

# Chapter 2

## Financial Statements and Analysis

### ■ Learning Goals

1. Review the contents of the stockholders' report and the procedures for consolidating international financial statements.
2. Understand who uses financial ratios, and how.
3. Use ratios to analyze a firm's liquidity and activity.
4. Discuss the relationship between debt and financial leverage and the ratios used to analyze a firm's debt.
5. Use ratios to analyze a firm's profitability and market value.
6. Use a summary of financial ratios and the DuPont System of analysis to perform a complete ratio analysis.

### ■ True/False

1. The Financial Accounting Standards Board (FASB) is the federal regulatory body that governs the sale and listing of securities.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Accounting Standards and Regulation
2. GAAP is the accounting profession's rule-setting body.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Accounting Standards and Regulation
3. Generally-accepted accounting principles are authorized by the Financial Accounting Standards Board (FASB).  
Answer: TRUE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Accounting Standards and Regulation

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4. Publicly-owned corporations are those which are financed by the proceeds from the treasury securities.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Accounting Standards and Regulation
  5. Publicly-owned corporations are required by the Securities and Exchange Commission (SEC) and individual state securities commissions to provide their stockholders with an annual stockholders' report.  
Answer: TRUE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Accounting Standards and Regulation
  6. The president's letter, as the first component of the stockholders' report, is the primary communication from management to the firm's employees.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Stockholders' Report
  7. Common stock dividends paid to stockholders are equal to the earnings available for common stockholders divided by the number of shares of common stock outstanding.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Dividends
  8. The income statement is a financial summary of the firm's operating results during a specified period while the balance sheet is a summary statement of the firm's financial position at a given point in time.  
Answer: TRUE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Income Statement
  9. The par value of common stock is an arbitrarily assigned per share value used primarily for accounting purposes.  
Answer: TRUE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Balance Sheet
  10. Paid-in capital in excess of par represents the firm's book value received from the original sale of common stock.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Balance Sheet

11. Earnings per share represents amount earned during the period on each outstanding share of common stock.  
Answer: TRUE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Earnings
12. Net fixed assets represent the difference between gross fixed assets and the total expense recorded for the depreciation of fixed assets.  
Answer: TRUE  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Balance Sheet
13. Earnings per share results from dividing earnings available for common stockholders by the number of shares of common stock authorized.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Earnings
14. Retained earnings represent the cumulative total of all earnings retained and reinvested in the firm since its inception.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Balance Sheet
15. The balance sheet is a statement which balances the firm's assets (what it owns) against its debt (what it owes).  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Balance Sheet
16. The amount paid in by the original purchasers of common stock is shown by two entries in the firm's balance sheet—common stock and paid-in capital in excess of par on common stock.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Balance Sheet
17. The original price per share received by the firm on a single issue of common stock is equal to the sum of the common stock and paid-in capital in excess of par accounts divided by the number of shares outstanding.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Balance Sheet

18. The statement of cash flows reconciles the net income earned during a given year, and any cash dividends paid, with the change in retained earnings between the start and end of that year.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Statement of Cash Flows
19. The cumulative translation adjustment is an equity reserve account on the parent company's books in which translation gains and losses are accumulated.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: International Accounting
20. The statement of cash flows provides insight into the firm's assets and liabilities and reconciles them with changes in its cash and marketable securities during the period of concern.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Statement of Cash Flows
21. A U.S. parent company's foreign equity accounts are translated into dollars using the exchange rate that prevailed when the parent's equity investment was made (the historical rate).  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: International Accounting
22. A U.S. parent company's foreign retained earnings are adjusted to reflect gains and losses resulting from currency movements as well as each year's operating profits or losses.  
Answer: FALSE  
Level of Difficulty: 3  
Learning Goal: 1  
Topic: International Accounting
23. The Financial Accounting Standards Board (FASB) Standard No. 52 mandates that U.S.-based companies translate their foreign-currency-denominated assets and liabilities into dollars using the current rate (translation) method.  
Answer: TRUE  
Level of Difficulty: 3  
Learning Goal: 1  
Topic: International Accounting
24. Time-series analysis is the evaluation of the firm's financial performance in comparison to other firm(s) at the same point in time.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 2  
Topic: Ratio Analysis Basics

25. As a rule, the necessary inputs to an effective financial analysis include, at minimum, the income statement and the statement of cash flow.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 2  
Topic: Ratio Analysis Basics
26. Cross-sectional ratio analysis involves comparing the firm's ratios to those of firms in other industries at the same point in time.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics
27. Benchmarking is a type of cross-sectional analysis in which the firm's ratio values are compared to those of firms in other industries, primarily to identify areas for improvement.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics
28. Time-series analysis evaluates performance of firms at the same point in time using financial ratios.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics
29. The firm's creditors are primarily interested in the short-term liquidity of the company and its ability to make interest and principal payments.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Liquidity Analysis
30. Benchmarking is a type of time-series analysis in which the firm's ratio values are compared to those of a key competitor or group of competitors, primarily to isolate areas of opportunity for improvement.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics
31. Ratio analysis merely directs the analyst to potential areas of concern; it does not provide conclusive evidence as to the existence of a problem.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics

32. In a cross-sectional comparison of firms operating in several lines of business, the industry average ratios of any of the firm's product lines may be used to analyze the multiproduct firm's financial performance.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics
33. Due to inflationary effects, inventory costs and depreciation write-offs can differ from their true values, thereby distorting profits.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics
34. If an analysis is concerned only with certain specific aspects of a firm's financial position, one or two ratios may provide sufficient information from which to make a reasonable judgment.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics
35. In ratio analysis, the financial statements being used for comparison should be dated at the same point in time during the year. If not, the effect of seasonality may produce erroneous conclusions and decisions.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics
36. The use of the audited financial statements for ratio analysis may not be preferable because there may be no reason to believe that the data contained in them reflect the firm's true financial condition.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 2  
Topic: Ratio Analysis Basics
37. Both present and prospective shareholders are interested in the firm's current and future level of risk and return. These two dimensions directly affect share price.  
Answer: TRUE  
Level of Difficulty: 3  
Learning Goal: 2  
Topic: Ratio Analysis Basics

38. The comparison of a particular ratio to the standard (industry average) is made in order to isolate any deviations from the norm. In the case of ratios for which higher values are preferred, as long as the firm that is being analyzed has a value in excess of the industry average it can be viewed favorably.

