts Journal

Date	Amount
12-3	$ 1,211.60
12-7	2,365.10
12-15	2,672.70
12-20	2,954.00
12-25	2,567.30
12-28	2,836.00
12-30	1,025.00
12-31	1,690.40
Total	$17,322.10

The bank statement contained two memoranda:

1. A credit of $5,145 for the collection of a $5,000 note for Langer Company plus interest of $160 and less a collection fee of $15. Langer Company has not accrued any interest on the note.
2. A debit of $572.80 for an NSF check written by L. Rees, a customer. At December 31, the check had not been redeposited in the bank.

At December 31, the cash balance per books was $12,485.20, and the cash balance per the bank statement was $20,154.30. The bank did not make any errors, but two errors were made by Langer Company.

Instructions

(a) Using the four steps in the reconciliation procedure, prepare a bank reconciliation at December 31.

(a) Adjusted balance per books $16,958.40

(b) Prepare the adjusting entries based on the reconciliation. (*Hint:* The correction of any errors pertaining to recording checks should be made to Accounts Payable. The correction of any errors relating to recording cash receipts should be made to Accounts Receivable.)

P8-5A Rodriguez Company maintains a checking account at the Imura Bank. At July 31, selected data from the ledger balance and the bank statement are shown below.

Prepare a bank reconciliation and adjusting entries.

(LO 3)

	Cash in Bank	
	Per Books	**Per Bank**
Balance, July 1	$17,600	$15,800
July receipts	81,400	
July credits		83,470
July disbursements	77,150	
July debits		74,756
Balance, July 31	$21,850	$24,514

Analysis of the bank data reveals that the credits consist of $79,000 of July deposits and a credit memorandum of $4,470 for the collection of a $4,400 note plus interest revenue of $70. The July debits per bank consist of checks cleared $74,700 and a debit memorandum of $56 for printing additional company checks.

You also discover the following errors involving July checks. (1) A check for $230 to a creditor on account that cleared the bank in July was journalized and posted as $320. (2) A salary check to an employee for $255 was recorded by the bank for $155.

The June 30 bank reconciliation contained only two reconciling items: deposits in transit $8,000 and outstanding checks of $6,200.

Instructions

(a) Prepare a bank reconciliation at July 31, 2017.

(a) Adjusted balance per books $26,354

(b) Journalize the adjusting entries to be made by Rodriguez Company. Assume that interest on the note has not been accrued.

Identify internal control weaknesses in cash receipts and cash disbursements.

(LO 1, 2)

P8-6A Rondelli Middle School wants to raise money for a new sound system for its auditorium. The primary fund-raising event is a dance at which the famous disc jockey D.J. Sound will play classic and not-so-classic dance tunes. Matt Ballester, the music and theater instructor, has been given the responsibility for coordinating the fund-raising efforts. This is Matt's first experience with fund-raising. He decides to put the eighth-grade choir in charge of the event; he will be a relatively passive observer.

Matt had 500 unnumbered tickets printed for the dance. He left the tickets in a box on his desk and told the choir students to take as many tickets as they thought they could sell for $5 each. In order to ensure that no extra tickets would be floating around, he told them to dispose of any unsold tickets. When the students received payment for the tickets, they were to bring the cash back to Matt and he would put it in a locked box in his desk drawer.

Some of the students were responsible for decorating the gymnasium for the dance. Matt gave each of them a key to the money box and told them that if they took money out to purchase materials, they should put a note in the box saying how much they took and what it was used for. After 2 weeks the money box appeared to be getting full, so Matt asked Jeff Kenney to count the money, prepare a deposit slip, and deposit the money in a bank account Matt had opened.

The day of the dance, Matt wrote a check from the account to pay the DJ. D.J. Sound, however, said that he accepted only cash and did not give receipts. So Matt took $200 out of the cash box and gave it to D.J. At the dance, Matt had Sam Copper working at the entrance to the gymnasium, collecting tickets from students, and selling tickets to those who had not prepurchased them. Matt estimated that 400 students attended the dance.

The following day, Matt closed out the bank account, which had $250 in it, and gave that amount plus the $180 in the cash box to Principal Finke. Principal Finke seemed surprised that, after generating roughly $2,000 in sales, the dance netted only $430 in cash. Matt did not know how to respond.

Instructions

Identify as many internal control weaknesses as you can in this scenario, and suggest how each could be addressed.

PROBLEMS: SET B AND SET C

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Problems: Set B and Set C.

COMPREHENSIVE PROBLEM

CP8 On December 1, 2017, Fullerton Company had the following account balances.

	Debit		Credit
Cash	$18,200	Accumulated Depreciation—	
Notes Receivable	2,200	Equipment	$ 3,000
Accounts Receivable	7,500	Accounts Payable	6,100
Inventory	16,000	Owner's Capital	64,400
Prepaid Insurance	1,600		$73,500
Equipment	28,000		
	$73,500		

During December, the company completed the following transactions.

Dec. 7 Received $3,600 cash from customers in payment of account (no discount allowed).
12 Purchased merchandise on account from Vance Co. $12,000, terms 1/10, n/30.
17 Sold merchandise on account $16,000, terms 2/10, n/30. The cost of the merchandise sold was $10,000.
19 Paid salaries $2,200.
22 Paid Vance Co. in full, less discount.
26 Received collections in full, less discounts, from customers billed on December 17.
31 Received $2,700 cash from customers in payment of account (no discount allowed).

Adjustment data:

1. Depreciation $200 per month.
2. Insurance expired $400.

Instructions

(a) Journalize the December transactions. (Assume a perpetual inventory system.)
(b) Enter the December 1 balances in the ledger T-accounts and post the December transactions. Use Cost of Goods Sold, Depreciation Expense, Insurance Expense, Salaries and Wages Expense, Sales Revenue, and Sales Discounts.
(c) The statement from Jackson County Bank on December 31 showed a balance of $26,130. A comparison of the bank statement with the Cash account revealed the following facts.
   1. The bank collected a note receivable of $2,200 for Fullerton Company on December 15.
   2. The December 31 receipts were deposited in a night deposit vault on December 31. These deposits were recorded by the bank in January.
   3. Checks outstanding on December 31 totaled $1,210.
   4. On December 31, the bank statement showed an NSF charge of $680 for a check received by the company from L. Bryan, a customer, on account.

   Prepare a bank reconciliation as of December 31 based on the available information. (*Hint:* The cash balance per books is $26,100. This can be proven by finding the balance in the Cash account from parts (a) and (b).)
(d) Journalize the adjusting entries resulting from the bank reconciliation and adjustment data.
(e) Post the adjusting entries to the ledger T-accounts.
(f) Prepare an adjusted trial balance.
(g) Prepare an income statement for December and a classified balance sheet at December 31.

CONTINUING PROBLEM

COOKIE CREATIONS: AN ENTREPRENEURIAL JOURNEY

(*Note:* This is a continuation of the Cookie Creations problem from Chapters 1 through 7.)

CC8 **Part 1** Natalie is struggling to keep up with the recording of her accounting transactions. She is spending a lot of time marketing and selling mixers and giving her cookie classes. Her friend John is an accounting student who runs his own accounting service. He has asked Natalie if she would like to have him do her accounting. John and Natalie meet and discuss her business.

Part 2 Natalie decides that she cannot afford to hire John to do her accounting. One way that she can ensure that her cash account does not have any errors and is accurate and up-to-date is to prepare a bank reconciliation at the end of each month. Natalie would like you to help her.

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Go to the book's companion website, **www.wiley.com/college/weygandt**, *to see the completion of this problem.*

BROADENING YOUR PERSPECTIVE

FINANCIAL REPORTING AND ANALYSIS

Financial Reporting Problem: Apple Inc.

BYP8-1 The financial statements of Apple Inc. are presented in Appendix A at the end of this textbook. Instructions for accessing and using the company's complete annual report, including the notes to the financial statements, are also provided in Appendix A.

Instructions

(a) What comments, if any, are made about cash in the report of the independent registered public accounting firm?
(b) What data about cash and cash equivalents are shown in the consolidated balance sheet?
(c) In its notes to Consolidated Financial Statements, how does Apple define cash equivalents?
(d) In management's Annual Report on Internal Control over Financial Reporting (Item 9A), what does Apple's management say about internal control?

Comparative Analysis Problem: PepsiCo, Inc. vs. The Coca-Cola Company

BYP8-2 PepsiCo's financial statements are presented in Appendix B. Financial statements of The Coca-Cola Company are presented in Appendix C. Instructions for accessing and using the complete annual reports of PepsiCo and Coca-Cola, including the notes to the financial statements, are also provided in Appendices B and C, respectively.

Instructions

(a) Based on the information contained in these financial statements, determine each of the following for each company:
   (1) Cash and cash equivalents balance at December 28, 2013, for PepsiCo and at December 31, 2013, for Coca-Cola.
   (2) Increase (decrease) in cash and cash equivalents from 2012 to 2013.
   (3) Cash provided by operating activities during the year ended December 2013 (from statement of cash flows).

(b) What conclusions concerning the management of cash can be drawn from these data?

Comparative Analysis Problem: Amazon.com, Inc. vs. Wal-Mart Stores, Inc.

BYP8-3 Amazon.com, Inc.'s financial statements are presented in Appendix D. Financial statements of Wal-Mart Stores, Inc. are presented in Appendix E. Instructions for accessing and using the complete annual reports of Amazon and Wal-Mart, including the notes to the financial statements, are also provided in Appendices D and E, respectively.

Instructions

(a) Based on the information contained in these financial statements, determine each of the following for each company:
   (1) Cash and cash equivalents balance at December 31, 2013, for Amazon and at January 31, 2014, for Wal-Mart.
   (2) Increase (decrease) in cash and cash equivalents from 2012 to 2013.
   (3) Net cash provided by operating activities during the year ended December 31, 2013, for Amazon and January 31, 2014, for Wal-Mart from statement of cash flows.

(b) What conclusions concerning the management of cash can be drawn from these data?

Real-World Focus

BYP8-4 All organizations should have systems of internal control. Universities are no exception. This site discusses the basics of internal control in a university setting.

Address: **www.bc.edu/offices/audit/controls**, or go to **www.wiley.com/college/weygandt**

Steps: Go to the site shown above.

Instructions

The home page of this site provides links to pages that answer critical questions. Use these links to answer the following questions.

(a) In a university setting, who has responsibility for evaluating the adequacy of the system of internal control?

(b) What do reconciliations ensure in the university setting? Who should review the reconciliation?

(c) What are some examples of physical controls?

(d) What are two ways to accomplish inventory counts?

CRITICAL THINKING

Decision-Making Across the Organization

BYP8-5 The board of trustees of a local church is concerned about the internal accounting controls for the offering collections made at weekly services. The trustees ask you to serve on a three-person audit team with the internal auditor of a local college and a CPA who has just joined the church.

At a meeting of the audit team and the board of trustees you learn the following.

1. The church's board of trustees has delegated responsibility for the financial management and audit of the financial records to the finance committee. This group prepares the annual budget and approves major disbursements. It is not involved in collections or recordkeeping. No audit has been made in recent years because the same trusted employee has kept church records and served as financial secretary for 15 years. The church does not carry any fidelity insurance.
2. The collection at the weekly service is taken by a team of ushers who volunteer to serve one month. The ushers take the collection plates to a basement office at the rear of the church. They hand their plates to the head usher and return to the church service. After all plates have been turned in, the head usher counts the cash received. The head usher then places the cash in the church safe along with a notation of the amount counted. The head usher volunteers to serve for 3 months.
3. The next morning the financial secretary opens the safe and recounts the collection. The secretary withholds \$150–\$200 in cash, depending on the cash expenditures expected for the week, and deposits the remainder of the collections in the bank. To facilitate the deposit, church members who contribute by check are asked to make their checks payable to "Cash."
4. Each month, the financial secretary reconciles the bank statement and submits a copy of the reconciliation to the board of trustees. The reconciliations have rarely contained any bank errors and have never shown any errors per books.

Instructions

With the class divided into groups, answer the following.

(a) Indicate the weaknesses in internal accounting control over the handling of collections.

(b) List the improvements in internal control procedures that you plan to make at the next meeting of the audit team for (1) the ushers, (2) the head usher, (3) the financial secretary, and (4) the finance committee.

(c) What church policies should be changed to improve internal control?

Communication Activity

BYP8-6 As a new auditor for the CPA firm of Eaton, Quayle, and Hale, you have been assigned to review the internal controls over mail cash receipts of Pritchard Company. Your review reveals the following. Checks are promptly endorsed "For Deposit Only," but no list of the checks is prepared by the person opening the mail. The mail is opened either by the cashier or by the employee who maintains the accounts receivable records. Mail receipts are deposited in the bank weekly by the cashier.

Instructions

Write a letter to Danny Peak, owner of Pritchard Company, explaining the weaknesses in internal control and your recommendations for improving the system.

Ethics Case

BYP8-7 You are the assistant controller in charge of general ledger accounting at Linbarger Bottling Company. Your company has a large loan from an insurance company. The loan agreement requires that the company's cash account balance be maintained at \$200,000 or more, as reported monthly.

At June 30, the cash balance is \$80,000, which you report to Lisa Infante, the financial vice president. Lisa excitedly instructs you to keep the cash receipts book open for one additional day for purposes of the June 30 report to the insurance company. Lisa says, "If we don't get that cash balance over \$200,000, we'll default on our loan agreement. They could close us down, put us all out of our jobs!" Lisa continues, "I talked to Oconto Distributors (one of Linbarger's largest customers) this morning. They said they sent us a check for \$150,000 yesterday. We should receive it tomorrow. If we include just that one check in our cash balance, we'll be in the clear. It's in the mail!"

Instructions

(a) Who will suffer negative effects if you do not comply with Lisa Infante's instructions? Who will suffer if you do comply?

(b) What are the ethical considerations in this case?

(c) What alternatives do you have?

All About You

BYP8-8 The print and electronic media are full of stories about potential security risks that may arise from your computer or smartphone. It is important to keep in mind, however, that there are also many other ways that your identity can be stolen. The federal government provides many resources to help protect you from identity thieves.

Instructions

Go to **http://onguardonline.gov/idtheft.html**, click **Video and Media**, and then click on **ID Theft Faceoff**. Complete the quiz provided there.

FASB Codification Activity

BYP8-9 If your school has a subscription to the FASB Codification, go to **http://aaahq.org/ascLogin.cfm** to log in and prepare responses to the following.

(a) How is cash defined in the Codification?
(b) How are cash equivalents defined in the Codification?
(c) What are the disclosure requirements related to cash and cash equivalents?

A Look at IFRS

LEARNING OBJECTIVE 5

Compare the accounting for fraud, internal control, and cash under GAAP and IFRS.

Fraud can occur anywhere. Because the three main factors that contribute to fraud are universal in nature, the principles of internal control activities are used globally by companies. While Sarbanes-Oxley (SOX) does not apply to international companies, most large international companies have internal controls similar to those indicated in the chapter. IFRS and GAAP are also very similar in accounting for cash. *IAS No. 1 (revised),* "Presentation of Financial Statements," is the only standard that discusses issues specifically related to cash.

Relevant Facts

Following are the key similarities and differences between GAAP and IFRS related to fraud, internal control, and cash.

Similarities

- The fraud triangle discussed in this chapter is applicable to all international companies. Some of the major frauds on an international basis are Parmalat (Italy), Royal Ahold (the Netherlands), and Satyam Computer Services (India).
- Rising economic crime poses a growing threat to companies, with nearly one-third of all organizations worldwide being victims of fraud in a recent 12-month period.
- Accounting scandals both in the United States and internationally have re-ignited the debate over the relative merits of GAAP, which takes a "rules-based" approach to accounting, versus IFRS, which takes a "principles-based" approach. The FASB announced that it intends to introduce more principles-based standards.
- On a lighter note, at one time the Ig Nobel Prize in Economics went to the CEOs of those companies involved in the corporate accounting scandals of that year for "adapting the mathematical concept of imaginary numbers for use in the business world." A parody of the Nobel Prizes, the Ig Nobel Prizes (read Ignoble, as not noble) are given each year in early October for 10 achievements that "first make people laugh, and then make them think." Organized by the scientific humor magazine *Annals of Improbable Research* (*AIR*), they are presented by a group that includes genuine Nobel laureates at a ceremony at Harvard University's Sanders Theater. (See **en.wikipedia.org/wiki/Ig_Nobel_Prize**.)
- The accounting and internal control procedures related to cash are essentially the same under both IFRS and this textbook. In addition, the definition used for cash equivalents is the same.
- Most companies report cash and cash equivalents together under IFRS, as shown in this textbook. In addition, IFRS follows the same accounting policies related to the reporting of restricted cash.

Differences

- The SOX internal control standards apply only to companies listed on U.S. exchanges. There is continuing debate over whether foreign issuers should have to comply with this extra layer of regulation.

Looking to the Future

Ethics has become a very important aspect of reporting. Different cultures have different perspectives on bribery and other questionable activities, and consequently penalties for engaging in such activities vary considerably across countries.

High-quality international accounting requires both high-quality accounting standards and high-quality auditing. Similar to the convergence of GAAP and IFRS, there is movement to improve international auditing standards. The International Auditing and Assurance Standards Board (IAASB) functions as an independent standard-setting body. It works to establish high-quality auditing and assurance and quality-control standards throughout the world. Whether the IAASB adopts internal control provisions similar to those in SOX remains to be seen. You can follow developments in the international audit arena at **http://www.ifac.org/iaasb/**.

IFRS Practice

IFRS Self-Test Questions

1. Non-U.S companies that follow IFRS:
  (a) do not normally use the principles of internal control activities described in this textbook.
  (b) often offset cash with accounts payable on the balance sheet.
  (c) are not required to follow SOX.
  (d) None of the above.

2. The Sarbanes-Oxley Act applies to:
  (a) all U.S. companies listed on U.S. exchanges.
  (b) all companies that list stock on any stock exchange in any country.
  (c) all European companies listed on European exchanges.
  (d) Both (a) and (c).

3. High-quality international accounting requires both high-quality accounting standards and:
  (a) a reconsideration of SOX to make it less onerous.
  (b) high-quality auditing standards.
  (c) government intervention to ensure that the public interest is protected.
  (d) the development of new principles of internal control activities.

IFRS Exercise

IFRS8-1 Some people argue that the internal control requirements of the Sarbanes-Oxley Act (SOX) put U.S. companies at a competitive disadvantage to companies outside the United States. Discuss the competitive implications (both pros and cons) of SOX.

International Financial Reporting Problem: Louis Vuitton

IFRS8–2 The financial statements of Louis Vuitton are presented in Appendix F. Instructions for accessing and using the company's complete annual report, including the notes to its financial statements, are also provided in Appendix F.

Instructions
Using the notes to the company's financial statements, what are Louis Vuitton's accounting policies related to cash and cash equivalents?

Answers to IFRS Self-Test Questions

1. c **2.** a **3.** b

9

Accounting for Receivables

CHAPTER PREVIEW As indicated in the Feature Story below, receivables are a significant asset for many pharmaceutical companies. Because a large portion of sales in the United States are credit sales, receivables are important to companies in other industries as well. As a consequence, companies must pay close attention to their receivables and manage them carefully. In this chapter, you will learn what journal entries companies make when they sell products, when they collect cash from those sales, and when they write off accounts they cannot collect.

FEATURE STORY

A Dose of Careful Management Keeps Receivables Healthy

"Sometimes you have to know when to be very tough, and sometimes you can give them a bit of a break," said Vivi Su. She wasn't talking about her children but about the customers of a subsidiary of former pharmaceutical company Whitehall-Robins, where she worked as supervisor of credit and collections.