Answer: FALSE

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics

39. The use of differing accounting treatments—especially relative to inventory and depreciation—can distort the results of ratio analysis, regardless of whether cross-sectional or time-series analysis is used.

Answer: TRUE

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics

40. Inflationary effects typically have a greater impact the larger the differences in the age of the assets of the firms being compared. Without adjustment, inflation tends to cause older firms (with older fixed assets) to appear more efficient and profitable than newer firms (with newer fixed assets).

Answer: TRUE

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics

41. Present and prospective shareholders and lenders pay close attention to the firm's degree of indebtedness and ability to repay debt. Shareholders are concerned since the claims of creditors must be satisfied prior to the distribution of earnings to them. Lenders are concerned since the more indebted the firm, the higher the probability that the firm will be unable to satisfy the claims of all its creditors.

Answer: TRUE

Level of Difficulty: 4

Learning Goal: 2

Topic: Leverage Analysis

42. The liquidity of a business firm refers to the solvency of the firm's overall financial position.

Answer: TRUE

Level of Difficulty: 1

Learning Goal: 3

Topic: Liquidity Analysis

43. The liquidity of a business firm is measured by its ability to satisfy its long-term obligations as they come due.

Answer: FALSE

Level of Difficulty: 2

Learning Goal: 3

Topic: Liquidity Analysis

44. The current ratio provides a better measure of overall liquidity only when a firm's inventory cannot easily be converted into cash. If inventory is liquid, the quick ratio is a preferred measure of overall liquidity.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 3  
Topic: Liquidity Analysis
45. Since the differences in the composition of a firm's current assets and liabilities can significantly affect the firm's "true" liquidity, it is important to look beyond measures of overall liquidity to assess the activity (liquidity) of specific current accounts.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 3  
Topic: Liquidity Analysis
46. The average age of inventory is viewed as the average length of time inventory is held by the firm or as the average number of days' sales in inventory.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 3  
Topic: Activity Analysis
47. Total asset turnover commonly measures the liquidity of a firm's total assets.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 3  
Topic: Activity Analysis
48. The magnification of risk and return introduced through the use of fixed-cost financing such as debt and preferred stock is called financial leverage.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 4  
Topic: Leverage Analysis
49. The less fixed-cost debt (financial leverage) a firm uses, the greater will be its risk and return.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 4  
Topic: Leverage Analysis
50. The higher the value of the times interest earned ratio, the higher the proportion of the firm's interest earnings compared to its contractual interest payments.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 4  
Topic: Leverage Analysis



51. In general, the more debt (other people's money) a firm uses in relation to its assets, the smaller its financial leverage.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 4  
Topic: Leverage Analysis
52. The lower the fixed-payment coverage ratio, the lower is the firm's financial leverage.  
Answer: FALSE  
Level of Difficulty: 3  
Learning Goal: 4  
Topic: Leverage Analysis
53. The higher the debt ratio, the more financial leverage a firm has and, thus, the greater will be its risk and return.  
Answer: TRUE  
Level of Difficulty: 3  
Learning Goal: 4  
Topic: Leverage Analysis
54. Typically, higher coverage ratios are preferred, but too high a ratio may indicate under-utilization of fixed-payment obligations, which may result in unnecessarily low risk and return.  
Answer: TRUE  
Level of Difficulty: 4  
Learning Goal: 4  
Topic: Leverage Analysis
55. Earnings per share represent the dollar amount earned and distributed to shareholders.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 5  
Topic: Profitability Analysis
56. Gross profit margin measures the percentage of each sales dollar left after the firm has paid for its goods and operating expenses.  
Answer: FALSE  
Level of Difficulty: 1  
Learning Goal: 5  
Topic: Profitability Analysis
57. Net profit margin measures the percentage of each sales dollar remaining after all costs and expenses, including interest and taxes, have been deducted.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 5  
Topic: Profitability Analysis

58. Return on total assets (ROA) measures the overall effectiveness of management in generating profits with the owners' investment in the firm.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 5  
Topic: Profitability Analysis
59. The price/earnings (P/E) ratio represents the degree of confidence that investors have in the firm's future performance.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 5  
Topic: Market Value Analysis
60. The financial leverage multiplier is the ratio of the firm's total assets to stockholders' equity.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 6  
Topic: Leverage Analysis
61. The DuPont formula allows the firm to break down its return into the net profit margin, which measures the firm's profitability on sales, and its total asset turnover, which indicates how efficiently the firm has used its assets to generate sales.  
Answer: TRUE  
Level of Difficulty: 3  
Learning Goal: 6  
Topic: Dupont System Analysis
62. The DuPont system allows the firm to break its return on equity into a profit-on-sales component, an efficiency-of-asset-use component, and a use-of-leverage component.  
Answer: TRUE  
Level of Difficulty: 4  
Learning Goal: 6  
Topic: Dupont System Analysis
63. The McCain-Feingold Act of 2002 was passed to eliminate many of the disclosure and conflict of interest problems of corporations.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Accounting Standards and Regulation
64. The Sarbanes-Oxley Act of 2002 was passed to eliminate many of the disclosure and conflict of interest problems of corporations.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Accounting Standards and Regulation

65. The Sarbanes-Oxley Act of 2002 established the Public Company Accounting Oversight Board (PCAOB) which is a not-for-profit corporation that oversees auditors of public corporations.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Accounting Standards and Regulation
66. The Sarbanes-Oxley Act of 2002 established the Private Company Accounting Oversight Board (PCAOB) which is a for-profit corporation that oversees CEOs of public corporations.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 1  
Topic: Accounting Standards and Regulation
67. The average age of inventory can be calculated as inventory divided by 365.  
Answer: FALSE  
Level of Difficulty: 3  
Learning Goal: 3  
Topic: Activity Analysis
68. The average age of inventory can be calculated as inventory turnover divided by 365.  
Answer: FALSE  
Level of Difficulty: 3  
Learning Goal: 3  
Topic: Activity Analysis
69. The average age of inventory can be calculated as 365 divided by inventory turnover.  
Answer: TRUE  
Level of Difficulty: 3  
Learning Goal: 3  
Topic: Activity Analysis
70. The average payment period can be calculated as accounts payable divided by average sales per day.  
Answer: FALSE  
Level of Difficulty: 2  
Learning Goal: 3  
Topic: Activity Analysis
71. The average payment period can be calculated as accounts payable divided by average purchases per day.  
Answer: TRUE  
Level of Difficulty: 2  
Learning Goal: 3  
Topic: Activity Analysis

## ■ Multiple Choice Questions

1. One of the most influential documents issued by a publicly-held corporation is the
  - (a) letter to stockholders.
  - (b) annual report.
  - (c) cash flow statement.
  - (d) income statement.

Answer: B

Level of Difficulty: 1

Learning Goal: 1

Topic: Stockholders' Report

2. The rule-setting body, which authorizes generally accepted accounting principles is
  - (a) GAAP.
  - (b) FASB.
  - (c) SEC.
  - (d) Federal Reserve System.

Answer: B

Level of Difficulty: 1

Learning Goal: 1

Topic: Accounting Standards and Regulation

3. Accounting practices and procedures used to prepare financial statements are called
  - (a) SEC.
  - (b) FASB.
  - (c) GAAP.
  - (d) IRB.

Answer: C

Level of Difficulty: 1

Learning Goal: 1

Topic: Accounting Standards and Regulation

4. The federal regulatory body governing the sale and listing of securities is called the
  - (a) IRS.
  - (b) FASB.
  - (c) GAAP.
  - (d) SEC.

Answer: D

Level of Difficulty: 1

Learning Goal: 1

Topic: Accounting Standards and Regulation

5. The stockholder's annual report must include
- (a) A statement of cash flows.
  - (b) An income statement.
  - (c) A balance sheet.
  - (d) A statement of retained earnings.
  - (e) All of the above.

Answer: E

Level of Difficulty: 1

Learning Goal: 1

Topic: Stockholders' Report

6. The stockholder's report may include all of the following EXCEPT
- (a) a cash budget.
  - (b) an income statement.
  - (c) a statement of cash flows.
  - (d) a statement of retained earnings.

Answer: A

Level of Difficulty: 1

Learning Goal: 1

Topic: Stockholders' Report

7. Total assets less net fixed assets equals
- (a) gross assets.
  - (b) current assets.
  - (c) depreciation.
  - (d) liabilities and equity.

Answer: B

Level of Difficulty: 1

Learning Goal: 1

Topic: Balance Sheet

8. The \_\_\_\_\_ provides a financial summary of the firm's operating results during a specified period.
- (a) income statement
  - (b) balance sheet
  - (c) statement of cash flows
  - (d) statement of retained earnings

Answer: A

Level of Difficulty: 1

Learning Goal: 1

Topic: Income Statement

9. Gross profits are defined as
- (a) operating profits minus depreciation.
  - (b) operating profits minus cost of goods sold.
  - (c) sales revenue minus operating expenses.
  - (d) sales revenue minus cost of goods sold.
- Answer: D  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Income Statement
10. Operating profits are defined as
- (a) gross profits minus operating expenses.
  - (b) sales revenue minus cost of goods sold.
  - (c) earnings before depreciation and taxes.
  - (d) sales revenue minus depreciation expense.
- Answer: A  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Income Statement
11. Net profits after taxes are defined as
- (a) gross profits minus operating expenses.
  - (b) sales revenue minus cost of goods sold.
  - (c) EBIT minus interest.
  - (d) EBIT minus interest and taxes.
- Answer: D  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Income Statement
12. Operating profits are defined as
- (a) sales revenue minus cost of goods sold.
  - (b) earnings before interest and taxes.
  - (c) earnings before depreciation and taxes.
  - (d) earnings after tax.
- Answer: B  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Income Statement
13. Earnings available to common shareholders are defined as net profits
- (a) after taxes.
  - (b) after taxes minus preferred dividends.
  - (c) after taxes minus common dividends.
  - (d) before taxes.
- Answer: B  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Income Statement

14. All of the following are examples of current assets EXCEPT
- (a) accounts receivable.
  - (b) cash.
  - (c) accruals.
  - (d) inventory.

Answer: C  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Balance Sheet

15. All of the following are examples of fixed assets EXCEPT
- (a) automobiles.
  - (b) buildings.
  - (c) marketable securities.
  - (d) equipment.

Answer: C  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Balance Sheet

16. All of the following are examples of current liabilities EXCEPT
- (a) accounts receivable.
  - (b) accounts payable.
  - (c) accruals.
  - (d) notes payable.

Answer: A  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Balance Sheet

17. The net value of fixed assets is also called its
- (a) market value.
  - (b) par value.
  - (c) book value.
  - (d) price.

Answer: C  
Level of Difficulty: 1  
Learning Goal: 1  
Topic: Balance Sheet

18. The \_\_\_\_\_ represents a summary statement of the firm's financial position at a given point in time.
- (a) income statement
  - (b) balance sheet
  - (c) statement of cash flows
  - (d) statement of retained earnings

Answer: B

Level of Difficulty: 1

Learning Goal: 1

Topic: Balance Sheet

19. The \_\_\_\_\_ summarizes the firm's funds flow over a given period of time.
- (a) income statement
  - (b) balance sheet
  - (c) statement of cash flows
  - (d) statement of retained earnings

Answer: C

Level of Difficulty: 1

Learning Goal: 1

Topic: Statement of Cash Flows

20. The statement of cash flows may also be called the
- (a) sources and uses statement.
  - (b) statement of retained earnings.
  - (c) bank statement.
  - (d) funds statement.