For example, while the company's regular terms were 1/15, n/30 (1% discount if paid within 15 days), a customer might have asked for and received a few days of grace and still got the discount. Or a customer might have placed orders above its credit limit, in which case, depending on its payment history and the circumstances, Ms. Su might have authorized shipment of the goods anyway.

"It's not about drawing a line in the sand, and that's all," she explained. "You want a good relationship with your customers—but you also need to bring in the money."

"The money," in Whitehall-Robins' case, amounted to some \$170 million in sales a year. Nearly all of it came in through the credit accounts Ms. Su managed. The process started with the decision to grant a customer an account in the first place. The sales rep gave the customer a credit application. "My department reviews this application very carefully; a customer needs to supply three good references, and we also run a check with a credit firm like Equifax. If we accept them, then based on their size and history, we assign a credit limit," Ms. Su explained.

Once accounts were established, "I get an aging report every single day," said Ms. Su. "The rule of thumb is that we should always have at least 85% of receivables current—meaning they were billed less than 30 days ago," she continued. "But we try to do even better than that—I like to see 90%."

At 15 days overdue, Whitehall-Robins phoned the client. After 45 days, Ms. Su noted, "I send a letter. Then a second notice is sent in writing. After the third and final notice, the client has 10 days to pay, and then I hand it over to a collection agency, and it's out of my hands."

Ms. Su's boss, Terry Norton, recorded an estimate for bad debts every year, based on a percentage of receivables. The percentage depended on the current aging history. He also calculated and monitored the company's accounts receivable turnover, which the company reported in its financial statements.

Ms. Su knew that she and Mr. Norton were crucial to the profitability of Whitehall-Robins. "Receivables are generally the second-largest asset of any company (after its capital assets)," she pointed out. "So it's no wonder we keep a very close eye on them."

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CHAPTER OUTLINE

Learning Objectives

1	**Explain how companies recognize accounts receivable.**	• Types of receivables • Recognizing accounts receivable	**DO IT!** 1 Recognizing Accounts Receivable
2	**Describe how companies value accounts receivable and record their disposition.**	• Valuing accounts receivable • Disposing of accounts receivable	**DO IT!** 2 Uncollectible Accounts Receivable
3	**Explain how companies recognize notes receivable.**	• Determining the maturity date • Computing interest • Recognizing notes receivable	**DO IT!** 3 Recognizing Notes Receivable
4	**Describe how companies value notes receivable, record their disposition, and present and analyze receivables.**	• Valuing notes receivable • Disposing of notes receivable • Statement presentation and analysis	**DO IT!** 4 Analysis of Receivables

Go to the *REVIEW AND PRACTICE* section at the end of the chapter for a review of key concepts and practice applications with solutions.

Visit WileyPLUS with ORION for additional tutorials and practice opportunities.

LEARNING OBJECTIVE 1

Explain how companies recognize accounts receivable.

Types of Receivables

The term **receivables** refers to amounts due from individuals and companies. Receivables are claims that are expected to be collected in cash. The management of receivables is a very important activity for any company that sells goods or services on credit.

Receivables are important because they represent one of a company's most liquid assets. For many companies, receivables are also one of the largest assets. For example, receivables represent 13.7% of the current assets of pharmaceutical giant **Rite Aid**. Illustration 9-1 lists receivables as a percentage of total assets for five other well-known companies in a recent year.

Illustration 9-1
Receivables as a percentage of assets

Company	Receivables as a Percentage of Total Assets
Ford Motor Company	43.2%
General Electric	41.5
Minnesota Mining and Manufacturing Company (3M)	12.7
DuPont Co.	11.7
Intel Corporation	3.9

The relative significance of a company's receivables as a percentage of its assets depends on various factors: its industry, the time of year, whether it extends long-term financing, and its credit policies. To reflect important differences among receivables, they are frequently classified as (1) accounts receivable, (2) notes receivable, and (3) other receivables.

Accounts receivable are amounts customers owe on account. They result from the sale of goods and services. Companies generally expect to collect accounts receivable within 30 to 60 days. They are usually the most significant type of claim held by a company.

ETHICS NOTE

Companies report receivables from employees separately in the financial statements. The reason: Sometimes these receivables are not the result of an "arm's-length" transaction.

Notes receivable are a written promise (as evidenced by a formal instrument) for amounts to be received. The note normally requires the collection of interest and extends for time periods of 60–90 days or longer. Notes and accounts receivable that result from sales transactions are often called **trade receivables**.

Other receivables include nontrade receivables such as interest receivable, loans to company officers, advances to employees, and income taxes refundable. These do not generally result from the operations of the business. Therefore, they are generally classified and reported as separate items in the balance sheet.

Recognizing Accounts Receivable

Recognizing accounts receivable is relatively straightforward. A service organization records a receivable when it performs service on account. A merchandiser records accounts receivable at the point of sale of merchandise on account. When a merchandiser sells goods, it increases (debits) Accounts Receivable and increases (credits) Sales Revenue.

The seller may offer terms that encourage early payment by providing a discount. Sales returns also reduce receivables. The buyer might find some of the goods unacceptable and choose to return the unwanted goods.

To review, assume that Jordache Co. on July 1, 2017, sells merchandise on account to Polo Company for $1,000, terms 2/10, n/30. On July 5, Polo returns merchandise with a sales price of $100 to Jordache Co. On July 11, Jordache receives payment from Polo Company for the balance due. The journal entries to record these transactions on the books of Jordache Co. are as follows. **(Cost of goods sold entries are omitted.)**

July 1	Accounts Receivable—Polo Company	1,000	
	Sales Revenue		1,000
	(To record sales on account)		
July 5	Sales Returns and Allowances	100	
	Accounts Receivable—Polo Company		100
	(To record merchandise returned)		
July 11	Cash ($900 − $18)	882	
	Sales Discounts ($900 × .02)	18	
	Accounts Receivable—Polo Company		900
	(To record collection of accounts receivable)		

ETHICS NOTE

In exchange for lower interest rates, some companies have eliminated the 25-day grace period before finance charges kick in. Be sure you read the fine print in any credit agreement you sign.

Helpful Hint
These entries are the same as those described in Chapter 5. For simplicity, we have omitted inventory and cost of goods sold from this set of journal entries and from end-of-chapter material.

Some retailers issue their own credit cards. When you use a retailer's credit card (JCPenney, for example), the retailer charges interest on the balance due if not paid within a specified period (usually 25–30 days).

To illustrate, assume that you use your JCPenney Company credit card to purchase clothing with a sales price of $300 on June 1, 2017. JCPenney will increase (debit) Accounts Receivable for $300 and increase (credit) Sales Revenue for $300 (cost of goods sold entry omitted) as follows.

June 1	Accounts Receivable	300	
	Sales Revenue		300
	(To record sale of merchandise)		

A	=	L	+	OE
+300				
				+300 Rev

Cash Flows
no effect

Assuming that you owe $300 at the end of the month and JCPenney charges 1.5% per month on the balance due, the adjusting entry that JCPenney makes to record interest revenue of $4.50 ($300 × 1.5%) on June 30 is as follows.

June 30	Accounts Receivable	4.50	
	Interest Revenue		4.50
	(To record interest on amount due)		

A	=	L	+	OE
+4.50				
				+4.50 Rev

Cash Flows
no effect

Interest revenue is often substantial for many retailers.

ANATOMY OF A FRAUD

Tasanee was the accounts receivable clerk for a large nonprofit foundation that provided performance and exhibition space for the performing and visual arts. Her responsibilities included activities normally assigned to an accounts receivable clerk, such as recording revenues from various sources (donations, facility rental fees, ticket revenue, and bar receipts). However, she was also responsible for handling all cash and checks from the time they were received until the time she deposited them, as well as preparing the bank reconciliation. Tasanee took advantage of her situation by falsifying bank deposits and bank reconciliations so that she could steal cash from the bar receipts. Since nobody else logged the donations or matched the donation receipts to pledges prior to Tasanee receiving them, she was able to offset the cash that was stolen against donations that she received but didn't record. Her crime was made easier by the fact that her boss, the company's controller, only did a very superficial review of the bank reconciliation and thus didn't notice that some numbers had been cut out from other documents and taped onto the bank reconciliation.

Total take: $1.5 million

THE MISSING CONTROLS

Segregation of duties. The foundation should not have allowed an accounts receivable clerk, whose job was to record receivables, to also handle cash, record cash, make deposits, and especially prepare the bank reconciliation.

Independent internal verification. The controller was supposed to perform a thorough review of the bank reconciliation. Because he did not, he was terminated from his position.

Source: Adapted from Wells, *Fraud Casebook* (2007), pp. 183–194.

DO IT! 1 Recognizing Accounts Receivable

On May 1, Wilton sold merchandise on account to Bates for $50,000, terms 3/15, net 45. On May 4, Bates returns merchandise with a sales price of $2,000. On May 16, Wilton receives payment from Bates for the balance due. Prepare journal entries to record the May transactions on Wilton's books. (You may ignore cost of goods sold entries and explanations.)

Action Plan

✔ Prepare entry to record the receivable and related return.

✔ Compute the sales discount and related entry.

Solution

May 1	Accounts Receivable—Bates	50,000	
	Sales Revenue		50,000
May 4	Sales Returns and Allowances	2,000	
	Accounts Receivable—Bates		2,000
May 16	Cash ($48,000 − $1,440)	46,560	
	Sales Discounts ($48,000 × .03)	1,440	
	Accounts Receivable—Bates		48,000

Related exercise material: **BE9-1, BE9-2, E9-1, E9-2, and DO IT! 9-1.**

LEARNING OBJECTIVE 2 Describe how companies value accounts receivable and record their disposition.

Valuing Accounts Receivable

Once companies record receivables in the accounts, the next question is: How should they report receivables in the financial statements? Companies report accounts receivable on the balance sheet as an asset. But determining the **amount** to report is sometimes difficult because some receivables will become uncollectible.

Each customer must satisfy the credit requirements of the seller before the credit sale is approved. Inevitably, though, some accounts receivable become uncollectible. For example, a customer may not be able to pay because of a decline in its sales revenue due to a downturn in the economy. Similarly, individuals may be laid off from their jobs or faced with unexpected hospital bills. Companies record credit losses as **Bad Debt Expense** (or Uncollectible Accounts Expense). Such losses are a normal and necessary risk of doing business on a credit basis.

Alternative Terminology
You will sometimes see *Bad Debt Expense* called *Uncollectible Accounts Expense.*

When U.S. home prices fell, home foreclosures rose, and the economy slowed as a result of the financial crises of 2008, lenders experienced huge increases in their bad debt expense. For example, during one quarter Wachovia (a large U.S. bank now owned by Wells Fargo) increased bad debt expense from $108 million to $408 million. Similarly, American Express increased its bad debt expense by 70%.

Two methods are used in accounting for uncollectible accounts: (1) the direct write-off method and (2) the allowance method. The following sections explain these methods.

DIRECT WRITE-OFF METHOD FOR UNCOLLECTIBLE ACCOUNTS

Under the **direct write-off method**, when a company determines a particular account to be uncollectible, it charges the loss to Bad Debt Expense. Assume, for example, that Warden Co. writes off as uncollectible M. E. Doran's $200 balance on December 12. Warden's entry is as follows.

Dec. 12	Bad Debt Expense	200	
	Accounts Receivable—M. E. Doran		200
	(To record write-off of M. E. Doran account)		

A	=	L	+	OE
				−200 Exp
−200				

Cash Flows
no effect

Under this method, Bad Debt Expense will show only **actual losses** from uncollectibles. The company will report accounts receivable at its gross amount.

Although this method is simple, its use can reduce the usefulness of both the income statement and balance sheet. Consider the following example. Assume that in 2017, Quick Buck Computer Company decided it could increase its revenues by offering computers to college students without requiring any money down and with no credit-approval process. On campuses across the country, it distributed one million computers with a selling price of $800 each. This increased Quick Buck's revenues and receivables by $800 million. The promotion was a huge success! The 2017 balance sheet and income statement looked great. Unfortunately, during 2018, nearly 40% of the customers defaulted on their loans. This made the 2018 income statement and balance sheet look terrible. Illustration 9-2 shows the effect of these events on the financial statements if the direct write-off method is used.

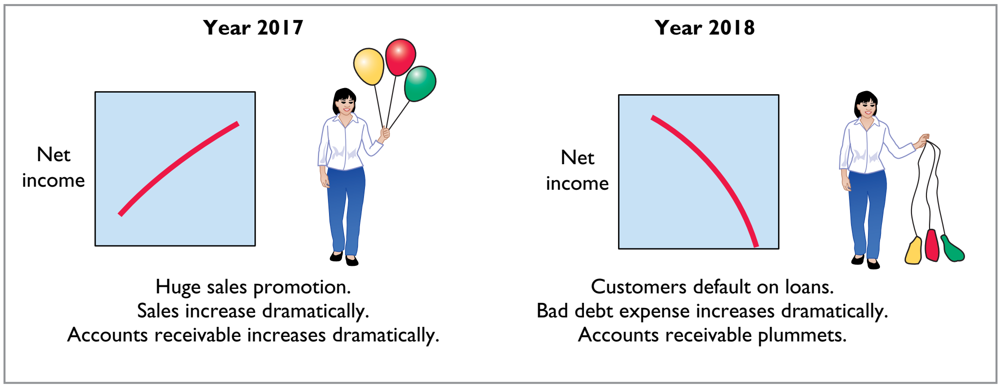


Illustration 9-2
Effects of direct write-off method

Under the direct write-off method, companies often record bad debt expense in a period different from the period in which they record the revenue. The method does not attempt to match bad debt expense to sales revenue in the income statement. Nor does the direct write-off method show accounts receivable in the balance sheet at the amount the company actually expects to receive. **Consequently, unless bad debt losses are insignificant, the direct write-off method is not acceptable for financial reporting purposes.**

ALLOWANCE METHOD FOR UNCOLLECTIBLE ACCOUNTS

The **allowance method** of accounting for bad debts involves estimating uncollectible accounts at the end of each period. This provides better matching on the income statement. It also ensures that companies state receivables on the balance sheet at their cash (net) realizable value. **Cash (net) realizable value** is the net amount the company expects to receive in cash. It excludes amounts that the company estimates it will not collect. Thus, this method reduces receivables in the balance sheet by the amount of estimated uncollectible receivables.

GAAP requires the allowance method for financial reporting purposes when bad debts are material in amount. This method has three essential features:

Helpful Hint
In this context, *material* means significant or important to financial statement users.

1. Companies **estimate** uncollectible accounts receivable. They match this estimated expense **against revenues** in the same accounting period in which they record the revenues.
2. Companies debit estimated uncollectibles to Bad Debt Expense and credit them to Allowance for Doubtful Accounts through an adjusting entry at the end of each period. Allowance for Doubtful Accounts is a contra account to Accounts Receivable.
3. When companies write off a specific account, they debit actual uncollectibles to Allowance for Doubtful Accounts and credit that amount to Accounts Receivable.

RECORDING ESTIMATED UNCOLLECTIBLES To illustrate the allowance method, assume that Hampson Furniture has credit sales of $1,200,000 in 2017. Of this amount, $200,000 remains uncollected at December 31. The credit manager estimates that $12,000 of these sales will be uncollectible. The adjusting entry to record the estimated uncollectibles increases (debits) Bad Debt Expense and increases (credits) Allowance for Doubtful Accounts, as follows.

A	=	L	+	OE
				−12,000 Exp
−12,000				

Cash Flows
no effect

Dec. 31	Bad Debt Expense	12,000	
	Allowance for Doubtful Accounts		12,000
	(To record estimate of uncollectible accounts)		

Hampson reports Bad Debt Expense in the income statement as an operating expense (usually as a selling expense). Thus, the estimated uncollectibles are matched with sales in 2017. Hampson records the expense in the same year it made the sales.

Allowance for Doubtful Accounts shows the estimated amount of claims on customers that the company expects will become uncollectible in the future. Companies use a contra account instead of a direct credit to Accounts Receivable because they do not know which customers will not pay. The credit balance in the allowance account will absorb the specific write-offs when they occur. As Illustration 9-3 shows, the company deducts the allowance account from accounts receivable in the current assets section of the balance sheet.

Illustration 9-3
Presentation of allowance for doubtful accounts

HAMPSON FURNITURE
Balance Sheet (partial)

Current assets		
Cash		$ 14,800
Accounts receivable	**$200,000**	
Less: Allowance for doubtful accounts	**12,000**	**188,000**
Inventory		310,000
Supplies		25,000
Total current assets		$537,800

Helpful Hint
Cash realizable value is sometimes referred to as *accounts receivable (net)*.

The amount of $188,000 in Illustration 9-3 represents the expected **cash realizable value** of the accounts receivable at the statement date. **Companies do not close Allowance for Doubtful Accounts at the end of the fiscal year.**

RECORDING THE WRITE-OFF OF AN UNCOLLECTIBLE ACCOUNT As described in the Feature Story, companies use various methods of collecting past-due accounts, such as letters, calls, and legal action. When they have exhausted all means of collecting a past-due account and collection appears impossible, the company writes off the account. In the credit card industry, for example, it is standard practice to write off accounts that are 210 days past due. To prevent premature or unauthorized write-offs, authorized management personnel should formally approve each write-off. To maintain segregation of duties, the employee authorized to write off accounts should not have daily responsibilities related to cash or receivables.

To illustrate a receivables write-off, assume that the financial vice president of Hampson Furniture authorizes a write-off of the $500 balance owed by R. A. Ware on March 1, 2018. The entry to record the write-off is as follows.

Mar. 1	Allowance for Doubtful Accounts	500	
	Accounts Receivable—R. A. Ware		500
	(Write-off of R. A. Ware account)		

A	=	L	+	OE
+500				
−500				

Cash Flows
no effect

Bad Debt Expense does not increase when the write-off occurs. **Under the allowance method, companies debit every bad debt write-off to the allowance account rather than to Bad Debt Expense.** A debit to Bad Debt Expense would be incorrect because the company has already recognized the expense when it made the adjusting entry for estimated bad debts. Instead, the entry to record the write-off of an uncollectible account reduces both Accounts Receivable and Allowance for Doubtful Accounts. After posting, the general ledger accounts appear as shown in Illustration 9-4.

Illustration 9-4
General ledger balances after write-off

Accounts Receivable				Allowance for Doubtful Accounts			
Jan. 1 Bal.	200,000	Mar. 1	**500**	Mar. 1	**500**	Jan. 1 Bal.	12,000
Mar. 1 Bal.	199,500					Mar. 1 Bal.	11,500

A write-off affects **only balance sheet accounts**—not income statement accounts. The write-off of the account reduces both Accounts Receivable and Allowance for Doubtful Accounts. Cash realizable value in the balance sheet, therefore, remains the same, as Illustration 9-5 shows.

Illustration 9-5
Cash realizable value comparison

	Before Write-Off	**After Write-Off**
Accounts receivable	$ 200,000	$ 199,500
Allowance for doubtful accounts	12,000	11,500
Cash realizable value	**$188,000**	**$188,000**

RECOVERY OF AN UNCOLLECTIBLE ACCOUNT Occasionally, a company collects from a customer after it has written off the account as uncollectible. The company makes two entries to record the recovery of a bad debt. (1) It reverses the entry made in writing off the account. This reinstates the customer's account. (2) It journalizes the collection in the usual manner.