Answer: A

Level of Difficulty: 1

Learning Goal: 1

Topic: Statement of Cash Flows

21. FASB Standard No. 52 mandates that U.S. based companies must translate their foreign-currency-denominated assets and liabilities into dollars using the
- (a) Historical rate.
  - (b) Current rate.
  - (c) Average rate.
  - (d) None of the above.

Answer: B

Level of Difficulty: 2

Learning Goal: 1

Topic: International Accounting



22. Retained earnings on the balance sheet represents
- net profits after taxes.
  - cash.
  - net profits after taxes minus preferred dividends.
  - the cumulative total of earnings reinvested in the firm.

Answer: D

Level of Difficulty: 2

Learning Goal: 1

Topic: Balance Sheet

23. The statement of retained earnings reports all of the following EXCEPT
- net profits after taxes.
  - interest.
  - common stock dividends.
  - preferred stock dividends.

Answer: B

Level of Difficulty: 2

Learning Goal: 1

Topic: Statement of Retained Earnings

24. When preparing a statement of cash flows, retained earnings adjustments are required so that which of the following are separated on the statement?
- Revenue and cost.
  - Assets and liabilities.
  - Depreciation and purchases.
  - Net profits and dividends.

Answer: D

Level of Difficulty: 2

Learning Goal: 1

Topic: Statement of Cash Flows

25. A firm had the following accounts and financial data for 2005.

Sales Revenue	\$3,060	Cost of goods sold	\$1,800
Accounts Receivable	500	Preferred stock dividends	18
Interest expense	126	Tax rate	40%
Total oper. expenses	600	Number of shares of common	1,000
Accounts payable	240	stocks outstanding	

The firm's earnings available to common shareholders for 2005 were \_\_\_\_\_.

- \$224
- \$195
- \$302
- \$516

Answer: C

Level of Difficulty: 2

Learning Goal: 1

Topic: Income Statement

26. A firm had the following accounts and financial data for 2005:

Sales revenue	\$3,060	Cost of goods sold	\$1,800
Accounts receivable	500	Preferred stock dividends	18
Interest expense	126	Tax rate	40%
Total operating expenses	600	Number of common shares	1,000
Accounts payable	240	outstanding	

The firm's earnings per share, rounded to the nearest cent, for 2005 was \_\_\_\_\_.

- (a) \$0.53  
 (b) \$0.51  
 (c) \$0.32  
 (d) \$0.30

Answer: D

Level of Difficulty: 2

Learning Goal: 1

Topic: Income Statement

27. A firm had the following accounts and financial data for 2005.

Sales revenue	\$3,060	Cost of goods sold	\$1,800
Accounts receivable	500	Preferred stock dividends	18
Interest expense	126	Tax rate	40%
Total operating expenses	600	Number of common shares	1,000
Accounts payable	240	outstanding	

The firm's net profit after taxes for 2005 was \_\_\_\_\_.

- (a) -\$206  
 (b) \$213  
 (c) \$320  
 (d) \$206

Answer: C

Level of Difficulty: 2

Learning Goal: 1

Topic: Income Statement

28. On the balance sheet net fixed assets represent

- (a) gross fixed assets at cost minus depreciation expense.  
 (b) gross fixed assets at market value minus depreciation expense.  
 (c) gross fixed assets at cost minus accumulated depreciation.  
 (d) gross fixed assets at market value minus accumulated depreciation.

Answer: C

Level of Difficulty: 2

Learning Goal: 1

Topic: Balance Sheet

29. Paid-in-capital in excess of par represents the amount of proceeds
- (a) from the original sale of stock.
  - (b) in excess of the par value from the original sale of common stock.
  - (c) at the current market value of common stock.
  - (d) at the current book value of common stock.

Answer: B

Level of Difficulty: 2

Learning Goal: 1

Topic: Balance Sheet

30. Firm ABC had operating profits of \$100,000, taxes of \$17,000, interest expense of \$34,000 and preferred dividends of \$5,000. What was the firm's net profit after taxes?
- (a) \$66,000
  - (b) \$49,000
  - (c) \$44,000
  - (d) \$83,000

Answer: B

Level of Difficulty: 3

Learning Goal: 1

Topic: Income Statement

31. Candy Corporation had pretax profits of \$1.2 million, an average tax rate of 34 percent, and it paid preferred stock dividends of \$50,000. There were 100,000 shares outstanding and no interest expense. What were Candy Corporation's earnings per share?
- (a) \$3.91
  - (b) \$4.52
  - (c) \$7.42
  - (d) \$7.59

Answer: C

Level of Difficulty: 3

Learning Goal: 1

Topic: Income Statement

32. A firm had year end 2004 and 2005 retained earnings balances of \$670,000 and \$560,000, respectively. The firm paid \$10,000 in dividends in 2005. The firm's net profit after taxes in 2002 was \_\_\_\_\_.
- (a) -\$100,000
  - (b) -\$110,000
  - (c) \$100,000
  - (d) \$110,000

Answer: A

Level of Difficulty: 3

Learning Goal: 1

Topic: Income Statement

33. A corporation had year end 2004 and 2005 retained earnings balances of \$320,000 and \$400,000, respectively. The firm reported net profits after taxes of \$100,000 in 2005. The firm paid dividends in 2005 of \_\_\_\_\_.
- (a) \$0
  - (b) \$20,000
  - (c) \$80,000
  - (d) \$100,000

Answer: B

Level of Difficulty: 3

Learning Goal: 1

Topic: Statement of Retained Earnings

34. A corporation had a year end 2004 retained earnings balance of \$220,000. The firm reported net profits after taxes of \$50,000 in 2005 and paid dividends in 2005 of \$30,000. The firm's retained earnings balance at year end 2005 was \_\_\_\_\_.
- (a) \$240,000
  - (b) \$250,000
  - (c) \$270,000
  - (d) \$300,000

Answer: A

Level of Difficulty: 3

Learning Goal: 1

Topic: Statement of Retained Earnings

35. A firm had year end 2004 and 2005 retained earnings balance of \$670,000 and \$560,000, respectively. The firm reported net profits after taxes of \$100,000 in 2005. The firm paid dividends in 2005 of \_\_\_\_\_.
- (a) \$10,000
  - (b) \$100,000
  - (c) \$110,000
  - (d) \$210,000

Answer: D

Level of Difficulty: 3

Learning Goal: 1

Topic: Statement of Retained Earnings

36. Ratios provide a \_\_\_\_\_ measure of a company's performance and condition.
- (a) definitive
  - (b) gross
  - (c) relative
  - (d) qualitative

Answer: C

Level of Difficulty: 1

Learning Goal: 2

Topic: Ratio Analysis Basics

37. \_\_\_\_\_ analysis involves the comparison of different firms' financial ratios at the same point in time.

- (a) Time-series
- (b) Cross-sectional
- (c) Marginal
- (d) Quantitative

Answer: B

Level of Difficulty: 1

Learning Goal: 2

Topic: Ratio Analysis Basics

38. \_\_\_\_\_ analysis involves comparison of current to past performance and the evaluation of developing trends.

- (a) Time-series
- (b) Cross-sectional
- (c) Marginal
- (d) Quantitative

Answer: A

Level of Difficulty: 1

Learning Goal: 2

Topic: Ratio Analysis Basics

39. The primary concern of creditors when assessing the strength of a firm is the firm's

- (a) profitability.
- (b) leverage.
- (c) short-term liquidity.
- (d) share price.

Answer: C

Level of Difficulty: 1

Learning Goal: 2

Topic: Liquidity Analysis

40. Present and prospective shareholders are mainly concerned with a firm's

- (a) risk and return.
- (b) profitability.
- (c) leverage.
- (d) liquidity.

Answer: A

Level of Difficulty: 1

Learning Goal: 2

Topic: Ratio Analysis Basics

41. To analyze the firm's financial performance, the following types of ratio analyses EXCEPT \_\_\_\_\_ may be used.

- (a) time-series analysis
- (b) cross-section analysis
- (c) combined analysis
- (d) marginal analysis

Answer: D

Level of Difficulty: 1

Learning Goal: 2

Topic: Ratio Analysis Basics

42. Time-series analysis is often used to

- (a) assess developing trends.
- (b) correct errors of judgment.
- (c) reflect performance relative to some norm.
- (d) standardize results.

Answer: A

Level of Difficulty: 1

Learning Goal: 2

Topic: Ratio Analysis Basics

43. In ratio analysis, a comparison to a standard industry ratio is made to isolate \_\_\_\_\_ deviations from the norm.

- (a) positive
- (b) negative
- (c) any
- (d) standard

Answer: C

Level of Difficulty: 1

Learning Goal: 2

Topic: Ratio Analysis Basics

44. \_\_\_\_\_ evidence of the existence of a problem or outstanding management performance is provided by ratio analysis.

- (a) Conclusive
- (b) Inconclusive
- (c) Complete
- (d) Definitive

Answer: B

Level of Difficulty: 2

Learning Goal: 2

Topic: Ratio Analysis Basics

45. The analyst should be careful when conducting ratio analysis to ensure that
- (a) the overall performance of the firm is not judged on a single ratio.
  - (b) the dates of the financial statements being compared are the same.
  - (c) audited statements are used.
  - (d) the same accounting procedures were used.
  - (e) all of the above.

Answer: E

Level of Difficulty: 2

Learning Goal: 2

Topic: Ratio Analysis Basics

46. The analyst should be careful when evaluating a ratio analysis that
- (a) The overall performance of the firm may be judged on a single ratio.
  - (b) The dates of the financial statements being compared are the same time.
  - (c) Pre-audited statements are used.
  - (d) All of the above.

Answer: B

Level of Difficulty: 2

Learning Goal: 2

Topic: Ratio Analysis Basics

47. \_\_\_\_\_ is where the firm's ratio values are compared to those of a key competitor or group of competitors, primarily to identify areas for improvement.
- (a) Time-series analysis
  - (b) Benchmarking
  - (c) Combined analysis
  - (d) None of the above.

Answer: B

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics

48. Cross-sectional ratio analysis is used to
- (a) correct expected problems in operations.
  - (b) isolate the causes of problems.
  - (c) provide conclusive evidence of the existence of a problem.
  - (d) reflect the symptoms of a possible problem.

Answer: D

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics

49. In the near term, the important ratios that provide the information critical to the short-run operation of the firm are
- (a) liquidity, activity, and profitability.
  - (b) liquidity, activity, and common stock.
  - (c) liquidity, activity, and debt.
  - (d) activity, debt, and profitability.

Answer: A

Level of Difficulty: 3

Learning Goal: 2

Topic: Liquidity Analysis

50. One way to negate the effect of inflation on ratio analysis is to value the fixed assets at
- (a) book value.
  - (b) liquidation value.
  - (c) replacement value.
  - (d) depreciation.

Answer: C

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics

51. Inflation can distort
- (a) inventory costs.
  - (b) accumulated depreciation.
  - (c) interest write-offs.
  - (d) salaries and wages.