To illustrate, assume that on July 1, R. A. Ware pays the $500 amount that Hampson had written off on March 1. Hampson makes the following entries.

(1)

July 1	Accounts Receivable—R. A. Ware	500	
	Allowance for Doubtful Accounts		500
	(To reverse write-off of R. A. Ware account)		

A	=	L	+	OE
+500				
−500				

Cash Flows
no effect

(2)

July 1	Cash	500	
	Accounts Receivable—R. A. Ware		500
	(To record collection from R. A. Ware)		

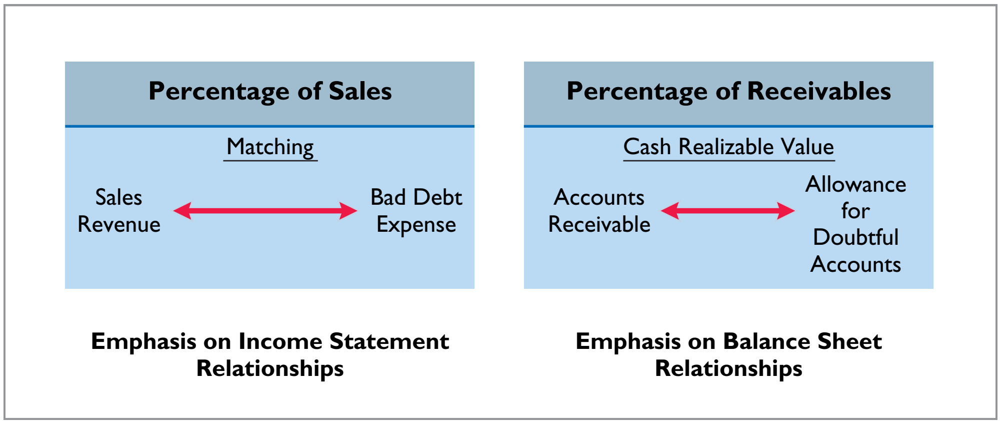
A	=	L	+	OE
+500				
−500				

Cash Flows
+500

Note that the recovery of a bad debt, like the write-off of a bad debt, affects **only balance sheet accounts**. The net effect of the two entries above is a debit to Cash and a credit to Allowance for Doubtful Accounts for $500. Accounts Receivable and Allowance for Doubtful Accounts both increase in entry (1) for two reasons. First, the company made an error in judgment when it wrote off the account receivable. Second, after R. A. Ware did pay, Accounts Receivable in the general ledger and Ware's account in the subsidiary ledger should show the collection for possible future credit purposes.

ESTIMATING THE ALLOWANCE For Hampson Furniture in Illustration 9-3, the amount of the expected uncollectibles was given. However, in "real life," companies must estimate that amount when they use the allowance method. Two bases are used to determine this amount: **(1) percentage of sales** and **(2) percentage of receivables**. Both bases are generally accepted. The choice is a management decision. It depends on the relative emphasis that management wishes to give to expenses and revenues on the one hand or to cash realizable value of the accounts receivable on the other. The choice is whether to emphasize income statement or balance sheet relationships. Illustration 9-6 compares the two bases.

Illustration 9-6
Comparison of bases for estimating uncollectibles



The percentage-of-sales basis results in a better matching of expenses with revenues—an income statement viewpoint. The percentage-of-receivables basis produces the better estimate of cash realizable value—a balance sheet viewpoint. Under both bases, the company must determine its past experience with bad debt losses.

Percentage-of-Sales In the **percentage-of-sales basis**, management estimates what percentage of credit sales will be uncollectible. This percentage is based on past experience and anticipated credit policy.

The company applies this percentage to either total credit sales or net credit sales of the current year. To illustrate, assume that Gonzalez Company elects to use the percentage-of-sales basis. It concludes that 1% of net credit sales will become uncollectible. If net credit sales for 2017 are $800,000, the estimated bad debt expense is $8,000 (1% × $800,000). The adjusting entry is as follows.

A	=	L	+	OE
				−8,000 Exp
−8,000				

Cash Flows
no effect

Dec. 31	Bad Debt Expense	8,000	
	Allowance for Doubtful Accounts		8,000
	(To record estimated bad debts for year)		

After the adjusting entry is posted, assuming the allowance account already has a credit balance of $1,723, the accounts of Gonzalez Company will show the following.

Illustration 9-7
Bad debt accounts after posting

Bad Debt Expense		Allowance for Doubtful Accounts	
Dec. 31 Adj. **8,000**			Jan. 1 Bal. 1,723
			Dec. 31 Adj. **8,000**
			Dec. 31 Bal. 9,723

This basis of estimating uncollectibles emphasizes the matching of expenses with revenues. As a result, Bad Debt Expense will show a direct percentage relationship to the sales base on which it is computed. **When the company makes the adjusting entry, it disregards the existing balance in Allowance for Doubtful Accounts.** The adjusted balance in this account should be a reasonable approximation of the realizable value of the receivables. If actual write-offs differ significantly from the amount estimated, the company should modify the percentage for future years.

Percentage-of-Receivables Under the **percentage-of-receivables basis**, management estimates what percentage of receivables will result in losses from uncollectible accounts. The company prepares an **aging schedule**, in which it classifies customer balances by the length of time they have been unpaid. Because of its emphasis on time, the analysis is often called **aging the accounts receivable**. In the Feature Story, Whitehall-Robins prepared an aging report daily.

After the company arranges the accounts by age, it determines the expected bad debt losses. It applies percentages based on past experience to the totals in each category. The longer a receivable is past due, the less likely it is to be collected. Thus, the estimated percentage of uncollectible debts increases as the number of days past due increases. Illustration 9-8 shows an aging schedule for Dart Company. Note that the estimated percentage uncollectible increases from 2% to 40% as the number of days past due increases.

Helpful Hint
Where appropriate, companies may use only a single percentage rate.

Illustration 9-8
Aging schedule

Worksheet.xls

	A	B	C	D	E	F	G
1				Number of Days Past Due			
2			Not				
3	Customer	Total	Yet Due	1–30	31–60	61–90	Over 90
4	T. E. Adert	$ 600		$ 300		$ 200	$ 100
5	R. C. Bortz	300	$ 300				
6	B. A. Carl	450		200	$ 250		
7	O. L. Diker	700	500			200	
8	T. O. Ebbet	600			300		300
9	Others	36,950	26,200	5,200	2,450	1,600	1,500
10		$39,600	$27,000	$5,700	$3,000	$2,000	$1,900
11	Estimated Percentage Uncollectible		2%	4%	10%	20%	40%
12	Total Estimated Bad Debts	$ 2,228	$ 540	$ 228	$ 300	$ 400	$ 760
13							

Helpful Hint
The older categories have higher percentages because the longer an account is past due, the less likely it is to be collected.

Total estimated bad debts for Dart Company ($2,228) represent the amount of existing customer claims the company expects will become uncollectible in the future. This amount represents the **required balance** in Allowance for Doubtful Accounts at the balance sheet date. **The amount of the bad debt adjusting entry is the difference between the required balance and the existing balance in the allowance account.** If the trial balance shows Allowance for Doubtful Accounts with a credit balance of $528, the company will make an adjusting entry for $1,700 ($2,228 − $528), as shown here.

Dec. 31	Bad Debt Expense	1,700	
	Allowance for Doubtful Accounts		1,700
	(To adjust allowance account to total estimated uncollectibles)		

A	=	L	+	OE
				−1,700 Exp
−1,700				

Cash Flows
no effect

After Dart posts its adjusting entry, its accounts will appear as follows.

Illustration 9-9
Bad debt accounts after posting

Bad Debt Expense		Allowance for Doubtful Accounts	
Dec. 31 Adj. **1,700**			Bal. 528
			Dec. 31 Adj. **1,700**
			Bal. 2,228

Occasionally, the allowance account will have a **debit balance** prior to adjustment. This occurs when write-offs during the year have exceeded previous provisions for bad debts. In such a case, the company **adds the debit balance to the required balance** when it makes the adjusting entry. Thus, if there had been a $500 debit balance in the allowance account before adjustment, the adjusting entry would have been for $2,728 ($2,228 + $500) to arrive at a credit balance of $2,228 (see T-account in margin). The percentage-of-receivables basis will normally result in the better approximation of cash realizable value.

Allowance for Doubtful Accounts	
Dec. 31 **Unadj.** Bal. 500	Dec. 31 **Adj.** 2,728
	Dec. 31 Bal. 2,228

Ethics Insight

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Cookie Jar Allowances

There are many pressures on companies to achieve earnings targets. For managers, poor earnings can lead to dismissal or lack of promotion. It is not surprising then that management may be tempted to look for ways to boost their earnings number.

One way a company can achieve greater earnings is to lower its estimate of what is needed in its Allowance for Doubtful Accounts (sometimes referred to as "tapping the cooking jar"). For example, suppose a company has an Allowance for Doubtful Accounts of $10 million and decides to reduce this balance to $9 million. As a result of this change, Bad Debt Expense decreases by $1 million and earnings increase by $1 million.

Large banks such as JP Morgan Chase, Wells Fargo, and Bank of America recently decreased their Allowance for Doubtful Accounts by over $4 billion. These reductions came at a time when these big banks were still suffering from lower mortgage lending and trading activity, both of which lead to lower earnings. They justified these reductions in the allowance balances by noting that credit quality and economic conditions had improved. This may be so, but it sure is great to have a cookie jar that might be tapped when a boost in earnings is needed.

How might investors determine that a company is managing its earnings? (See **WileyPLUS** for this answer and additional questions.)

Disposing of Accounts Receivable

In the normal course of events, companies collect accounts receivable in cash and remove the receivables from the books. However, as credit sales and receivables have grown in significance, the "normal course of events" has changed. Companies now frequently sell their receivables to another company for cash, thereby shortening the cash-to-cash operating cycle.

Companies sell receivables for two major reasons. First, **they may be the only reasonable source of cash**. When money is tight, companies may not be able to borrow money in the usual credit markets. Or if money is available, the cost of borrowing may be prohibitive.

A second reason for selling receivables is that **billing and collection are often time-consuming and costly**. It is often easier for a retailer to sell the receivables to another party with expertise in billing and collection matters. Credit card companies such as MasterCard, Visa, and Discover specialize in billing and collecting accounts receivable.

SALE OF RECEIVABLES

A common sale of receivables is a sale to a factor. A **factor** is a finance company or bank that buys receivables from businesses and then collects the payments directly from the customers. Factoring is a multibillion dollar business.

Factoring arrangements vary widely. Typically, the factor charges a commission to the company that is selling the receivables. This fee ranges from 1–3% of the amount of receivables purchased. To illustrate, assume that Hendredon Furniture factors $600,000 of receivables to Federal Factors. Federal Factors assesses a service charge of 2% of the amount of receivables sold. The journal entry to record the sale by Hendredon Furniture on April 2, 2017, is as follows.

Apr. 2	Cash	588,000	
	Service Charge Expense (2% × $600,000)	12,000	
	Accounts Receivable		600,000
	(To record the sale of accounts receivable)		

A	=	L	+	OE
+588,000				
				−12,000 Exp
−600,000				

Cash Flows
+588,000

If Hendredon often sells its receivables, it records the service charge expense as a selling expense. If the company infrequently sells receivables, it may report this amount in the "Other expenses and losses" section of the income statement.

CREDIT CARD SALES

Over one billion credit cards are in use in the United States—more than three credit cards for every man, woman, and child in this country. Visa, MasterCard, and American Express are the national credit cards that most individuals use. Three parties are involved when national credit cards are used in retail sales: (1) the credit card issuer, who is independent of the retailer; (2) the retailer; and (3) the customer. A retailer's acceptance of a national credit card is another form of selling (factoring) the receivable.

Illustration 9-10 shows the major advantages of national credit cards to the retailer. In exchange for these advantages, the retailer pays the credit card issuer a fee of 2–6% of the invoice price for its services.

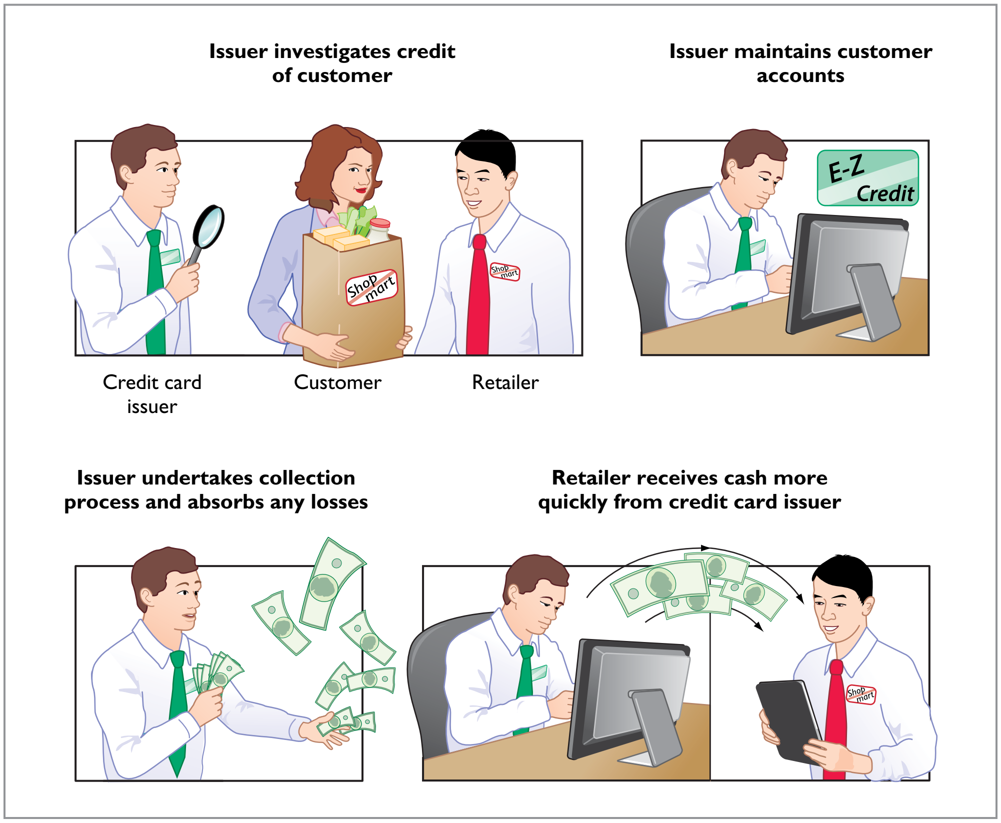


Illustration 9-10
Advantages of credit cards to the retailer

ACCOUNTING FOR CREDIT CARD SALES The retailer generally considers sales from the use of national credit card sales as **cash sales**. The retailer must pay to the bank that issues the card a fee for processing the transactions. The retailer records the credit card slips in a similar manner as checks deposited from a cash sale.

To illustrate, Anita Ferreri purchases $1,000 of compact discs for her restaurant from Karen Kerr Music Co., using her Visa First Bank Card. First Bank charges a service fee of 3%. The entry to record this transaction by Karen Kerr Music on March 22, 2017, is as follows.

A	=	L	+	OE
+970				
				−30 Exp
				+1,000 Rev

Cash Flows
+970

Mar. 22	Cash	970	
	Service Charge Expense	30	
	Sales Revenue		1,000
	(To record Visa credit card sales)		

Accounting Across the Organization — Nordstrom


© Michael Braun/iStockphoto

How Does a Credit Card Work?

Most of you know how to use a credit card, but do you know what happens in the transaction and how the transaction is processed? Suppose that you use a Visa card to purchase some new ties at Nordstrom. The salesperson swipes your card, which allows the information on the magnetic strip on the back of the card to be read. The salesperson then enters in the amount of the purchase. The machine contacts the Visa computer, which routes the call back to the bank that issued your Visa card. The issuing bank verifies that the account exists, that the card is not stolen, and that you have not exceeded your credit limit. At this point, the slip is printed, which you sign.

Visa acts as the clearing agent for the transaction. It transfers funds from the issuing bank to Nordstrom's bank account. Generally this transfer of funds, from sale to the receipt of funds in the merchant's account, takes two to three days.

In the meantime, Visa puts a pending charge on your account for the amount of the tie purchase; that amount counts immediately against your available credit limit. At the end of the billing period, Visa sends you an invoice (your credit card bill) which shows the various charges you made, and the amounts that Visa expended on your behalf, for the month. You then must "pay the piper" for your stylish new ties.

Assume that Nordstrom prepares a bank reconciliation at the end of each month. If some credit card sales have not been processed by the bank, how should Nordstrom treat these transactions on its bank reconciliation? (Go to **WileyPLUS** for this answer and additional questions.)

DO IT! 2 Uncollectible Accounts Receivable

Brule Co. has been in business five years. The unadjusted trial balance at the end of the current year shows:

Accounts Receivable	$30,000 Dr.
Sales Revenue	$180,000 Cr.
Allowance for Doubtful Accounts	$2,000 Dr.

Brule estimates bad debts to be 10% of receivables. Prepare the entry necessary to adjust Allowance for Doubtful Accounts.

Action Plan

- ✔ Estimate the amount the company does not expect to collect.
- ✔ Consider the existing balance in the allowance account when using the percentage-of-receivables basis.
- ✔ Report receivables at their cash (net) realizable value.

Solution

The following entry should be made to bring the balance in Allowance for Doubtful Accounts up to a normal credit balance of $3,000 (10% × $30,000):

Bad Debt Expense [(10% × $30,000) + $2,000]	5,000	
Allowance for Doubtful Accounts		5,000
(To record estimate of uncollectible accounts)		

Related exercise material: **BE9-3, BE9-4, BE9-5, BE9-6, BE9-7, E9-3, E9-4, E9-5, E9-6, and DO IT! 9-2.**

LEARNING OBJECTIVE 3

Explain how companies recognize notes receivable.

Companies may also grant credit in exchange for a formal credit instrument known as a promissory note. A **promissory note** is a written promise to pay a specified amount of money on demand or at a definite time. Promissory notes may be used (1) when individuals and companies lend or borrow money, (2) when the amount of the transaction and the credit period exceed normal limits, or (3) in settlement of accounts receivable.

In a promissory note, the party making the promise to pay is called the **maker**. The party to whom payment is to be made is called the **payee**. The note may specifically identify the payee by name or may designate the payee simply as the bearer of the note.

In the note shown in Illustration 9-11, Calhoun Company is the maker and Wilma Company is the payee. To Wilma Company, the promissory note is a note receivable. To Calhoun Company, it is a note payable.

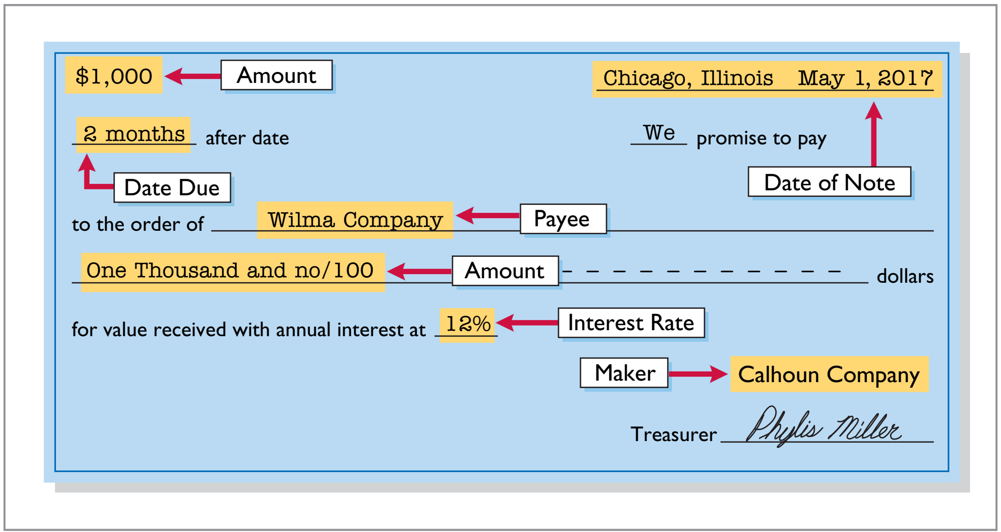


Illustration 9-11
Promissory note

Helpful Hint
For this note, the maker, Calhoun Company, debits Cash and credits Notes Payable. The payee, Wilma Company, debits Notes Receivable and credits Cash.