Answer: A

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics

52. Without adjustment, inflation may tend to cause \_\_\_\_\_ firms to appear more efficient and profitable than \_\_\_\_\_ firms, all else being the same.
- (a) large; smaller
  - (b) older; newer
  - (c) smaller; larger
  - (d) newer; older

Answer: B

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics



53. The following groups of ratios primarily measure risk.
- (a) liquidity, activity, and profitability
  - (b) liquidity, activity, and common stock
  - (c) liquidity, activity, and debt
  - (d) activity, debt, and profitability

Answer: C

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics

54. The \_\_\_\_\_ ratios are primarily measures of return.
- (a) liquidity
  - (b) activity
  - (c) debt
  - (d) profitability

Answer: D

Level of Difficulty: 3

Learning Goal: 2

Topic: Profitability Analysis

55. The \_\_\_\_\_ of a business firm is measured by its ability to satisfy its short-term obligations as they come due.
- (a) activity
  - (b) liquidity
  - (c) debt
  - (d) profitability

Answer: B

Level of Difficulty: 1

Learning Goal: 3

Topic: Liquidity Analysis

56. \_\_\_\_\_ ratios are a measure of the speed with which various accounts are converted into sales or cash.
- (a) Activity
  - (b) Liquidity
  - (c) Debt
  - (d) Profitability

Answer: A

Level of Difficulty: 1

Learning Goal: 3

Topic: Activity Analysis

57. The \_\_\_\_\_ is useful in evaluating credit and collection policies.
- (a) average payment period
  - (b) current ratio
  - (c) average collection period
  - (d) current asset turnover

Answer: C

Level of Difficulty: 1

Learning Goal: 3

Topic: Activity Analysis

58. The \_\_\_\_\_ measures the activity, or liquidity, of a firm's inventory.
- (a) average collection period
  - (b) inventory turnover
  - (c) quick ratio
  - (d) current ratio

Answer: B

Level of Difficulty: 2

Learning Goal: 3

Topic: Activity Analysis

59. The two basic measures of liquidity are
- (a) inventory turnover and current ratio.
  - (b) current ratio and quick ratio.
  - (c) gross profit margin and ROE.
  - (d) current ratio and total asset turnover.

Answer: B

Level of Difficulty: 2

Learning Goal: 3

Topic: Liquidity Analysis

60. The \_\_\_\_\_ is a measure of liquidity which excludes \_\_\_\_\_, generally the least liquid asset.
- (a) current ratio; accounts receivable
  - (b) quick ratio; accounts receivable
  - (c) current ratio; inventory
  - (d) quick ratio; inventory

Answer: D

Level of Difficulty: 2

Learning Goal: 3

Topic: Liquidity Analysis

61. The \_\_\_\_\_ ratio may indicate the firm is experiencing stockouts and lost sales.
- (a) average payment period
  - (b) inventory turnover
  - (c) average collection period
  - (d) quick

Answer: B

Level of Difficulty: 2

Learning Goal: 3

Topic: Activity Analysis

62. The \_\_\_\_\_ ratio may indicate poor collections procedures or a lax credit policy.
- (a) average payment period
  - (b) inventory turnover
  - (c) average collection period
  - (d) quick

Answer: C

Level of Difficulty: 2

Learning Goal: 3

Topic: Activity Analysis

63. ABC Corp. extends credit terms of 45 days to its customers. Its credit collection would be considered poor if its average collection period was
- (a) 30 days.
  - (b) 36 days.
  - (c) 47 days.
  - (d) 57 days.

Answer: D

Level of Difficulty: 2

Learning Goal: 3

Topic: Activity Analysis

64. Which of the following ratios is difficult for creditors of a firm to analyze because the data are usually not available in published financial statements?
- (a) operating leverage
  - (b) average payment period
  - (c) quick ratio
  - (d) average age of inventory

Answer: A

Level of Difficulty: 2

Learning Goal: 3

Topic: Leverage Analysis

65. \_\_\_\_\_ are especially interested in the average payment period, since it provides them with a sense of the bill-paying patterns of the firm.
- (a) Customers
  - (b) Stockholders
  - (c) Lenders and suppliers
  - (d) Borrowers and buyers

Answer: C

Level of Difficulty: 2

Learning Goal: 3

Topic: Activity Analysis

66. A firm has a current ratio of 1; in order to improve its liquidity ratios, this firm might
- (a) improve its collection practices, thereby increasing cash and increasing its current and quick ratios.
  - (b) improve its collection practices and pay accounts payable, thereby decreasing current liabilities and increasing the current and quick ratios.
  - (c) decrease current liabilities by utilizing more long-term debt, thereby increasing the current and quick ratios.
  - (d) increase inventory, thereby increasing current assets and the current and quick ratios.

Answer: C

Level of Difficulty: 3

Learning Goal: 3

Topic: Liquidity Analysis

67. As a firm's cash flows become more predictable,
- (a) the current ratio will expand.
  - (b) the return on equity will increase.
  - (c) current liabilities will decrease.
  - (d) current assets will decrease.

Answer: D

Level of Difficulty: 3

Learning Goal: 3

Topic: Liquidity Analysis

68. If the inventory turnover is divided into 360, it becomes a measure of
- (a) sales efficiency.
  - (b) the average age of the inventory.
  - (c) sales turnover.
  - (d) the average collection period.

Answer: B

Level of Difficulty: 3

Learning Goal: 3

Topic: Activity Analysis

69. The \_\_\_\_\_ is useful in evaluating credit and collection policies.
- (a) average payment period
  - (b) current ratio
  - (c) average collection period
  - (d) current asset turnover

Answer: C

Level of Difficulty: 3

Learning Goal: 3

Topic: Activity Analysis

70. The two categories of ratios that should be utilized to assess a firm's true liquidity are the
- (a) current and quick ratios.
  - (b) liquidity and profitability ratios.
  - (c) liquidity and debt ratios.
  - (d) liquidity and activity ratios.

Answer: D

Level of Difficulty: 3

Learning Goal: 3

Topic: Liquidity Analysis

71. A firm with a total asset turnover that is lower than industry standard but with a current ratio which meets industry standard must have excessive
- (a) fixed assets.
  - (b) inventory.
  - (c) accounts receivable.
  - (d) debt.

Answer: A

Level of Difficulty: 3

Learning Goal: 3

Topic: Activity Analysis

72. The following groups of ratios provide the information critical to the short-run operation of the firm.
- (a) liquidity, activity, and profitability
  - (b) liquidity, activity, and common stock
  - (c) liquidity, activity, and debt
  - (d) activity, debt, and profitability

Answer: A

Level of Difficulty: 3

Learning Goal: 3

Topic: Ratio Analysis Basics

73. The \_\_\_\_\_ ratios provide the information critical to the long-run operation of the firm.
- (a) liquidity
  - (b) activity
  - (c) debt
  - (d) profitability

Answer: C

Level of Difficulty: 3

Learning Goal: 3

Topic: Leverage Analysis

74. A firm with a total asset turnover lower than industry standard may have
- (a) excessive debt.
  - (b) excessive cost of goods sold.
  - (c) insufficient sales.
  - (d) insufficient fixed assets.

Answer: C

Level of Difficulty: 3

Learning Goal: 3

Topic: Activity Analysis

75. The \_\_\_\_\_ ratio measures the proportion of total assets financed by the firm's creditors.
- (a) total asset turnover
  - (b) fixed asset turnover
  - (c) current
  - (d) debt

Answer: D

Level of Difficulty: 1

Learning Goal: 4

Topic: Leverage Analysis

76. The \_\_\_\_\_ ratio measures the firm's ability to pay contractual interest payments.
- (a) times interest earned
  - (b) fixed-payment coverage
  - (c) debt
  - (d) average payment period

Answer: A

Level of Difficulty: 1

Learning Goal: 4

Topic: Leverage Analysis

77. The \_\_\_\_\_ ratio may indicate that the firm will not be able to meet interest obligations due on outstanding debt.
- (a) debt
  - (b) net profit margin
  - (c) return on total assets
  - (d) times interest earned

Answer: D

Level of Difficulty: 2

Learning Goal: 4

Topic: Leverage Analysis

78. The higher the value of \_\_\_\_\_ ratio, the better able the firm is to fulfill its interest obligations.
- debt
  - average collection period
  - times interest earned
  - average payment period

Answer: C

Level of Difficulty: 2

Learning Goal: 4

Topic: Leverage Analysis

**Table 2.1**

<b>Balance Sheet</b>			
<b>Cole Eagan Enterprises</b>			
<b>December 31, 2005</b>			
Cash	\$4,500	Accounts Payable	\$10,000
Accounts Receivable		Notes Payable	
Inventory		Accruals	1,000
Total Current Assets		Total Current Liabilities	
Net Fixed Assets		Long-Term Debt	
Total Assets		Stockholders' Equity	
		Total Liabilities & S.E.	

Information (2005 values)

- Sales totaled \$110,000
  - The gross profit margin was 25 percent.
  - Inventory turnover was 3.0.
  - There are 360 days in the year.
  - The average collection period was 65 days.
  - The current ratio was 2.40.
  - The total asset turnover was 1.13.
  - The debt ratio was 53.8 percent.
79. Inventory for CEE in 2005 was \_\_\_\_\_. (See Table 2.1)
- \$36,667
  - \$32,448
  - \$27,500
  - \$ 9,167

Answer: C

Level of Difficulty: 3

Learning Goal: 4

Topic: Balance Sheet and Activity Analysis

80. Notes payable for CEE in 2005 was \_\_\_\_\_. (See Table 2.1)
- (a) \$113,466
  - (b) \$ 52,372
  - (c) \$ 41,372
  - (d) \$ 10,608

Answer: D

Level of Difficulty: 3

Learning Goal: 4

Topic: Balance Sheet and Activity Analysis

81. Accounts receivable for CEE in 2005 was \_\_\_\_\_. (See Table 2.1)
- (a) \$14,056
  - (b) \$19,861
  - (c) \$14,895
  - (d) \$18,333

Answer: B

Level of Difficulty: 3

Learning Goal: 4

Topic: Balance Sheet and Activity Analysis

82. Net fixed assets for CEE in 2005 were \_\_\_\_\_. (See Table 2.1)
- (a) \$45,484
  - (b) \$48,975
  - (c) \$54,511
  - (d) \$69,341

Answer: A

Level of Difficulty: 3

Learning Goal: 4

Topic: Balance Sheet and Activity Analysis

83. Total assets for CEE in 2005 were \_\_\_\_\_. (See Table 2.1)
- (a) \$ 45,895
  - (b) \$124,300
  - (c) \$ 58,603
  - (d) \$ 97,345

Answer: D

Level of Difficulty: 3

Learning Goal: 4

Topic: Balance Sheet and Activity Analysis

84. Long-term debt for CEE in 2005 was \_\_\_\_\_. (See Table 2.1)
- (a) \$30,737
  - (b) \$52,372
  - (c) \$10,608
  - (d) \$41,372

Answer: A

Level of Difficulty: 3

Learning Goal: 4

Topic: Balance Sheet and Activity Analysis



85. \_\_\_\_\_ is a term used to describe the magnification of risk and return introduced through the use of fixed cost financing such as preferred stock and long-term debt.
- (a) Financial leverage
  - (b) Operating leverage
  - (c) Fixed-payment coverage
  - (d) The acid-test

Answer: A

Level of Difficulty: 3

Learning Goal: 4

Topic: Leverage Analysis

86. When assessing the fixed-payment coverage ratio,
- (a) the lower its value the more risky is the firm.
  - (b) the lower its value, the lower is the firm's financial leverage.
  - (c) preferred stock dividend payments can be disregarded.
  - (d) the higher its value, the higher is the firm's liquidity.