Notes receivable give the holder a stronger legal claim to assets than do accounts receivable. Like accounts receivable, notes receivable can be readily sold to another party. Promissory notes are negotiable instruments (as are checks), which means that they can be transferred to another party by endorsement.

Companies frequently accept notes receivable from customers who need to extend the payment of an outstanding account receivable. They often require such notes from high-risk customers. In some industries (such as the pleasure and sport boat industry), all credit sales are supported by notes. The majority of notes, however, originate from loans.

The basic issues in accounting for notes receivable are the same as those for accounts receivable. On the following pages, we look at these issues. Before we do, however, we need to consider two issues that do not apply to accounts receivable: determining the maturity date and computing interest.

Determining the Maturity Date

When the life of a note is expressed in terms of months, you find the date when it matures by counting the months from the date of issue. For example, the maturity date of a three-month note dated May 1 is August 1. A note drawn on the last day of a month matures on the last day of a subsequent month. That is, a July 31 note due in two months matures on September 30.

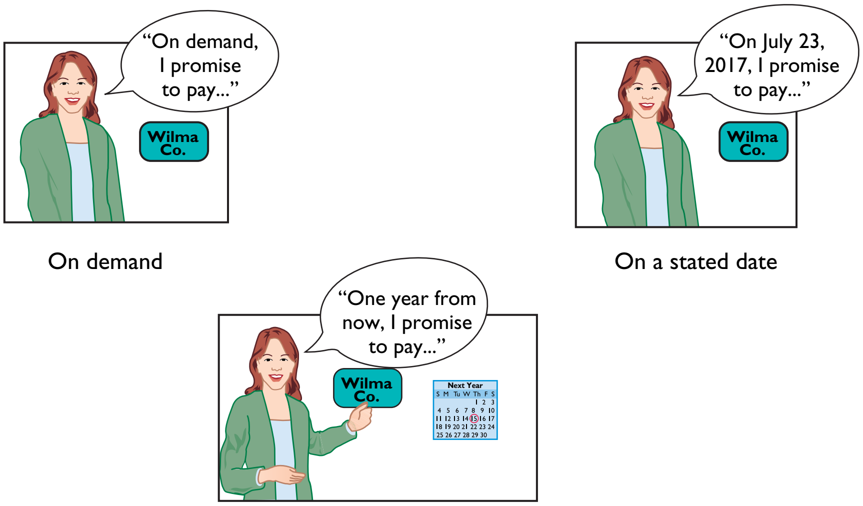
When the due date is stated in terms of days, you need to count the exact number of days to determine the maturity date. In counting, **omit the date the note is issued but include the due date**. For example, the maturity date of a 60-day note dated July 17 is September 15, computed as follows.

Illustration 9-12
Computation of maturity date

Term of note		60 days
July (31 − 17)	14	
August	31	45
Maturity date: September		**15**

Illustration 9-13 shows three ways of stating the maturity date of a promissory note.

Illustration 9-13
Maturity date of different notes



On demand

On a stated date

At the end of a stated period of time

Computing Interest

Illustration 9-14 gives the basic formula for computing interest on an interest-bearing note.

Illustration 9-14
Formula for computing interest

Face Value of Note	×	**Annual Interest Rate**	×	**Time in Terms of One Year**	=	**Interest**

Helpful Hint
The interest rate specified is the *annual* rate.

The interest rate specified in a note is an **annual** rate of interest. The time factor in the formula in Illustration 9-14 expresses the fraction of a year that the note is outstanding. When the maturity date is stated in days, the time factor is often the number of days divided by 360. When counting days, omit the date that the note is issued but include the due date. When the due date is stated in months, the time factor is the number of months divided by 12. Illustration 9-15 shows computation of interest for various time periods.

Illustration 9-15
Computation of interest

Terms of Note	Interest Computation
	Face × Rate × Time = Interest
$ 730, 12%, 120 days	$ 730 × 12% × **120/360** = $ 29.20
$1,000, 9%, 6 months	$1,000 × 9% × **6/12** = $ 45.00
$2,000, 6%, 1 year	$2,000 × 6% × **1/1** = $120.00

There are different ways to calculate interest. For example, the computation in Illustration 9-15 assumes 360 days for the length of the year. Most financial instruments use 365 days to compute interest. *For homework problems, assume 360 days to simplify computations*.

Recognizing Notes Receivable

To illustrate the basic entry for notes receivable, we will use Calhoun Company's $1,000, two-month, 12% promissory note dated May 1. Assuming that Calhoun Company wrote the note to settle an open account, Wilma Company makes the following entry for the receipt of the note.

May 1	Notes Receivable	1,000	
	Accounts Receivable—Calhoun Company		1,000
	(To record acceptance of Calhoun Company note)		

A	=	L	+	OE
+1,000				
−1,000				

Cash Flows
no effect

The company records the note receivable at its **face value**, the amount shown on the face of the note. No interest revenue is reported when the note is accepted because the revenue recognition principle does not recognize revenue until the performance obligation is satisfied. Interest is earned (accrued) as time passes.

If a company lends money using a note, the entry is a debit to Notes Receivable and a credit to Cash in the amount of the loan.

DO IT! 3 Recognizing Notes Receivable

Gambit Stores accepts from Leonard Co. a $3,400, 90-day, 6% note dated May 10 in settlement of Leonard's overdue account. (a) What is the maturity date of the note? (b) What is the interest payable at the maturity date?

Solution

(a) The maturity date is August 8, computed as follows.

Term of note:		90 days
May (31−10)	21	
June	30	
July	31	82
Maturity date: August		8

(b) The interest payable at the maturity date is $51, computed as follows.

Face	×	Rate	×	Time	=	Interest
$3,400	×	6%	×	90/360	=	$51

Action Plan

- ✔ Count the exact number of days to determine the maturity date. Omit the date the note is issued, but include the due date.
- ✔ Compute the accrued interest.

Related exercise material: **BE9-9, BE9-10, BE9-11, E9-10, E9-11, and DO IT! 9-3.**

LEARNING OBJECTIVE 4

Describe how companies value notes receivable, record their disposition, and present and analyze receivables.

Valuing Notes Receivable

Valuing short-term notes receivable is the same as valuing accounts receivable. Like accounts receivable, companies report short-term notes receivable at their **cash (net) realizable value**. The notes receivable allowance account is Allowance for Doubtful Accounts. The estimations involved in determining cash realizable value and in recording bad debt expense and the related allowance are done similarly to accounts receivable.

Disposing of Notes Receivable

Notes may be held to their maturity date, at which time the face value plus accrued interest is due. In some situations, the maker of the note defaults, and the payee must make an appropriate adjustment. In other situations, similar to accounts receivable, the holder of the note speeds up the conversion to cash by selling the receivables (as described later in this chapter).

HONOR OF NOTES RECEIVABLE

A note is **honored** when its maker pays in full at its maturity date. For each interest-bearing note, the **amount due at maturity** is the face value of the note plus interest for the length of time specified on the note.

To illustrate, assume that Wolder Co. lends Higley Co. $10,000 on June 1, accepting a five-month, 9% interest note. In this situation, interest is $375 ($\$10{,}000 \times 9\% \times \frac{5}{12}$). The amount due, **the maturity value**, is $10,375 ($10,000 + $375). To obtain payment, Wolder (the payee) must present the note either to Higley Co. (the maker) or to the maker's agent, such as a bank. If Wolder presents the note to Higley Co. on November 1, the maturity date, Wolder's entry to record the collection is as follows.

A	= L	+ OE
+10,375		
−10,000		
		+375 Rev

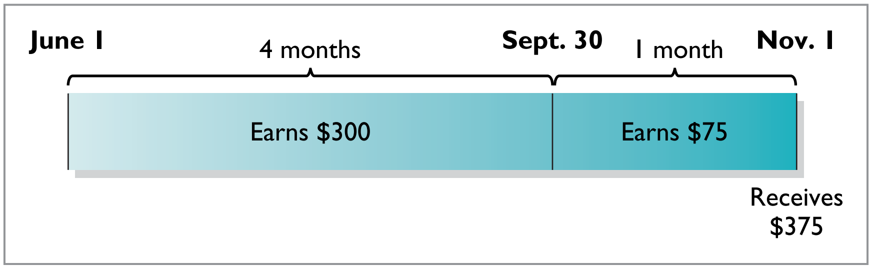
Cash Flows
+10,375

Nov. 1	Cash	10,375	
	Notes Receivable		10,000
	Interest Revenue ($\$10{,}000 \times 9\% \times \frac{5}{12}$)		375
	(To record collection of Higley note and interest)		

ACCRUAL OF INTEREST RECEIVABLE

Suppose instead that Wolder Co. prepares financial statements as of September 30. The timeline in Illustration 9-16 presents this situation.

Illustration 9-16
Timeline of interest earned



To reflect interest earned but not yet received, Wolder must accrue interest on September 30. In this case, the adjusting entry by Wolder is for four months of interest, or \$300, as shown below.

Sept. 30	Interest Receivable (\$10,000 × 9% × $\frac{4}{12}$)	300	
	Interest Revenue		300
	(To accrue 4 months' interest on Higley note)		

A	=	L	+	OE
+300				
				+300 Rev

Cash Flows
no effect

At the note's maturity on November 1, Wolder receives \$10,375. This amount represents repayment of the \$10,000 note as well as five months of interest, or \$375, as shown below. The \$375 is comprised of the \$300 Interest Receivable accrued on September 30 plus \$75 earned during October. Wolder's entry to record the honoring of the Higley note on November 1 is as follows.

Nov. 1	Cash [\$10,000 + (10,000 × 9% × $\frac{5}{12}$)]	10,375	
	Notes Receivable		10,000
	Interest Receivable		300
	Interest Revenue (10,000 × 9% × $\frac{1}{12}$)]		75
	(To record collection of Higley note and interest)		

A	=	L	+	OE
+10,375				
−10,000				
−300				
				+75 Rev

Cash Flows
+10,375

In this case, Wolder credits Interest Receivable because the receivable was established in the adjusting entry on September 30.

DISHONOR OF NOTES RECEIVABLE

A **dishonored (defaulted) note** is a note that is not paid in full at maturity. A dishonored note receivable is no longer negotiable. However, the payee still has a claim against the maker of the note for both the note and the interest. Therefore, the note holder usually transfers the Notes Receivable account to an Accounts Receivable account.

To illustrate, assume that Higley Co. on November 1 indicates that it cannot pay at the present time. The entry to record the dishonor of the note depends on whether Wolder Co. expects eventual collection. If it does expect eventual collection, Wolder Co. debits the amount due (face value and interest) on the note to Accounts Receivable. It would make the following entry at the time the note is dishonored (assuming no previous accrual of interest).

Nov. 1	Accounts Receivable—Higley	10,375	
	Notes Receivable		10,000
	Interest Revenue		375
	(To record the dishonor of Higley note)		

A	=	L	+	OE
+10,375				
−10,000				
				+375 Rev

Cash Flows
no effect

If instead on November 1 there is no hope of collection, the note holder would write off the face value of the note by debiting Allowance for Doubtful Accounts. No interest revenue would be recorded because collection will not occur.

SALE OF NOTES RECEIVABLE

The accounting for the sale of notes receivable is recorded similarly to the sale of accounts receivable. The accounting entries for the sale of notes receivable are left for a more advanced course.

Accounting Across the Organization — Countrywide Financial Corporation

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Bad Information Can Lead to Bad Loans

Many factors have contributed to the recent credit crisis. One significant factor that resulted in many bad loans was a failure by lenders to investigate loan customers sufficiently. For example, Countrywide Financial Corporation wrote many loans under its "Fast and Easy" loan program. That program allowed borrowers to provide little or no documentation for their income or their assets. Other lenders had similar programs, which earned the nickname "liars' loans." One study found that in these situations, 60% of applicants overstated their incomes by more than 50% in order to qualify for a loan. Critics of the banking industry say that because loan officers were compensated for loan volume and because banks were selling the loans to investors rather than holding them, the lenders had little incentive to investigate the borrowers' creditworthiness.

Sources: Glenn R. Simpson and James R. Hagerty, "Countrywide Loss Focuses Attention on Underwriting," *Wall Street Journal* (April 30, 2008), p. B1; and Michael Corkery, "Fraud Seen as Driver in Wave of Foreclosures," *Wall Street Journal* (December 21, 2007), p. A1.

What steps should the banks have taken to ensure the accuracy of financial information provided on loan applications? (Go to **WileyPLUS** for this answer and additional questions.)

Statement Presentation and Analysis

PRESENTATION

Companies should identify in the balance sheet or in the notes to the financial statements each of the major types of receivables. Short-term receivables appear in the current assets section of the balance sheet. Short-term investments appear before short-term receivables because these investments are more liquid (nearer to cash). Companies report both the gross amount of receivables and the allowance for doubtful accounts.

In a multiple-step income statement, companies report bad debt expense and service charge expense as selling expenses in the operating expenses section. Interest revenue appears under "Other revenues and gains" in the nonoperating activities section of the income statement.

ANALYSIS

Investors and corporate managers compute financial ratios to evaluate the liquidity of a company's accounts receivable. They use the **accounts receivable turnover** to assess the liquidity of the receivables. This ratio measures the number of times, on average, the company collects accounts receivable during the period. It is computed by dividing net credit sales (net sales less cash sales) by the average net accounts receivable during the year. Unless seasonal factors are significant, average net accounts receivable outstanding can be computed from the beginning and ending balances of net accounts receivable.

For example, in 2013 Cisco Systems had net sales of $38,029 million for the year. It had a beginning accounts receivable (net) balance of $4,369 million and an ending accounts receivable (net) balance of $5,470 million. Assuming that Cisco's sales were all on credit, its accounts receivable turnover is computed as follows.

Illustration 9-17
Accounts receivable turnover and computation

Net Credit Sales	÷	Average Net Accounts Receivable	=	Accounts Receivable Turnover
$38,029	÷	$\frac{\$4,369 + \$5,470}{2}$	=	**7.7 times**

The result indicates an accounts receivable turnover of 7.7 times per year. The higher the turnover, the more liquid the company's receivables.

A variant of the accounts receivable turnover that makes the liquidity even more evident is its conversion into an **average collection period** in terms of days. This is done by dividing the accounts receivable turnover into 365 days. For example, Cisco's turnover of 7.7 times is divided into 365 days, as shown in Illustration 9-18, to obtain approximately 47 days. This means that it takes Cisco 47 days to collect its accounts receivable.

Days in Year	÷	Accounts Receivable Turnover	=	Average Collection Period in Days
365 days	÷	7.7 times	=	**47 days**

Illustration 9-18
Average collection period for receivables formula and computation

Companies frequently use the average collection period to assess the effectiveness of a company's credit and collection policies. The general rule is that the collection period should not greatly exceed the credit term period (that is, the time allowed for payment).

DO IT! 4 Analysis of Receivables

In 2017, Phil Mickelson Company has net credit sales of $923,795 for the year. It had a beginning accounts receivable (net) balance of $38,275 and an ending accounts receivable (net) balance of $35,988. Compute Phil Mickelson Company's (a) accounts receivable turnover and (b) average collection period in days.

Solution

(a)	Net credit sales	÷	Average net accounts receivable	=	Accounts receivable turnover
	$923,795	÷	$\frac{\$38,275 + \$35,988}{2}$	=	24.9 times
(b)	Days in year	÷	Accounts receivable turnover	=	Average collection period in days
	365	÷	24.9 times	=	14.7 days

Related exercise material: **BE9-12, E9-14, and DO IT! 9-4.**

Action Plan

- ✔ Review the formula to compute the accounts receivable turnover.
- ✔ Make sure that both the beginning and ending accounts receivable balances are considered in the computation.
- ✔ Review the formula to compute the average collection period in days.

REVIEW AND PRACTICE

LEARNING OBJECTIVES REVIEW

1 Explain how companies recognize accounts receivable. Receivables are frequently classified as (1) accounts, (2) notes, and (3) other. Accounts receivable are amounts customers owe on account. Notes receivable are claims for which lenders issue formal instruments of credit as proof of the debt. Other receivables include nontrade receivables such as interest receivable, loans to company officers, advances to employees, and income taxes refundable.

Companies record accounts receivable when they perform a service on account or at the point of sale of merchandise on account. Accounts receivable are reduced by sales returns and allowances. Cash discounts reduce the amount received on accounts receivable. When interest is charged on a past due receivable, the company adds this interest to the accounts receivable balance and recognizes it as interest revenue.

2 **Describe how companies value accounts receivable and record their disposition.** There are two methods of accounting for uncollectible accounts: the allowance method and the direct write-off method. Companies may use either the percentage-of-sales or the percentage-of-receivables basis to estimate uncollectible accounts using the allowance method. The percentage-of-sales basis emphasizes the expense recognition (matching) principle. The percentage-of-receivables basis emphasizes the cash realizable value of the accounts receivable. An aging schedule is often used with this basis.

When a company collects an account receivable, it credits Accounts Receivable. When a company sells (factors) an account receivable, a service charge expense reduces the amount received.

3 **Explain how companies recognize notes receivable.** For a note stated in months, the maturity date is found by counting the months from the date of issue. For a note stated in days, the number of days is counted, omitting the issue date and counting the due date. The formula for computing interest is Face value × Interest rate × Time.

Companies record notes receivable at face value. In some cases, it is necessary to accrue interest prior to maturity. In this case, companies debit Interest Receivable and credit Interest Revenue.

4 **Describe how companies value notes receivable, record their disposition, and present and analyze receivables.** As with accounts receivable, companies report notes receivable at their cash (net) realizable value. The notes receivable allowance account is Allowance for Doubtful Accounts. The computation and estimations involved in valuing notes receivable at cash realizable value, and in recording the proper amount of bad debt expense and the related allowance, are similar to those for accounts receivable.

Notes can be held to maturity. At that time the face value plus accrued interest is due, and the note is removed from the accounts. In many cases, the holder of the note speeds up the conversion by selling the receivable to another party (a factor). In some situations, the maker of the note dishonors the note (defaults), in which case the company transfers the note and accrued interest to an account receivable or writes off the note.

Companies should identify in the balance sheet or in the notes to the financial statements each major type of receivable. Short-term receivables are considered current assets. Companies report the gross amount of receivables and the allowance for doubtful accounts. They report bad debt and service charge expenses in the multiple-step income statement as operating (selling) expenses. Interest revenue appears under other revenues and gains in the nonoperating activities section of the statement. Managers and investors evaluate accounts receivable for liquidity by computing a turnover ratio and an average collection period.

GLOSSARY REVIEW

Accounts receivable Amounts owed by customers on account. (p. 406).

Accounts receivable turnover A measure of the liquidity of accounts receivable; computed by dividing net credit sales by average net accounts receivable. (p. 422).

Aging the accounts receivable The analysis of customer balances by the length of time they have been unpaid. (p. 413).

Allowance method A method of accounting for bad debts that involves estimating uncollectible accounts at the end of each period. (p. 409).

Average collection period The average amount of time that a receivable is outstanding; calculated by dividing 365 days by the accounts receivable turnover. (p. 423).

Bad Debt Expense An expense account to record uncollectible receivables. (p. 408).

Cash (net) realizable value The net amount a company expects to receive in cash. (p. 409).

Direct write-off method A method of accounting for bad debts that involves expensing accounts at the time they are determined to be uncollectible. (p. 409).

Dishonored (defaulted) note A note that is not paid in full at maturity. (p. 421).

Factor A finance company or bank that buys receivables from businesses and then collects the payments directly from the customers. (p. 415).

Maker The party in a promissory note who is making the promise to pay. (p. 417).

Notes receivable Written promise (as evidenced by a formal instrument) for amounts to be received. (p. 406).

Other receivables Various forms of nontrade receivables, such as interest receivable and income taxes refundable. (p. 406).

Payee The party to whom payment of a promissory note is to be made. (p. 417).

Percentage-of-receivables basis Management estimates what percentage of receivables will result in losses from uncollectible accounts. (p. 413).

Percentage-of-sales basis Management estimates what percentage of credit sales will be uncollectible. (p. 412).

Promissory note A written promise to pay a specified amount of money on demand or at a definite time. (p. 417).

Receivables Amounts due from individuals and other companies. (p. 406).

Trade receivables Notes and accounts receivable that result from sales transactions. (p. 406).

PRACTICE MULTIPLE-CHOICE QUESTIONS

(LO 1) **1.** Receivables are frequently classified as:
(a) accounts receivable, company receivables, and other receivables.
(b) accounts receivable, notes receivable, and employee receivables.
(c) accounts receivable and general receivables.
(d) accounts receivable, notes receivable, and other receivables.

(LO 1) **2.** Buehler Company on June 15 sells merchandise on account to Chaz Co. for $1,000, terms 2/10, n/30. On June 20, Chaz Co. returns merchandise worth $300 to Buehler Company. On June 24, payment is received from Chaz Co. for the balance due. What is the amount of cash received?
(a) $700. (c) $686.
(b) $680. (d) None of the above.

(LO 2) **3.** Which of the following approaches for bad debts is best described as a balance sheet method?
(a) Percentage-of-receivables basis.
(b) Direct write-off method.
(c) Percentage-of-sales basis.
(d) Both percentage-of-receivables basis and direct write-off method.

(LO 2) **4.** Hughes Company has a credit balance of $5,000 in its Allowance for Doubtful Accounts before any adjustments are made at the end of the year. Based on review and aging of its accounts receivable at the end of the year, Hughes estimates that $60,000 of its receivables are uncollectible. The amount of bad debt expense which should be reported for the year is:
(a) $5,000. (c) $60,000.
(b) $55,000. (d) $65,000.

(LO 2) **5.** Use the same information as in Question 4, except that Hughes has a debit balance of $5,000 in its Allowance for Doubtful Accounts before any adjustments are made at the end of the year. In this situation, the amount of bad debt expense that should be reported for the year is:
(a) $5,000. (c) $60,000.
(b) $55,000. (d) $65,000.

(LO 2) **6.** Net sales for the month are $800,000, and bad debts are expected to be 1.5% of net sales. The company uses the percentage-of-sales basis. If Allowance for Doubtful Accounts has a credit balance of $15,000 before adjustment, what is the balance after adjustment?
(a) $15,000. (c) $23,000.
(b) $27,000. (d) $31,000.

(LO 2) **7.** In 2017, Roso Carlson Company had net credit sales of $750,000. On January 1, 2017, Allowance for Doubtful Accounts had a credit balance of $18,000. During 2017, $30,000 of uncollectible accounts receivable were written off. Past experience indicates that 3% of net credit sales become uncollectible. What should be the adjusted balance of Allowance for Doubtful Accounts at December 31, 2017?
(a) $10,050. (c) $22,500.
(b) $10,500. (d) $40,500.

8. An analysis and aging of the accounts receivable of Prince Company at December 31 reveals the following data. (LO 2)

Accounts receivable	$800,000
Allowance for doubtful accounts per books before adjustment	50,000
Amounts expected to become uncollectible	65,000

The cash realizable value of the accounts receivable at December 31, after adjustment, is:
(a) $685,000. (c) $800,000.
(b) $750,000. (d) $735,000.

9. Which of the following statements about Visa credit card sales is **incorrect**? (LO 2)
(a) The credit card issuer makes the credit investigation of the customer.
(b) The retailer is not involved in the collection process.
(c) Two parties are involved.
(d) The retailer receives cash more quickly than it would from individual customers on account.

10. Blinka Retailers accepted $50,000 of Citibank Visa credit card charges for merchandise sold on July 1. Citibank charges 4% for its credit card use. The entry to record this transaction by Blinka Retailers will include a credit to Sales Revenue of $50,000 and a debit(s) to: (LO 2)

(a)	Cash	$48,000
	and Service Charge Expense	$2,000
(b)	Accounts Receivable	$48,000
	and Service Charge Expense	$2,000
(c)	Cash	$50,000
(d)	Accounts Receivable	$50,000

11. One of the following statements about promissory notes is incorrect. The **incorrect** statement is: (LO 3)
(a) The party making the promise to pay is called the maker.
(b) The party to whom payment is to be made is called the payee.
(c) A promissory note is not a negotiable instrument.
(d) A promissory note is often required from high-risk customers.

12. Foti Co. accepts a $1,000, 3-month, 6% promissory note in settlement of an account with Bartelt Co. The entry to record this transaction is as follows. (LO 3)

(a)	Notes Receivable	1,015	
	Accounts Receivable		1,015
(b)	Notes Receivable	1,000	
	Accounts Receivable		1,000
(c)	Notes Receivable	1,000	
	Sales Revenue		1,000
(d)	Notes Receivable	1,030	
	Accounts Receivable		1,030

13. Ginter Co. holds Kolar Inc.'s $10,000, 120-day, 9% note. The entry made by Ginter Co. when the note is collected, assuming no interest has been previously accrued, is: (LO 4)

(a)	Cash	10,300	
	Notes Receivable		10,300

(b) Cash | 10,000 |
    Notes Receivable | | 10,000
(c) Accounts Receivable | 10,300 |
    Notes Receivable | | 10,000
    Interest Revenue | | 300
(d) Cash | 10,300 |
    Notes Receivable | | 10,000
    Interest Revenue | | 300

(LO 4) **14.** Accounts and notes receivable are reported in the current assets section of the balance sheet at:
(a) cash (net) realizable value.
(b) net book value.
(c) lower-of-cost-or-net realizable value.
(d) invoice cost.

(LO 4) **15.** Oliveras Company had net credit sales during the year of $800,000 and cost of goods sold of $500,000. The balance in accounts receivable at the beginning of the year was $100,000, and the end of the year it was $150,000. What were the accounts receivable turnover and the average collection period in days?
(a) 4.0 and 91.3 days.
(b) 5.3 and 68.9 days.
(c) 6.4 and 57 days.
(d) 8.0 and 45.6 days.

Solutions

1. (d) Receivables are frequently classified as accounts receivable, notes receivable, and other receivables. The other choices are incorrect because receivables are not frequently classified as (a) company receivables, (b), employee receivables, or (c) general receivables.

2. (c) Because payment is received within 10 days of the purchase, the cash received is $686 [[$1,000 − $300] − [($1,000 − $300) × 2%)]]. The other choices are incorrect because (a) $700 does not consider the 2% discount; (b) the amount of the discount is based upon the amount after the return is granted ($700 × 2%), not the amount before the return of merchandise ($1,000 × 2%); and (d) there is a correct answer.

3. (a) The percentage-of-receivables basis is a balance sheet method because it emphasizes the cash (net) realizable value of accounts receivable. The other choices are incorrect because (b) the direct write-off method is neither a balance sheet nor an income statement method for accounting for bad debts, (c) the percentage-of-sales basis is an income statement method because it results in a better matching of expenses with revenues, and (d) only the percentage-of-receivables basis is a balance sheet method, not the direct write-off method.

4. (b) By crediting Allowance for Doubtful Accounts for $55,000, the new balance will be the required balance of $60,000. This adjusting entry debits Bad Debt Expense for $55,000 and credits Allowance for Doubtful Accounts for $55,000, not (a) $5,000, (c) $60,000, or (d) $65,000.

5. (d) By crediting Allowance for Doubtful Accounts for $65,000, the new balance will be the required balance of $60,000. This adjusting entry debits Bad Debt Expense for $65,000 and credits Allowance for Doubtful Accounts for $65,000, not (a) $5,000, (b) $55,000, or (c) $60,000.

6. (b) Net sales times the percentage expected to default equals the amount of bad debt expense for the year ($800,000 × 1.5% = $12,000). Because this adjusting entry credits Allowance for Doubtful Accounts, the balance after adjustment is $27,000 ($15,000 + $12,000), not (a) $15,000, (c) $23,000, or (d) $31,000.

7. (b) The accounts written off during the year will result in a $30,000 debit to Allowance for Doubtful Accounts. The adjusting entry for bad debts will include a $22,500 credit ($750,000 × 3%) to Allowance for Doubtful Accounts. Combining the beginning balance of $ 18,000 credit, the $30,000 debit, and the $22,500 credit leaves a credit balance of $10,500 in the allowance account, not (a) $10,050, (c) $22,500, or (d) $40,500.

8. (d) Accounts Receivable less the expected uncollectible amount equals the cash realizable value of $735,000 ($800,000 − $65,000), not (a) $685,000, (b) $750,000, or (c) $800,000.

9. (c) There are three parties, not two, involved in Visa credit card sales: the credit card company, the retailer, and the customer. The other choices are true statements.

10. (a) Credit card sales are considered cash sales. Cash is debited $48,000 for the net amount received ($50,000 − $2,000 for credit card use fee), and Service Charge Expense is debited $2,000 for the 4% credit card use fee ($50,000 × 4%). The other choices are therefore incorrect.

11. (c) A promissory note is a negotiable instrument. The other choices are true statements.

12. (b) Notes Receivable is recorded at face value ($1,000). No interest on the note is recorded until it is earned. Accounts Receivable is credited because no new sales have been made. The other choices are therefore incorrect.

13. (d) Cash is debited for its maturity value [$10,000 + interest earned ($10,000 × 1/3 × 9%)], Notes Receivable credited for its face value, and Interest Revenue credited for the amount of interest earned. The other choices are therefore incorrect.

14. (a) Accounts Receivable is reported in the current assets section of the balance sheet at the gross amount less the allowance for doubtful accounts, not at (b) net book value, (c) lower-of-cost-or-net realizable value, or (d) invoice cost.

15. (c) The accounts receivable turnover is 6.4 [$800,000/($100,000 + $150,000)/2)]. The average collection period in days is 57 days (365/6.4). The other choices are therefore incorrect.

PRACTICE EXERCISES

Journalize entries to record allowance for doubtful accounts using two different bases.
(LO 2)

1. The ledger of Nuro Company at the end of the current year shows Accounts Receivable $180,000, Sales Revenue $1,800,000, and Sales Returns and Allowances $60,000.

Instructions

(a) If Nuro uses the direct write-off method to account for uncollectible accounts, journalize the adjusting entry at December 31, assuming Nuro determines that Willie's $2,900 balance is uncollectible.

(b) If Allowance for Doubtful Accounts has a credit balance of $4,300 in the trial balance, journalize the adjusting entry at December 31, assuming bad debts are expected to be (1) 1 % of net sales, and (2) 10% of accounts receivable.

(c) If Allowance for Doubtful Accounts has a debit balance of $410 in the trial balance, journalize the adjusting entry at December 31, assuming bad debts are expected to be (1) 0.75% of net sales and (2) 6% of accounts receivable.

Solution

1. (a)	Dec. 31	Bad Debt Expense	2,900	
		Accounts Receivable—Willie's		2,900
(b) (1)	Dec. 31	Bad Debt Expense		
		[($1,800,000 − $60,000) × 1%]	17,400	
		Allowance for Doubtful Accounts		17,400
(2)	Dec. 31	Bad Debt Expense	13,700	
		Allowance for Doubtful		
		Accounts [($180,000 × 10%) − $4,300]		13,700
(c) (1)	Dec. 31	Bad Debt Expense		
		[($1,800,000 − $60,000) × 0.75%]	13,050	
		Allowance for Doubtful Accounts		13,050
(2)	Dec. 31	Bad Debt Expense	11,210	
		Allowance for Doubtful		
		Accounts [($180,000 × 6%) + $410]		11,210

Journalize entries for notes receivable transactions.
(LO 3, 4)

2. Sargeant Supply Co. has the following transactions related to notes receivable during the last 2 months of 2017.

Nov. 1 Loaned $20,000 cash to Mary Hawkins on a 1-year, 12% note.
Dec. 11 Sold goods to Eminem, Inc., receiving a $9,000. 90-day, 8% note.
16 Received a $8,000, 6-month, 9% note in exchange for Rick DeLong's outstanding accounts receivable.
31 Accrued interest revenue on all notes receivable.

Instructions

(a) Journalize the transactions for Sargeant Supply Co.

(b) Record the collection of the Hawkins note at its maturity in 2018.

Solution

2. (a) **2017**

Nov. 1	Notes Receivable	20,000	
	Cash		20,000
Dec. 11	Notes Receivable	9,000	
	Sales Revenue		9,000
16	Notes Receivable	8,000	
	Accounts Receivable—DeLong		8,000
31	Interest Receivable	470	
	Interest Revenue*		470

*Calculation of interest revenue:

Hawkins' note:	$20,000 × 12% × 2/12 =	$400
Eminem's note:	9,000 × 8% × 20/360 =	40
DeLong's note:	8,000 × 9% × 15/360 =	30
Total accrued interest		$470

(b)	2018		
Nov. 1	Cash	22,400	
	Interest Receivable		400
	Interest Revenue**		2,000
	Notes Receivable		20,000

**($20,000 × 12% × 10/12)

PRACTICE PROBLEM

Prepare entries for various receivables transactions.

(LO 1, 2, 3, 4)

The following selected transactions relate to Dylan Company.

Mar.	1	Sold $20,000 of merchandise to Potter Company, terms 2/10, n/30.
	11	Received payment in full from Potter Company for balance due on existing accounts receivable.
	12	Accepted Juno Company's $20,000, 6-month, 12% note for balance due.
	13	Made Dylan Company credit card sales for $13,200.
	15	Made Visa credit card sales totaling $6,700. A 3% service fee is charged by Visa.
Apr.	11	Sold accounts receivable of $8,000 to Harcot Factor. Harcot Factor assesses a service charge of 2% of the amount of receivables sold.
	13	Received collections of $8,200 on Dylan Company credit card sales and added finance charges of 1.5% to the remaining balances.
May	10	Wrote off as uncollectible $16,000 of accounts receivable. Dylan uses the percentage-of-sales basis to estimate bad debts.
June	30	Credit sales recorded during the first 6 months total $2,000,000. The bad debt percentage is 1% of credit sales. At June 30, the balance in the allowance account is $3,500 before adjustment.
July	16	One of the accounts receivable written off in May was from J. Simon, who pays the amount due, $4,000, in full.

Instructions

Prepare the journal entries for the transactions. (Ignore entries for cost of goods sold.)

Solution

Mar. 1	Accounts Receivable—Potter	20,000	
	Sales Revenue		20,000
	(To record sales on account)		
11	Cash	19,600	
	Sales Discounts (2% × $20,000)	400	
	Accounts Receivable—Potter		20,000
	(To record collection of accounts receivable)		
12	Notes Receivable	20,000	
	Accounts Receivable—Juno		20,000
	(To record acceptance of Juno Company note)		
13	Accounts Receivable	13,200	
	Sales Revenue		13,200
	(To record company credit card sales)		
15	Cash	6,499	
	Service Charge Expense (3% × $6,700)	201	
	Sales Revenue		6,700
	(To record credit card sales)		
Apr. 11	Cash	7,840	
	Service Charge Expense (2% × $8,000)	160	
	Accounts Receivable		8,000
	(To record sale of receivables to factor)		
13	Cash	8,200	
	Accounts Receivable		8,200
	(To record collection of accounts receivable)		
	Accounts Receivable [($13,200 − $8,200) × 1.5%]	75	
	Interest Revenue		75
	(To record interest on amount due)		

		Debit	Credit
May 10	Allowance for Doubtful Accounts	16,000	
	Accounts Receivable		16,000
	(To record write-off of accounts receivable)		
June 30	Bad Debt Expense ($2,000,000 × 1%)	20,000	
	Allowance for Doubtful Accounts		20,000
	(To record estimate of uncollectible accounts)		
July 16	Accounts Receivable—J. Simon	4,000	
	Allowance for Doubtful Accounts		4,000
	(To reverse write-off of accounts receivable)		
	Cash	4,000	
	Accounts Receivable—J. Simon		4,000
	(To record collection of accounts receivable)		

QUESTIONS

1. What is the difference between an account receivable and a note receivable?
2. What are some common types of receivables other than accounts receivable and notes receivable?
3. Texaco Oil Company issues its own credit cards. Assume that Texaco charges you $40 interest on an unpaid balance. Prepare the journal entry that Texaco makes to record this revenue.
4. What are the essential features of the allowance method of accounting for bad debts?
5. Roger Holloway cannot understand why cash realizable value does not decrease when an uncollectible account is written off under the allowance method. Clarify this point for Roger.
6. Distinguish between the two bases that may be used in estimating uncollectible accounts.
7. Borke Company has a credit balance of $3,000 in Allowance for Doubtful Accounts. The estimated bad debt expense under the percentage-of-sales basis is $4,100. The total estimated uncollectibles under the percentage-of-receivables basis is $5,800. Prepare the adjusting entry under each basis.
8. How are bad debts accounted for under the direct write-off method? What are the disadvantages of this method?
9. Freida Company accepts both its own credit cards and national credit cards. What are the advantages of accepting both types of cards?
10. An article recently appeared in the *Wall Street Journal* indicating that companies are selling their receivables at a record rate. Why are companies selling their receivables?
11. Westside Textiles decides to sell $800,000 of its accounts receivable to First Factors Inc. First Factors assesses a service charge of 3% of the amount of receivables sold. Prepare the journal entry that Westside Textiles makes to record this sale.
12. Your roommate is uncertain about the advantages of a promissory note. Compare the advantages of a note receivable with those of an account receivable.
13. How may the maturity date of a promissory note be stated?
14. Indicate the maturity date of each of the following promissory notes:

	Date of Note	Terms
(a)	March 13	one year after date of note
(b)	May 4	3 months after date
(c)	June 20	30 days after date
(d)	July 1	60 days after date

15. Compute the missing amounts for each of the following notes.

	Principal	Annual Interest Rate	Time	Total Interest
(a)	?	9%	120 days	$ 450
(b)	$30,000	10%	3 years	?
(c)	$60,000	?	5 months	$1,500
(d)	$45,000	8%	?	$1,200

16. In determining interest revenue, some financial institutions use 365 days per year and others use 360 days. Why might a financial institution use 360 days?
17. Jana Company dishonors a note at maturity. What are the options available to the lender?
18. General Motors Corporation has accounts receivable and notes receivable. How should the receivables be reported on the balance sheet?
19. The accounts receivable turnover is 8.14, and average net receivables during the period are $400,000. What is the amount of net credit sales for the period?
20. What percentage does Apple's allowance for doubtful accounts represent as a percentage of its gross receivables?

BRIEF EXERCISES

Identify different types of receivables.
(LO 1)

BE9-1 Presented below are three receivables transactions. Indicate whether these receivables are reported as accounts receivable, notes receivable, or other receivables on a balance sheet.

(a) Sold merchandise on account for $64,000 to a customer.
(b) Received a promissory note of $57,000 for services performed.
(c) Advanced $10,000 to an employee.

Record basic accounts receivable transactions.
(LO 1)

BE9-2 Record the following transactions on the books of RAS Co.

(a) On July 1, RAS Co. sold merchandise on account to Waegelein Inc. for $17,200, terms 2/10, n/30.
(b) On July 8, Waegelein Inc. returned merchandise worth $3,800 to RAS Co.
(c) On July 11, Waegelein Inc. paid for the merchandise.

Prepare entry for allowance method and partial balance sheet.
(LO 2, 4)

BE9-3 During its first year of operations, Gavin Company had credit sales of $3,000,000; $600,000 remained uncollected at year-end. The credit manager estimates that $31,000 of these receivables will become uncollectible.

(a) Prepare the journal entry to record the estimated uncollectibles.
(b) Prepare the current assets section of the balance sheet for Gavin Company. Assume that in addition to the receivables it has cash of $90,000, inventory of $130,000, and prepaid insurance of $7,500.

Prepare entry for write-off; determine cash realizable value.
(LO 2)

BE9-4 At the end of 2017, Carpenter Co. has accounts receivable of $700,000 and an allowance for doubtful accounts of $54,000. On January 24, 2018, the company learns that its receivable from Megan Gray is not collectible, and management authorizes a write-off of $6,200.

(a) Prepare the journal entry to record the write-off.
(b) What is the cash realizable value of the accounts receivable (1) before the write-off and (2) after the write-off?

Prepare entries for collection of bad debt write-off.
(LO 2)

BE9-5 Assume the same information as BE9-4. On March 4, 2018, Carpenter Co. receives payment of $6,200 in full from Megan Gray. Prepare the journal entries to record this transaction.

Prepare entry using percentage-of-sales method.
(LO 2)

BE9-6 Farr Co. elects to use the percentage-of-sales basis in 2017 to record bad debt expense. It estimates that 2% of net credit sales will become uncollectible. Sales revenues are $800,000 for 2017, sales returns and allowances are $40,000, and the allowance for doubtful accounts has a credit balance of $9,000. Prepare the adjusting entry to record bad debt expense in 2017.

Prepare entry using percentage-of-receivables method.
(LO 2)

BE9-7 Kingston Co. uses the percentage-of-receivables basis to record bad debt expense. It estimates that 1% of accounts receivable will become uncollectible. Accounts receivable are $420,000 at the end of the year, and the allowance for doubtful accounts has a credit balance of $1,500.

(a) Prepare the adjusting journal entry to record bad debt expense for the year.
(b) If the allowance for doubtful accounts had a debit balance of $800 instead of a credit balance of $1,500, determine the amount to be reported for bad debt expense.

Prepare entries to dispose of accounts receivable.
(LO 2)

BE9-8 Presented below are two independent transactions.

(a) Tony's Restaurant accepted a Visa card in payment of a $175 lunch bill. The bank charges a 4% fee. What entry should Tony's make?
(b) Larkin Company sold its accounts receivable of $60,000. What entry should Larkin make, given a service charge of 3% on the amount of receivables sold?

Compute interest and determine maturity dates on notes.
(LO 3)

BE9-9 Compute interest and find the maturity date for the following notes.

	Date of Note	Principal	Interest Rate (%)	Terms
(a)	June 10	$80,000	6%	60 days
(b)	July 14	$64,000	7%	90 days
(c)	April 27	$12,000	8%	75 days

BE9-10 Presented below are data on three promissory notes. Determine the missing amounts.

Determine maturity dates and compute interest and rates on notes. **(LO 3)**

	Date of Note	Terms	Maturity Date	Principal	Annual Interest Rate	Total Interest
(a)	April 1	60 days	?	$600,000	6%	?
(b)	July 2	30 days	?	90,000	?	$600
(c)	March 7	6 months	?	120,000	10%	?

BE9-11 On January 10, 2017, Perez Co. sold merchandise on account to Robertsen Co. for $15,600, n/30. On February 9, Robertsen Co. gave Perez Co. a 10% promissory note in settlement of this account. Prepare the journal entry to record the sale and the settlement of the account receivable.

Prepare entry for notes receivable exchanged for account receivable. **(LO 3)**

BE9-12 The financial statements of Minnesota Mining and Manufacturing Company (3M) report net sales of $20.0 billion. Accounts receivable (net) are $2.7 billion at the beginning of the year and $2.8 billion at the end of the year. Compute 3M's accounts receivable turnover. Compute 3M's average collection period for accounts receivable in days.

Compute ratios to analyze receivables. **(LO 4)**

DO IT! Exercises

DO IT! 9-1 On March 1, Lincoln sold merchandise on account to Amelia Company for $28,000, terms 1/10, net 45. On March 6, Amelia returns merchandise with a sales price of $1,000. On March 11, Lincoln receives payment from Amelia for the balance due. Prepare journal entries to record the March transactions on Lincoln's books. (You may ignore cost of goods sold entries and explanations.)

Prepare entries to recognize accounts receivable. **(LO 1)**

DO IT! 9-2 Gonzalez Company has been in business several years. At the end of the current year, the ledger shows the following:

Prepare entry for uncollectible accounts. **(LO 2)**

Accounts Receivable	$ 310,000 Dr.
Sales Revenue	2,200,000 Cr.
Allowance for Doubtful Accounts	6,100 Cr.

Bad debts are estimated to be 5% of accounts receivable. Prepare the entry to adjust Allowance for Doubtful Accounts.

DO IT! 9-3 Gentry Wholesalers accepts from Benton Stores a $6,200, 4-month, 9% note dated May 31 in settlement of Benton's overdue account. (a) What is the maturity date of the note? (b) What is the interest payable at the maturity date?

Compute maturity date and interest on note. **(LO 3)**

DO IT! 9-4 In 2017, Wainwright Company has net credit sales of $1,300,000 for the year. It had a beginning accounts receivable (net) balance of $101,000 and an ending accounts receivable (net) balance of $107,000. Compute Wainwright Company's (a) accounts receivable turnover and (b) average collection period in days.

Compute ratios for receivables. **(LO 4)**

EXERCISES

E9-1 Presented below are selected transactions of Molina Company. Molina sells in large quantities to other companies and also sells its product in a small retail outlet.

Journalize entries related to accounts receivable. **(LO 1)**

March	1	Sold merchandise on account to Dodson Company for $5,000, terms 2/10, n/30.
	3	Dodson Company returned merchandise worth $500 to Molina.
	9	Molina collected the amount due from Dodson Company from the March 1 sale.
	15	Molina sold merchandise for $400 in its retail outlet. The customer used his Molina credit card.
	31	Molina added 1.5% monthly interest to the customer's credit card balance.

Instructions

Prepare journal entries for the transactions above.

Journalize entries for recognizing accounts receivable.
(LO 1)

E9-2 Presented below are two independent situations.

(a) On January 6, Brumbaugh Co. sells merchandise on account to Pryor Inc. for $7,000, terms 2/10, n/30. On January 16, Pryor Inc. pays the amount due. Prepare the entries on Brumbaugh's books to record the sale and related collection.

(b) On January 10, Andrew Farley uses his Paltrow Co. credit card to purchase merchandise from Paltrow Co. for $9,000. On February 10, Farley is billed for the amount due of $9,000. On February 12, Farley pays $5,000 on the balance due. On March 10, Farley is billed for the amount due, including interest at 1% per month on the unpaid balance as of February 12. Prepare the entries on Paltrow Co.'s books related to the transactions that occurred on January 10, February 12, and March 10.

Journalize entries to record allowance for doubtful accounts using two different bases.
(LO 2)

E9-3 The ledger of Costello Company at the end of the current year shows Accounts Receivable $110,000, Sales Revenue $840,000, and Sales Returns and Allowances $20,000.

Instructions

(a) If Costello uses the direct write-off method to account for uncollectible accounts, journalize the adjusting entry at December 31, assuming Costello determines that L. Dole's $1,400 balance is uncollectible.

(b) If Allowance for Doubtful Accounts has a credit balance of $2,100 in the trial balance, journalize the adjusting entry at December 31, assuming bad debts are expected to be (1) 1% of net sales, and (2) 10% of accounts receivable.

(c) If Allowance for Doubtful Accounts has a debit balance of $200 in the trial balance, journalize the adjusting entry at December 31, assuming bad debts are expected to be (1) 0.75% of net sales and (2) 6% of accounts receivable.

Determine bad debt expense; prepare the adjusting entry for bad debt expense.
(LO 2)

E9-4 Menge Company has accounts receivable of $93,100 at March 31. Credit terms are 2/10, n/30. At March 31, Allowance for Doubtful Accounts has a credit balance of $1,200 prior to adjustment. The company uses the percentage-of-receivables basis for estimating uncollectible accounts. The company's estimate of bad debts is shown below.

Age of Accounts	Balance, March 31	Estimated Percentage Uncollectible
1–30 days	$60,000	2.0%
31–60 days	17,600	5.0%
61–90 days	8,500	20.0%
Over 90 days	7,000	50.0%
	$93,100	

Instructions

(a) Determine the total estimated uncollectibles.

(b) Prepare the adjusting entry at March 31 to record bad debt expense.

Journalize write-off and recovery.
(LO 2)

E9-5 At December 31, 2016, Finzelberg Company had a credit balance of $15,000 in Allowance for Doubtful Accounts. During 2017, Finzelberg wrote off accounts totaling $11,000. One of those accounts ($1,800) was later collected. At December 31, 2017, an aging schedule indicated that the balance in Allowance for Doubtful Accounts should be $19,000.

Instructions

Prepare journal entries to record the 2017 transactions of Finzelberg Company.

Journalize percentage of sales basis, write-off, recovery.
(LO 2)

E9-6 On December 31, 2017, Ling Co. estimated that 2% of its net sales of $450,000 will become uncollectible. The company recorded this amount as an addition to Allowance for Doubtful Accounts. On May 11, 2018, Ling Co. determined that the Jeff Shoemaker account was uncollectible and wrote off $1,100. On June 12, 2018, Shoemaker paid the amount previously written off.

Instructions

Prepare the journal entries on December 31, 2017, May 11, 2018, and June 12, 2018.

E9-7 Presented below are two independent situations.

Journalize entries for the sale of accounts receivable.

(LO 2)

(a) On March 3, Kitselman Appliances sells $650,000 of its receivables to Ervay Factors Inc. Ervay Factors assesses a finance charge of 3% of the amount of receivables sold. Prepare the entry on Kitselman Appliances' books to record the sale of the receivables.
(b) On May 10, Fillmore Company sold merchandise for $3,000 and accepted the customer's America Bank MasterCard. America Bank charges a 4% service charge for credit card sales. Prepare the entry on Fillmore Company's books to record the sale of merchandise.

E9-8 Presented below are two independent situations.

Journalize entries for credit card sales.

(LO 2)

(a) On April 2, Jennifer Elston uses her JCPenney Company credit card to purchase merchandise from a JCPenney store for $1,500. On May 1, Elston is billed for the $1,500 amount due. Elston pays $500 on the balance due on May 3. Elston receives a bill dated June 1 for the amount due, including interest at 1.0% per month on the unpaid balance as of May 3. Prepare the entries on JCPenney Co.'s books related to the transactions that occurred on April 2, May 3, and June 1.
(b) On July 4, Spangler's Restaurant accepts a Visa card for a $200 dinner bill. Visa charges a 2% service fee. Prepare the entry on Spangler's books related to this transaction.

E9-9 Colaw Stores accepts both its own and national credit cards. During the year, the following selected summary transactions occurred.

Journalize credit card sales, and indicate the statement presentation of financing charges and service charge expense.

(LO 2)

Jan. 15 Made Colaw credit card sales totaling $18,000. (There were no balances prior to January 15.)
20 Made Visa credit card sales (service charge fee 2%) totaling $4,500.
Feb. 10 Collected $10,000 on Colaw credit card sales.
15 Added finance charges of 1.5% to Colaw credit card account balances.

Instructions
Journalize the transactions for Colaw Stores.

E9-10 Elburn Supply Co. has the following transactions related to notes receivable during the last 2 months of 2017. The company does not make entries to accrue interest except at December 31.

Journalize entries for notes receivable transactions.

(LO 3)

Nov. 1 Loaned $30,000 cash to Manny Lopez on a 12 month, 10% note.
Dec. 11 Sold goods to Ralph Kremer, Inc., receiving a $6,750, 90-day, 8% note.
16 Received a $4,000, 180 day, 9% note in exchange for Joe Fernetti's outstanding accounts receivable.
31 Accrued interest revenue on all notes receivable.

Instructions
(a) Journalize the transactions for Elburn Supply Co.
(b) Record the collection of the Lopez note at its maturity in 2018.

E9-11 Record the following transactions for Redeker Co. in the general journal.

Journalize entries for notes receivable.

(LO 3)

2017

May 1 Received a $9,000, 12-month, 10% note in exchange for Mark Chamber's outstanding accounts receivable.
Dec. 31 Accrued interest on the Chamber note.
Dec. 31 Closed the interest revenue account.

2018

May 1 Received principal plus interest on the Chamber note. (No interest has been accrued in 2018.)

E9-12 Vandiver Company had the following select transactions.

Prepare entries for note receivable transactions.

(LO 3, 4)

Apr. 1, 2017 Accepted Goodwin Company's 12-month, 12% note in settlement of a $30,000 account receivable.
July 1, 2017 Loaned $25,000 cash to Thomas Slocombe on a 9-month, 10% note.
Dec. 31, 2017 Accrued interest on all notes receivable.
Apr. 1, 2018 Received principal plus interest on the Goodwin note.
Apr. 1, 2018 Thomas Slocombe dishonored its note; Vandiver expects it will eventually collect.

Instructions
Prepare journal entries to record the transactions. Vandiver prepares adjusting entries once a year on December 31.

Journalize entries for dishonor of notes receivable.

(LO 3, 4)

E9-13 On May 2, McLain Company lends $9,000 to Chang, Inc., issuing a 6-month, 9% note. At the maturity date, November 2, Chang indicates that it cannot pay.

Instructions

(a) Prepare the entry to record the issuance of the note.
(b) Prepare the entry to record the dishonor of the note, assuming that McLain Company expects collection will occur.
(c) Prepare the entry to record the dishonor of the note, assuming that McLain Company does not expect collection in the future.

Compute accounts receivable turnover and average collection period.

(LO 4)

E9-14 Kerwick Company had accounts receivable of $100,000 on January 1, 2017. The only transactions that affected accounts receivable during 2017 were net credit sales of $1,000,000, cash collections of $920,000, and accounts written off of $30,000.

Instructions

(a) Compute the ending balance of accounts receivable.
(b) Compute the accounts receivable turnover for 2017.
(c) Compute the average collection period in days.

EXERCISES: SET B AND CHALLENGE EXERCISES

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Exercises: Set B and Challenge Exercises.

PROBLEMS: SET A

Prepare journal entries related to bad debt expense.

(LO 1, 2, 4)

P9-1A At December 31, 2016, House Co. reported the following information on its balance sheet.

Accounts receivable	$960,000
Less: Allowance for doubtful accounts	80,000

During 2017, the company had the following transactions related to receivables.

1. Sales on account	$3,700,000
2. Sales returns and allowances	50,000
3. Collections of accounts receivable	2,810,000
4. Write-offs of accounts receivable deemed uncollectible	90,000
5. Recovery of bad debts previously written off as uncollectible	29,000

Instructions

(a) Prepare the journal entries to record each of these five transactions. Assume that no cash discounts were taken on the collections of accounts receivable.
(b) Enter the January 1, 2017, balances in Accounts Receivable and Allowance for Doubtful Accounts, post the entries to the two accounts (use T-accounts), and determine the balances.
(c) Prepare the journal entry to record bad debt expense for 2017, assuming that an aging of accounts receivable indicates that expected bad debts are $115,000.
(d) Compute the accounts receivable turnover for 2017 assuming the expected bad debt information provided in (c).

(b) Accounts receivable $1,710,000
ADA $19,000
(c) Bad debt expense $96,000

Compute bad debt amounts.

(LO 2)

P9-2A Information related to Mingenback Company for 2017 is summarized below.

Total credit sales	$2,500,000
Accounts receivable at December 31	875,000
Bad debts written off	33,000

Instructions

(a) What amount of bad debt expense will Mingenback Company report if it uses the direct write-off method of accounting for bad debts?
(b) Assume that Mingenback Company estimates its bad debt expense to be 2% of credit sales. What amount of bad debt expense will Mingenback record if it has an Allowance for Doubtful Accounts credit balance of $4,000?

(c) Assume that Mingenback Company estimates its bad debt expense based on 6% of accounts receivable. What amount of bad debt expense will Mingenback record if it has an Allowance for Doubtful Accounts credit balance of $3,000?

(d) Assume the same facts as in (c), except that there is a $3,000 debit balance in Allowance for Doubtful Accounts. What amount of bad debt expense will Mingenback record?

(e) What is the weakness of the direct write-off method of reporting bad debt expense?

Journalize entries to record transactions related to bad debts.

(LO 2)

P9-3A Presented below is an aging schedule for Halleran Company.

Worksheet.xls

Home | Insert | Page Layout | Formulas | Data | Review | View

P18 *fx*

	A	B	C	D	E	F	G
1				Number of Days Past Due			
2			Not				
3	Customer	Total	Yet Due	1–30	31–60	61–90	Over 90
4	Anders	$ 22,000		$10,000	$12,000		
5	Blake	40,000	$ 40,000				
6	Coulson	57,000	16,000	6,000		$35,000	
7	Deleon	34,000					$34,000
8	Others	132,000	96,000	16,000	14,000		6,000
9		$285,000	$152,000	$32,000	$26,000	$35,000	$40,000
10	Estimated Percentage Uncollectible		3%	6%	13%	25%	50%
11	Total Estimated Bad Debts	$ 38,610	$ 4,560	$ 1,920	$ 3,380	$ 8,750	$20,000
12							

At December 31, 2017, the unadjusted balance in Allowance for Doubtful Accounts is a credit of $12,000.

Instructions

(a) Journalize and post the adjusting entry for bad debts at December 31, 2017.

(a) Bad debt expense $26,610

(b) Journalize and post to the allowance account the following events and transactions in the year 2018.

(1) On March 31, a $1,000 customer balance originating in 2017 is judged uncollectible.

(2) On May 31, a check for $1,000 is received from the customer whose account was written off as uncollectible on March 31.

(c) Journalize the adjusting entry for bad debts on December 31, 2018, assuming that the unadjusted balance in Allowance for Doubtful Accounts is a debit of $800 and the aging schedule indicates that total estimated bad debts will be $31,600.

(c) Bad debt expense $32,400

Journalize transactions related to bad debts.

(LO 2)

P9-4A Rigney Inc. uses the allowance method to estimate uncollectible accounts receivable. The company produced the following aging of the accounts receivable at year-end.

Worksheet.xls

Home | Insert | Page Layout | Formulas | Data | Review | View

P18 *fx*

	A	B	C	D	E	F	G
1			Number of Days Outstanding				
2							
3		Total	0–30	31–60	61–90	91–120	Over 120
4	Accounts receivable	200,000	77,000	46,000	39,000	23,000	15,000
5	% uncollectible		1%	4%	5%	8%	20%
6	Estimated bad debts						
7							

Instructions

(a) Calculate the total estimated bad debts based on the above information.

(a) Tot. est. bad debts $9,400

(b) Prepare the year-end adjusting journal entry to record the bad debts using the aged uncollectible accounts receivable determined in (a). Assume the current balance in Allowance for Doubtful Accounts is a $8,000 debit.

(c) Of the above accounts, $5,000 is determined to be specifically uncollectible. Prepare the journal entry to write off the uncollectible account.

(d) The company collects $5,000 subsequently on a specific account that had previously been determined to be uncollectible in (c). Prepare the journal entry(ies) necessary to restore the account and record the cash collection.

(e) Comment on how your answers to (a)–(d) would change if Rigney Inc. used 4% of **total** accounts receivable rather than aging the accounts receivable. What are the advantages to the company of aging the accounts receivable rather than applying a percentage to total accounts receivable?

Journalize entries to record transactions related to bad debts.

(LO 2)

P9-5A At December 31, 2017, the trial balance of Darby Company contained the following amounts before adjustment.

	Debit	Credit
Accounts Receivable	$385,000	
Allowance for Doubtful Accounts		$ 1,000
Sales Revenue		970,000

Instructions

(a) Based on the information given, which method of accounting for bad debts is Darby Company using—the direct write-off method or the allowance method? How can you tell?

(b) Prepare the adjusting entry at December 31, 2017, for bad debt expense under each of the following independent assumptions.
  (1) An aging schedule indicates that $11,750 of accounts receivable will be uncollectible.
  (2) The company estimates that 1% of sales will be uncollectible.

(b) (2) $9,700

(c) Repeat part (b) assuming that instead of a credit balance there is a $1,000 debit balance in Allowance for Doubtful Accounts.

(d) During the next month, January 2018, a $3,000 account receivable is written off as uncollectible. Prepare the journal entry to record the write-off.

(e) Repeat part (d) assuming that Darby uses the direct write-off method instead of the allowance method in accounting for uncollectible accounts receivable.

(f) What type of account is Allowance for Doubtful Accounts? How does it affect how accounts receivable is reported on the balance sheet at the end of the accounting period?

Prepare entries for various notes receivable transactions.

(LO 1, 2, 3, 4)

GLS

P9-6A Farwell Company closes its books monthly. On September 30, selected ledger account balances are:

Notes Receivable	$37,000
Interest Receivable	183

Notes Receivable include the following.

Date	Maker	Face	Term	Interest
Aug. 16	K. Goza Inc.	$12,000	60 days	8%
Aug. 25	Holt Co.	9,000	60 days	7%
Sept. 30	Noblitt Corp.	16,000	6 months	9%

Interest is computed using a 360-day year. During October, the following transactions were completed.

Oct.	7	Made sales of $6,900 on Farwell credit cards.
	12	Made sales of $900 on MasterCard credit cards. The credit card service charge is 3%.
	15	Added $460 to Farwell customer balances for finance charges on unpaid balances.
	15	Received payment in full from K. Goza Inc. on the amount due.
	24	Received notice that the Holt note has been dishonored. (Assume that Holt is expected to pay in the future.)

Instructions

(a) Journalize the October transactions and the October 31 adjusting entry for accrued interest receivable.

(b) Enter the balances at October 1 in the receivable accounts. Post the entries to all of the receivable accounts. There was no opening balance in accounts receivable.

(c) Show the balance sheet presentation of the receivable accounts at October 31.

(b) Accounts receivable $16,465
(c) Total receivables $32,585

Prepare entries for various receivable transactions.

(LO 1, 2, 3, 4)

P9-7A On January 1, 2017, Harter Company had Accounts Receivable $139,000, Notes Receivable $25,000, and Allowance for Doubtful Accounts $13,200. The note receivable is from Willingham Company. It is a 4-month, 9% note dated December 31, 2016. Harter Company prepares financial statements annually at December 31. During the year, the following selected transactions occurred.

Jan. 5	Sold $20,000 of merchandise to Sheldon Company, terms n/15.
20	Accepted Sheldon Company's $20,000, 3-month, 8% note for balance due.
Feb. 18	Sold $8,000 of merchandise to Patwary Company and accepted Patwary's $8,000, 6-month, 9% note for the amount due.
Apr. 20	Collected Sheldon Company note in full.
30	Received payment in full from Willingham Company on the amount due.
May 25	Accepted Potter Inc.'s $6,000, 3-month, 7% note in settlement of a past-due balance on account.
Aug. 18	Received payment in full from Patwary Company on note due.
25	The Potter Inc. note was dishonored. Potter Inc. is not bankrupt; future payment is anticipated.
Sept. 1	Sold $12,000 of merchandise to Stanbrough Company and accepted a $12,000, 6-month, 10% note for the amount due.

Instructions
Journalize the transactions.

PROBLEMS: SET B AND SET C

Visit the book's companion website, at **www.wiley.com/college/weygandt**, and choose the Student Companion site to access Problems: Set B and Set C.

COMPREHENSIVE PROBLEM

CP9 Winter Company's balance sheet at December 31, 2016, is presented below.

WINTER COMPANY
Balance Sheet
December 31, 2016

Cash	$13,100	Accounts payable	$ 8,750
Accounts receivable	19,780	Owner's capital	32,730
Allowance for doubtful accounts	(800)		$41,480
Inventory	9,400		
	$41,480		

During January 2017, the following transactions occurred. Winter uses the perpetual inventory method.

Jan. 1	Winter accepted a 4-month, 8% note from Merando Company in payment of Merando's $1,200 account.
3	Winter wrote off as uncollectible the accounts of Inwood Corporation ($450) and Goza Company ($280).
8	Winter purchased $17,200 of inventory on account.
11	Winter sold for $28,000 on account inventory that cost $19,600.
15	Winter sold inventory that cost $700 to Mark Lauber for $1,000. Lauber charged this amount on his Visa First Bank card. The service fee charged Winter by First Bank is 3%.
17	Winter collected $22,900 from customers on account.
21	Winter paid $14,300 on accounts payable.
24	Winter received payment in full ($280) from Goza Company on the account written off on January 3.
27	Winter purchased supplies for $1,400 cash.
31	Winter paid other operating expenses, $3,718.

Adjustment data:

1. Interest is recorded for the month on the note from January 1.
2. Bad debts are expected to be 6% of the January 31, 2017, accounts receivable.
3. A count of supplies on January 31, 2017, reveals that $560 remains unused.

Instructions
(You may want to set up T-accounts to determine ending balances.)

(a) Prepare journal entries for the transactions listed above and adjusting entries. (Include entries for cost of goods sold using the perpetual system.)
(b) Prepare an adjusted trial balance at January 31, 2017.
(c) Prepare an income statement and an owner's equity statement for the month ending January 31, 2017, and a classified balance sheet as of January 31, 2017.

(b) Totals $74,765
(c) Tot. assets $47,473

CONTINUING PROBLEM

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COOKIE CREATIONS: AN ENTREPRENEURIAL JOURNEY

(*Note:* This is a continuation of the Cookie Creations problem from Chapters 1 through 8.)

CC9 One of Natalie's friends, Curtis Lesperance, runs a coffee shop where he sells specialty coffees and prepares and sells muffins and cookies. He is eager to buy one of Natalie's fine European mixers, which would enable him to make larger batches of muffins and cookies. However, Curtis cannot afford to pay for the mixer for at least 30 days. He asks Natalie if she would be willing to sell him the mixer on credit. Natalie comes to you for advice.

Go to the book's companion website, **www.wiley.com/college/weygandt**, *to see the completion of this problem.*

BROADENING YOUR PERSPECTIVE

FINANCIAL REPORTING AND ANALYSIS

Financial Reporting Problem: RLF Company

BYP9-1 RLF Company sells office equipment and supplies to many organizations in the city and surrounding area on contract terms of 2/10, n/30. In the past, over 75% of the credit customers have taken advantage of the discount by paying within 10 days of the invoice date.

The number of customers taking the full 30 days to pay has increased within the last year. Current indications are that less than 60% of the customers are now taking the discount. Bad debts as a percentage of gross credit sales have risen from the 2.5% provided in past years to about 4.5% in the current year.

The company's Finance Committee has requested more information on the collections of accounts receivable. The controller responded to this request with the report reproduced below.

RLF COMPANY
Accounts Receivable Collections
May 31, 2017

The fact that some credit accounts will prove uncollectible is normal. Annual bad debt write-offs have been 2.5% of gross credit sales over the past 5 years. During the last fiscal year, this percentage increased to slightly less than 4.5%. The current Accounts Receivable balance is $1,400,000. The condition of this balance in terms of age and probability of collection is as follows.

Proportion of Total	Age Categories	Probability of Collection
60%	not yet due	98%
22%	less than 30 days past due	96%
9%	30 to 60 days past due	94%
5%	61 to 120 days past due	91%
$2\frac{1}{2}$%	121 to 180 days past due	75%
$1\frac{1}{2}$%	over 180 days past due	30%

Allowance for Doubtful Accounts had a credit balance of $29,500 on June 1, 2016. RLF has provided for a monthly bad debt expense accrual during the current fiscal year based on the assumption that 4.5% of gross credit sales will be uncollectible. Total gross credit sales for the 2016–2017 fiscal year amounted to $2,900,000. Write-offs of bad accounts during the year totaled $102,000.

Instructions

(a) Prepare an accounts receivable aging schedule for RLF Company using the age categories identified in the controller's report to the Finance Committee showing the following.
   (1) The amount of accounts receivable outstanding for each age category and in total.
   (2) The estimated amount that is uncollectible for each category and in total.

(b) Compute the amount of the year-end adjustment necessary to bring Allowance for Doubtful Accounts to the balance indicated by the age analysis. Then prepare the necessary journal entry to adjust the accounting records.

(c) In a recessionary environment with tight credit and high interest rates:
   (1) Identify steps RLF Company might consider to improve the accounts receivable situation.
   (2) Then evaluate each step identified in terms of the risks and costs involved.

Comparative Analysis Problem:
PepsiCo, Inc. vs. The Coca-Cola Company

BYP9-2 PepsiCo, Inc.'s financial statements are presented in Appendix B. Financial statements of The Coca-Cola Company are presented in Appendix C. Instructions for accessing and using the complete annual reports of PepsiCo and Coca-Cola, including the notes to the financial statements, are also provided in Appendices B and C, respectively.

Instructions

(a) Based on the information in these financial statements, compute the following 2013 ratios for each company. (Assume all sales are credit sales and that PepsiCo's receivables on its balance sheet are all trade receivables.)
   (1) Accounts receivable turnover.
   (2) Average collection period for receivables.

(b) What conclusions about managing accounts receivable can you draw from these data?

Comparative Analysis Problem:
Amazon.com, Inc. vs. Wal-Mart Stores, Inc.

BYP9-3 Amazon.com, Inc.'s financial statements are presented in Appendix D. Financial statements of Wal-Mart Stores, Inc. are presented in Appendix E. Instructions for accessing and using the complete annual reports of Amazon and Wal-Mart, including the notes to the financial statements, are also provided in Appendices D and E, respectively.

Instructions

(a) Based on the information in these financial statements, compute the following ratios for each company (for the most recent year shown). (Assume all sales are credit sales.)
   (1) Accounts receivable turnover.
   (2) Average collection period for receivables.

(b) What conclusions about managing accounts receivable can you draw from these data?

Real-World Focus

BYP9-4 **Purpose:** To learn more about factoring.

Address: **www.comcapfactoring.com**, or go to **www.wiley.com/college/weygandt**

Steps: Go to the website, click on **Invoice Factoring**, and answer the following questions.

(a) What are some of the benefits of factoring?
(b) What is the range of the percentages of the typical discount rate?
(c) If a company factors its receivables, what percentage of the value of the receivables can it expect to receive from the factor in the form of cash, and how quickly will it receive the cash?

CRITICAL THINKING

Decision-Making Across the Organization

BYP9-5 Carol and Sam Foyle own Campus Fashions. From its inception Campus Fashions has sold merchandise on either a cash or credit basis, but no credit cards have been accepted. During the past several months, the Foyles have begun to question their sales policies. First, they have lost some sales because of refusing to accept credit cards. Second, representatives of two metropolitan banks have been persuasive in almost convincing them to accept their national credit cards. One bank, City National Bank, has stated that its credit card fee is 4%.

The Foyles decide that they should determine the cost of carrying their own credit sales. From the accounting records of the past 3 years, they accumulate the following data.

	2018	2017	2016
Net credit sales	$500,000	$550,000	$400,000
Collection agency fees for slow-paying customers	2,450	2,500	2,300
Salary of part-time accounts receivable clerk	4,100	4,100	4,100

Uncollectible account expense is 1.6% of net credit sales, billing and mailing costs 0.5%, and credit investigation fee on new customers is 0.15%.

Carol and Sam also determine that the average accounts receivable balance outstanding during the year is 5% of net credit sales. The Foyles estimate that they could earn an average of 8% annually on cash invested in other business opportunities.

Instructions

With the class divided into groups, answer the following.

(a) Prepare a table showing, for each year, total credit and collection expenses in dollars and as a percentage of net credit sales.
(b) Determine the net credit and collection expense in dollars and as a percentage of sales after considering the revenue not earned from other investment opportunities.
(c) Discuss both the financial and nonfinancial factors that are relevant to the decision.

Communication Activity

BYP9-6 Jill Epp, a friend of yours, overheard a discussion at work about changes her employer wants to make in accounting for uncollectible accounts. Jill knows little about accounting, and she asks you to help make sense of what she heard. Specifically, she asks you to explain the differences between the percentage-of-sales, percentage-of-receivables, and the direct write-off methods for uncollectible accounts.

Instructions

In a letter of one page (or less), explain to Jill the three methods of accounting for uncollectibles. Be sure to discuss differences among these methods.

Ethics Case

BYP9-7 The controller of Diaz Co. believes that the yearly allowance for doubtful accounts for Diaz Co. should be 2% of net credit sales. The president of Diaz Co., nervous that the owners might expect the company to sustain its 10% growth rate, suggests that the controller increase the allowance for doubtful accounts to 4%. The president thinks that the lower net income, which reflects a 6% growth rate, will be a more sustainable rate for Diaz Co.

Instructions

(a) Who are the stakeholders in this case?
(b) Does the president's request pose an ethical dilemma for the controller?
(c) Should the controller be concerned with Diaz Co.'s growth rate? Explain your answer.

FASB Codification Activity

BYP9-8 If your school has a subscription to the FASB Codification, go to **http://aaahq.org/ascLogin.cfm** to log in and prepare responses to the following.

(a) How are receivables defined in the Codification?
(b) What are the conditions under which losses from uncollectible receivables (Bad Debt Expense) should be reported?

A Look at IFRS

LEARNING OBJECTIVE 5 **Compare the accounting for receivables under GAAP and IFRS.**

The basic accounting and reporting issues related to the recognition, measurement, and disposition of receivables are essentially the same between IFRS and GAAP.

Key Points

Following are the key similarities and differences between GAAP and IFRS as related to the accounting for receivables.

Similarities

- The recording of receivables, recognition of sales returns and allowances and sales discounts, and the allowance method to record bad debts are the same between IFRS and GAAP.
- Both IFRS and GAAP often use the term impairment to indicate that a receivable may not be collected.
- The FASB and IASB have worked to implement fair value measurement (the amount they currently could be sold for) for financial instruments, such as receivables. Both Boards have faced bitter opposition from various factions.

Differences

- Although IFRS implies that receivables with different characteristics should be reported separately, there is no standard that mandates this segregation.
- IFRS and GAAP differ in the criteria used to determine how to record a factoring transaction. IFRS uses a combination approach focused on risks and rewards and loss of control. GAAP uses loss of control as the primary criterion. In addition, IFRS permits partial derecognition of receivables; GAAP does not.

Looking to the Future

The question of recording fair values for financial instruments will continue to be an important issue to resolve as the Boards work toward convergence. Both the IASB and the FASB have indicated that they believe that financial statements would be more transparent and understandable if companies recorded and reported all financial instruments at fair value.

IFRS Practice

IFRS Self-Test Questions

1. Which of the following statements is **false**?
   (a) Receivables include equity securities purchased by the company.
   (b) Receivables include credit card receivables.
   (c) Receivables include amounts owed by employees as a result of company loans to employees.
   (d) Receivables include amounts resulting from transactions with customers.
2. Under IFRS:
   (a) the entry to record estimated uncollected accounts is the same as GAAP.
   (b) it is always acceptable to use the direct write-off method.
   (c) all financial instruments are recorded at fair value.
   (d) None of the above.

International Financial Reporting Problem: Louis Vuitton

IFRS9-1 The financial statements of Louis Vuitton are presented in Appendix F. Instructions for accessing and using the company's complete annual report, including the notes to its financial statements, are also provided in Appendix F.

Instructions
Use the company's annual report to answer the following questions.

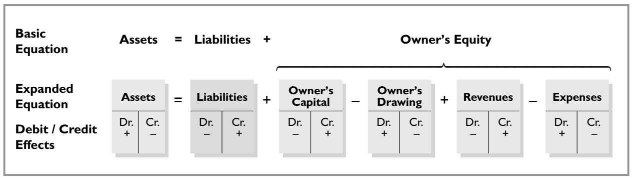
(a) What is the accounting policy related to accounting for trade accounts receivable?
(b) According to the notes to the financial statements, what accounted for the difference between gross trade accounts receivable and net accounts receivable?
(c) According to the notes to the financial statements, what was the major reason why the balance in receivables increased relative to the previous year?
(d) Using information in the notes to the financial statements, determine what percentage the provision for impairment of receivables was as a percentage of total trade receivables for 2013 and 2012. How did the ratio change from 2012 to 2013, and what does this suggest about the company's receivables?

Answers to IFRS Self-Test Questions

1. a **2.** a

RAPID REVIEW
Chapter Content

ACCOUNTING EQUATION (Chapter 2)



ADJUSTING ENTRIES (Chapter 3)

	Type	Adjusting Entry	
Deferrals	1. Prepaid expenses 2. Unearned revenues	Dr. Expenses Dr. Liabilities	Cr. Assets Cr. Revenues
Accruals	1. Accrued r evenues 2. Accrued expenses	Dr. Assets Dr. Expenses	Cr. Revenues Cr. Liabilities

Note: Each adjusting entry will affect one or more income statement accounts and one or more balance sheet accounts.

Interest Computation

Interest = Face value of note × Annual interest rate × Time in terms of one year

CLOSING ENTRIES (Chapter 4)

Purpose: (1) Update the Owner's Capital account in the ledger by transferring net income (loss) and Owner's Drawings to Owner's Capital. (2) Prepare the temporary accounts (revenue, expense, Owner's Drawings) for the next period's postings by reducing their balances to zero.

Process

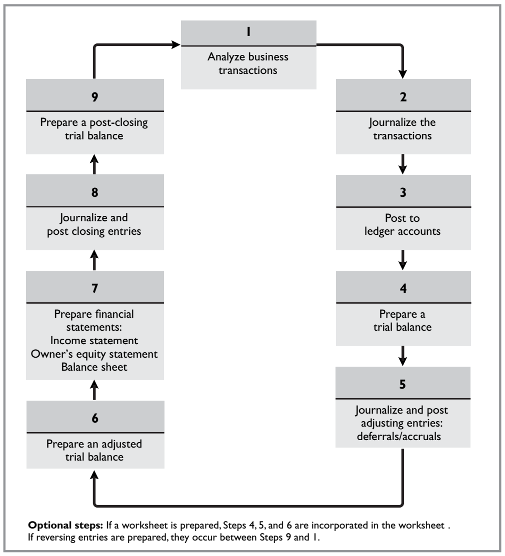
1. Debit each revenue account for its balance (assuming normal balances), and credit Income Summary for total revenues.
2. Debit Income Summary for total expenses, and credit each expense account for its balance (assuming normal balances).

STOP AND CHECK: Does the balance in your Income Summary account equal the net income (loss) reported in the income statement?

3. Debit (credit) Income Summary, and credit (debit) Owner's Capital for the amount of net income (loss).
4. Debit Owner's Capital for the balance in the Owner's Drawings account, and credit Owner's Drawings for the same amount.

STOP AND CHECK: Does the balance in your Owner's Capital account equal the ending balance reported in the balance sheet and the owner's equity statement? Are all of your temporary account balances zero?

ACCOUNTING CYCLE (Chapter 4)



INVENTORY (Chapters 5 and 6)

Ownership

Freight Terms	Ownership of goods on public carrier resides with:	Who pays freight costs:
FOB shipping point	Buyer	Buyer
FOB destination	Seller	Seller

Perpetual vs. Periodic Journal Entries

Event	Perpetual	Periodic*
Purchase of goods	Inventory Cash (A/P)	Purchases Cash (A/P)
Freight (shipping point)	Inventory Cash	Freight-In Cash
Return of goods	Cash (or A/P) Inventory	Cash (or A/P) Purchase Ret. and All.
Sale of goods	Cash (or A/R) Sales Revenue Cost of Goods Sold Inventory	Cash (or A/R) Sales Revenue No entry
Sales returns and allowances	Sales Ret. and All. Accounts Receivable Inventory Cost of Goods Sold	Sales Ret. and All. Accounts Receivable No entry
Sales discounts	Cash Sales Discounts Accounts Receivable	Cash Sales Discounts Accounts Receivable
End of period	No entry	Closing or adjusting entry required

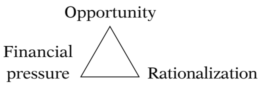
*Covered in appendix.

Cost Flow Methods

- Specific identification
- First-in, first-out (FIFO)
- Weighted-average
- Last-in, first-out (LIFO)

FRAUD, INTERNAL CONTROL, AND CASH (Chapter 8)

The Fraud Triangle



Principles of Internal Control Activities

- Establishment of responsibility
- Segregation of duties
- Documentation procedures
- Physical controls
- Independent internal verification
- Human resource controls

Bank Reconciliation

Bank	Books
Balance per bank statement Add: Deposit in transit Deduct: Outstanding checks Adjusted cash balance	Balance per books Add: Unrecorded credit memoranda from bank statement Deduct: Unrecorded debit memoranda from bank statement Adjusted cash balance

Note: 1. Errors should be offset (added or deducted) on the side that made the error.
2. Adjusting journal entries should only be made on the books.

STOP AND CHECK: Does the adjusted cash balance in the Cash account equal the reconciled balance?

RAPID REVIEW
Chapter Content

RECEIVABLES (Chapter 9)

Methods to Account for Uncollectible Accounts

Direct write-off method	Record bad debt expense when the company determines a particular account to be uncollectible.
Allowance methods: **Percentage-of-sales**	At the end of each period, estimate the amount of credit sales uncollectible. Debit Bad Debt Expense and credit Allowance for Doubtful Accounts for this amount. As specific accounts become uncollectible, debit Allowance for Doubtful Accounts and credit Accounts Receivable.
Percentage-of-receivables	At the end of each period, estimate the amount of uncollectible receivables. Debit Bad Debt Expense and credit Allowance for Doubtful Accounts in an amount that results in a balance in the allowance account equal to the estimate of uncollectibles. As specific accounts become uncollectible, debit Allowance for Doubtful Accounts and credit Accounts Receivable.

PLANT ASSETS (Chapter 10)

Presentation

Tangible Assets	Intangible Assets
Property, plant, and equipment	Intangible assets (patents, copyrights, trademarks, franchises, goodwill)
Natural resources	

Computation of Annual Depreciation Expense

Straight-line	$\frac{\text{Cost} - \text{Salvage value}}{\text{Useful life (in years)}}$
Units-of-activity	$\frac{\text{Depreciable cost}}{\text{Useful life (in units)}} \times \text{Units of activity during year}$
Declining-balance	Book value at beginning of year × Declining balance rate* *Declining-balance rate = 1 ÷ Useful life (in years)

Note: If depreciation is calculated for partial periods, the straight-line and declining-balance methods must be adjusted for the relevant proportion of the year. Multiply the annual depreciation expense by the number of months expired in the year divided by 12 months.

SHAREHOLDERS' EQUITY (Chapter 13)

Comparison of Equity Accounts

Proprietorship	Partnership	Corporation
Owner's equity Owner's capital	Partner's equity Name, Capital Name, Capital	Stockholders' equity Common stock Retained earnings

No-Par Value vs. Par Value Stock Journal Entries

No-Par Value	Par Value
Cash Common Stock	Cash Common Stock (par value) Paid-in Capital in Excess of Par—Common Stock

DIVIDENDS (Chapter 14)

Comparison of Dividend Effects

	Cash	Common Stock	Retained Earnings
Cash dividend	↓	No effect	↓
Stock dividend	No effect	↑	↓
Stock split	No effect	No effect	No effect

BONDS (Chapter 15)

Premium	Market interest rate < Contractual interest rate
Face Value	Market interest rate = Contractual interest rate
Discount	Market interest rate > Contractual interest rate

INVESTMENTS (Chapter 16)

Comparison of Long-Term Bond Investment and Liability Journal Entries

Event	Investor	Investee
Purchase / issue of bonds	Debt Investments Cash	Cash Bonds Payable
Interest receipt / payment	Cash Interest Revenue	Interest Expense Cash

Comparison of Cost and Equity Methods of Accounting for Long-Term Stock Investments

Event	Cost	Equity
Acquisition	Stock Investments Cash	Stock Investments Cash
Investee reports earnings	No entry	Stock Investments Revenue from Stock Investments
Investee pays dividends	Cash Dividend Revenue	Cash Stock Investments

Trading and Available-for-Sale Securities

Trading	Report at fair value with changes reported in net income.
Available-for-sale	Report at fair value with changes reported in the stockholders' equity section.

STATEMENT OF CASH FLOWS (Chapter 17)

Cash flows from operating activities (**indirect method**)

Net income			
Add:	Losses on disposals of assets	$ X	
	Amortization and depreciation	X	
	Decreases in current assets	X	
	Increases in current liabilities	X	
Deduct:	Gains on disposals of assets	(X)	
	Increases in current assets	(X)	
	Decreases in current liabilities	(X)	
Net cash provided (used) by operating activities			$ X

Cash flows from operating activities (**direct method**)

Cash receipts (Examples: from sales of goods and services to customers, from receipts of interest and dividends on loans and investments)	$ X	
Cash payments (Examples: to suppliers, for operating expenses, for interest, for taxes)	(X)	
Net cash provided (used) by operating activities		$ X

PRESENTATION OF NON-TYPICAL ITEMS (Chapter 18)

Prior period adjustments (Chapter 14)	Statement of retained earnings (adjustment of beginning retained earnings)
Discontinued operations	Income statement (presented separately after "Income from continuing operations")
Changes in accounting principle	In most instances, use the new method in current period and restate previous year's results using new method. For changes in depreciation and amortization methods, use the new method in the current period but do not restate previous periods.

RAPID REVIEW
Chapter Content

MANAGERIAL ACCOUNTING (Chapter 19)

Characteristics of Managerial Accounting

Primary users	Internal users
Reports	Internal reports issued as needed
Purpose	Special purpose for a particular user
Content	Pertains to subunits, may be detailed, use of relevant data
Verification	No independent audits

Types of Manufacturing Costs

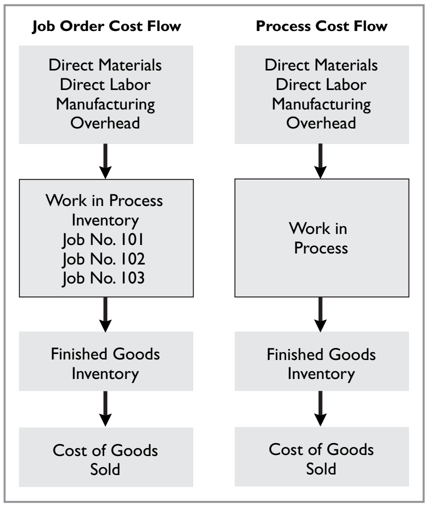
Direct materials	Raw materials directly associated with finished product
Direct labor	Work of employees directly associated with turning raw materials into finished product
Manufacturing overhead	Costs indirectly associated with manufacture of finished product

JOB ORDER AND PROCESS COSTING (Chapters 20 and 21)

Types of Accounting Systems

Job order	Costs are assigned to each unit or each batch of goods
Process cost	Costs are applied to similar products that are mass-produced in a continuous fashion

Job Order and Process Cost Flow



COST-VOLUME-PROFIT (Chapter 22)

Types of Costs

Variable costs	Vary in total directly and proportionately with changes in activity level
Fixed costs	Remain the same in total regardless of change in activity level
Mixed costs	Contain both a fixed and a variable element

CVP Income Statement Format

	Total	Per Unit
Sales	$xx	$xx
Variable costs	xx	xx
Contribution margin	xx	$xx
Fixed costs	xx	
Net income	$xx	

Unit contribution margin = Unit selling price − Unit variable costs

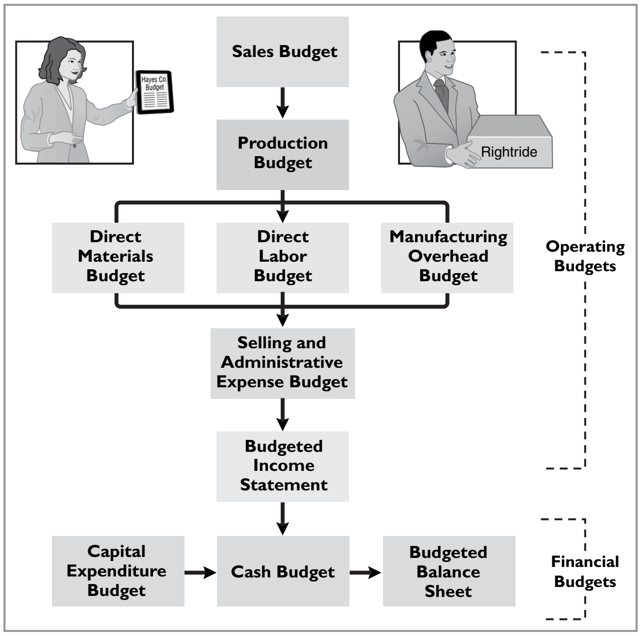
Break-even point in units = Fixed costs ÷ Unit contribution margin

Required sales in units for target net income = (Fixed costs + Target net income) ÷ Unit contribution margin

RAPID REVIEW
Chapter Content

BUDGETS (Chapter 23)

Components of the Master Budget



RESPONSIBILITY ACCOUNTING (Chapter 24)

Types of Responsibility Centers

Cost	Profit	Investment
Expenses only	Expenses and Revenues	Expenses and Revenues and ROI

Return on Investment

Return on investment (ROI) = Investment center controllable margin ÷ Average investment center operating assets

STANDARD COSTS (Chapter 25)

Standard Cost Variances

Total materials variance = Materials price variance + Materials quantity variance

Total labor variance = Labor price variance + Labor quantity variance

Total overhead variance = Overhead controllable variance + Overhead volume variance

Materials price variance = $(AQ \times AP) - (AQ \times SP)$

Materials quantity variance = $(AQ \times SP) - (SQ \times SP)$

Labor price variance = $(AH \times AR) - (AH \times SR)$

Labor quantity variance = $(AH \times SR) - (SH \times SR)$

* **Overhead controllable variance** = Actual overhead − Overhead budgeted

* **Overhead volume variance** = Fixed overhead rate × (Normal capacity hours − Standard hours allowed)

*Appendix coverage

Balanced Scorecard

Linked process across perspectives:

Financial → Customer → Internal Process → Learning and Growth

INCREMENTAL ANALYSIS AND CAPITAL BUDGETING (Chapter 26)

Incremental Analysis

1. Identify the relevant costs associated with each alternative. Relevant costs are those costs and revenues that differ across alternatives. Choose the alternative that maximizes net income.
2. Opportunity costs are those benefits that are given up when one alternative is chosen instead of another one. Opportunity costs are relevant costs.
3. Sunk costs have already been incurred and will not be changed or avoided by any future decision. Sunk costs are not relevant costs.

Annual Rate of Return

Annual rate of return = Expected annual net income ÷ Average investment

Cash Payback

Cash payback period = Cost of capital investment ÷ Net annual cash flow

Discounted Cash Flow Approaches

Net Present Value	Internal Rate of Return
Compute net present value (a dollar amount). If net present value is zero or positive, accept the proposal. If net present value is negative, reject the proposal.	Compute internal rate of return (a percentage). If internal rate of return is equal to or greater than the minimum required rate of return, accept the proposal. If internal rate of return is less than the minimum rate, reject the proposal.

RAPID REVIEW
Financial Statements

Order of Preparation

Statement Type	Date
1. Income statement	For the period ended
2. Retained earnings statement	For the period ended
3. Balance sheet	As of the end of the period
4. Statement of cash flows	For the period ended

Income Statement (perpetual inventory system)

COMPANY NAME
Income Statement
For the Period Ended

Sales		
Sales revenue	$ X	
Less: Sales returns and allowances	X	
Sales discounts	X	
Net sales		$ X
Cost of goods sold		X
Gross profit		X
Operating expenses		
(Examples: store salaries, advertising, delivery, rent, depreciation, utilities, insurance)		X
Income from operations		X
Other revenues and gains		
(Examples: interest, gains)	X	
Other expenses and losses		
(Examples: interest, losses)	X	X
Income before income taxes		X
Income tax expense		X
Net income		$ X

Income Statement (periodic inventory system)

COMPANY NAME
Income Statement
For the Period Ended

Sales			
Sales revenue		$ X	
Less: Sales returns and allowances		X	
Sales discounts		X	
Net sales			$ X
Cost of goods sold			
Beginning inventory		X	
Purchases	$ X		
Less: Purchase returns and allowances	X		
Net purchases	X		
Add: Freight-in	X		
Cost of goods purchased		X	
Cost of goods available for sale		X	
Less: Ending inventory		X	
Cost of goods sold			X
Gross profit			X
Operating expenses			
(Examples: store salaries, advertising, delivery, rent, depreciation, utilities, insurance)			X
Income from operations			X
Other revenues and gains			
(Examples: interest, gains)		X	
Other expenses and losses			
(Examples: interest, losses)		X	X
Income before income taxes			X
Income tax expense			X
Net income			$ X

Retained Earnings Statement

COMPANY NAME
Retained Earnings Statement
For the Period Ended

Retained earnings, beginning of period	$ X
Add: Net income (or deduct net loss)	X
	X
Deduct: Dividends	X
Retained earnings, end of period	$ X

STOP AND CHECK: Net income (loss) presented on the retained earnings statement must equal the net income (loss) presented on the income statement.

Balance Sheet

COMPANY NAME
Balance Sheet
As of the End of the Period

Assets

Current assets			
(Examples: cash, short-term debt investments, accounts receivable, inventory, prepaids)			$ X
Long-term investments			
(Examples: investments in bonds, investments in stocks)			X
Property, plant, and equipment			
Land		$ X	
Buildings and equipment	$ X		
Less: Accumulated depreciation	X	X	X
Intangible assets			X
Total assets			$ X

Liabilities and Stockholders' Equity

Liabilities	
Current liabilities	
(Examples: notes payable, accounts payable, accruals, unearned revenues, current portion of notes payable)	$ X
Long-term liabilities	
(Examples: notes payable, bonds payable)	X
Total liabilities	X
Stockholders' equity	
Common stock	X
Retained earnings	X
Total liabilities and stockholders' equity	$ X

STOP AND CHECK: Total assets on the balance sheet must equal total liabilities and stockholders' equity; and, ending retained earnings on the balance sheet must equal ending retained earnings on the retained earnings statement.

Statement of Cash Flows

COMPANY NAME
Statement of Cash Flows
For the Period Ended

Cash flows from operating activities	
(*Note:* May be prepared using the direct or indirect method)	
Net cash provided (used) by operating activities	$ X
Cash flows from investing activities	
(Examples: purchase / sale of long-term assets)	
Net cash provided (used) by investing activities	X
Cash flows from financing activities	
(Examples: issue / repayment of long-term liabilities, issue of stock, payment of dividends)	
Net cash provided (used) by financing activities	X
Net increase (decrease) in cash	X
Cash, beginning of the period	X
Cash, end of the period	$ X

STOP AND CHECK: Cash, end of the period, on the statement of cash flows must equal cash presented on the balance sheet.

RAPID REVIEW

Using the Information in the Financial Statements

	Ratio	Formula	Purpose or Use
	Liquidity Ratios		
1.	Current ratio	$\dfrac{\text{Current assets}}{\text{Current liabilities}}$	Measures short-term debt-paying ability.
2.	Acid-test (quick) ratio	$\dfrac{\text{Cash + Short-term investments + Accounts receivable (net)}}{\text{Current liabilities}}$	Measures immediate short-term liquidity.
3.	Accounts receivable turnover	$\dfrac{\text{Net credit sales}}{\text{Average net accounts receivable}}$	Measures liquidity of receivables.
4.	Inventory turnover	$\dfrac{\text{Cost of goods sold}}{\text{Average inventory}}$	Measures liquidity of inventory.
	Profitability Ratios		
5.	Profit margin	$\dfrac{\text{Net income}}{\text{Net sales}}$	Measures net income generated by each dollar of sales.
6.	Asset turnover	$\dfrac{\text{Net sales}}{\text{Average total assets}}$	Measures how efficiently assets are used to generate sales.
7.	Return on assets	$\dfrac{\text{Net income}}{\text{Average total assets}}$	Measures overall profitability of assets.
8.	Return on common stockholders' equity	$\dfrac{\text{Net income} - \text{Preferred dividends}}{\text{Average common stockholders' equity}}$	Measures profitability of owners' investment.
9.	Earnings per share (EPS)	$\dfrac{\text{Net income} - \text{Preferred dividends}}{\text{Weighted-average common shares outstanding}}$	Measures net income earned on each share of common stock.
10.	Price-earnings (P-E) ratio	$\dfrac{\text{Market price per share of stock}}{\text{Earnings per share}}$	Measures ratio of the market price per share to earnings per share.
11.	Payout ratio	$\dfrac{\text{Cash dividends}}{\text{Net income}}$	Measures percentage of earnings distributed in the form of cash dividends.
	Solvency Ratios		
12.	Debt to assets ratio	$\dfrac{\text{Total liabilities}}{\text{Total assets}}$	Measures percentage of total assets provided by creditors.
13.	Times interest earned	$\dfrac{\text{Net income + Interest expense + Income tax expense}}{\text{Interest expense}}$	Measures ability to meet interest payments as they come due.
14.	Free cash flow	Net cash provided by operating activities − Capital expenditures − Cash dividends	Measures the amount of cash generated during the current year that is available for the payment of additional dividends or for expansion.

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