Answer: A

Level of Difficulty: 4

Learning Goal: 4

Topic: Leverage Analysis

87. The \_\_\_\_\_ is a popular approach for evaluating profitability in relation to sales by expressing each item on the income statement as a percent of sales.
- (a) retained earnings statement
  - (b) source and use statement
  - (c) common-size income statement
  - (d) profit and loss statement

Answer: C

Level of Difficulty: 1

Learning Goal: 5

Topic: Common Size Analysis

88. The \_\_\_\_\_ indicates the percentage of each sales dollar remaining after the firm has paid for its goods.
- (a) net profit margin
  - (b) operating profit margin
  - (c) gross profit margin
  - (d) earnings available to common shareholders

Answer: C

Level of Difficulty: 1

Learning Goal: 5

Topic: Profitability Analysis

89. The \_\_\_\_\_ measures the percentage of profit earned on each sales dollar before interest and taxes.
- (a) net profit margin
  - (b) operating profit margin
  - (c) gross profit margin
  - (d) earnings available to common shareholders

Answer: B

Level of Difficulty: 1

Learning Goal: 5

Topic: Profitability Analysis

90. The \_\_\_\_\_ measures the percentage of each sales dollar remaining after ALL expenses, including taxes, have been deducted.
- (a) net profit margin
  - (b) operating profit margin
  - (c) gross profit margin
  - (d) earnings available to common shareholders

Answer: A

Level of Difficulty: 1

Learning Goal: 5

Topic: Profitability Analysis

91. The \_\_\_\_\_ measures the overall effectiveness of management in generating profits with its available assets.
- (a) net profit margin
  - (b) price/earnings ratio
  - (c) return on equity
  - (d) return on total assets

Answer: D

Level of Difficulty: 1

Learning Goal: 5

Topic: Profitability Analysis

92. The \_\_\_\_\_ measures the return on owners' (both preferred and common stockholders) investment in the firm.
- (a) net profit margin
  - (b) price/earnings ratio
  - (c) return on equity
  - (d) return on total assets

Answer: C

Level of Difficulty: 1

Learning Goal: 5

Topic: Profitability Analysis

93. The \_\_\_\_\_ ratio is commonly used to assess the owner's appraisal of the share value.
- (a) debt
  - (b) price/earnings
  - (c) return on equity
  - (d) return on total assets

Answer: B

Level of Difficulty: 1

Learning Goal: 5

Topic: Market Value Analysis

94. Two frequently cited ratios of profitability that can be read directly from the common-size income statement are
- (a) the earnings per share and the return on total assets.
  - (b) the gross profit margin and the earnings per share.
  - (c) the gross profit margin and the return on total assets.
  - (d) the gross profit margin and the net profit margin.

Answer: D

Level of Difficulty: 1

Learning Goal: 5

Topic: Profitability Analysis

95. A firm with a gross profit margin which meets industry standard and a net profit margin which is below industry standard must have excessive
- (a) general and administrative expenses.
  - (b) cost of goods sold.
  - (c) dividend payments.
  - (d) principal payments.

Answer: A

Level of Difficulty: 3

Learning Goal: 5

Topic: Profitability Analysis

96. A firm with sales of \$1,000,000, net profits after taxes of \$30,000, total assets of \$1,500,000, and total liabilities of \$750,000 has a return on equity of
- (a) 20 percent.
  - (b) 15 percent.
  - (c) 3 percent.
  - (d) 4 percent.

Answer: D

Level of Difficulty: 3

Learning Goal: 5

Topic: Dupont System Analysis

97. The DuPont system merges the income statement and balance sheet into two summary measures of profitability:
- (a) net profit margin and return on total assets.
  - (b) net profit margin and return on equity.
  - (c) return on total assets and return on equity.
  - (d) net profit margin and price/earning ratio.

Answer: C

Level of Difficulty: 1

Learning Goal: 6

Topic: Dupont System Analysis

98. \_\_\_\_\_ is used by financial managers as a structure for dissecting the firm's financial statements to assess its financial condition.
- (a) Statement of cash flows
  - (b) The DuPont system of analysis
  - (c) A common-size income statement
  - (d) Cross-sectional analysis

Answer: B

Level of Difficulty: 2

Learning Goal: 6

Topic: Dupont System Analysis

99. In the DuPont system, the return on total assets (asset) is equal to
- (a)  $(\text{return on equity}) \times (\text{financial leverage multiplier})$ .
  - (b)  $(\text{return on equity}) \times (\text{total asset turnover})$ .
  - (c)  $(\text{net profit margin}) \times (\text{fixed asset turnover})$ .
  - (d)  $(\text{net profit margin}) \times (\text{total asset turnover})$ .

Answer: D

Level of Difficulty: 2

Learning Goal: 6

Topic: Dupont System Analysis

100. The modified DuPont formula relates the firm's return on total assets (ROA) to the
- (a) return on equity (ROE).
  - (b) financial leverage multiplier.
  - (c) net profit margin.
  - (d) total asset turnover.

Answer: A

Level of Difficulty: 2

Learning Goal: 6

Topic: Dupont System Analysis

101. In the DuPont system, the return on equity is equal to
- (a) (net profit margin)  $\times$  (total asset turnover).
  - (b) (stockholders' equity)  $\times$  (financial leverage multiplier).
  - (c) (return on total assets)  $\times$  (financial leverage multiplier).
  - (d) (return on total assets)  $\times$  (total asset turnover).

Answer: C

Level of Difficulty: 2

Learning Goal: 6

Topic: Dupont System Analysis

102. A firm with a substandard net profit margin can improve its return on total assets by
- (a) increasing its debt ratio.
  - (b) increasing its total asset turnover.
  - (c) decreasing its fixed asset turnover.
  - (d) decreasing its total asset turnover.

Answer: B

Level of Difficulty: 3

Learning Goal: 6

Topic: Dupont System Analysis

103. A decrease in total asset turnover will result in \_\_\_\_\_ in the return on equity.
- (a) an increase
  - (b) a decrease
  - (c) no change
  - (d) an undetermined change

Answer: B

Level of Difficulty: 3

Learning Goal: 6

Topic: Dupont System Analysis

104. A firm with a substandard return on total assets can improve its return on equity, all else remaining the same, by
- (a) increasing its debt ratio.
  - (b) increasing its total asset turnover.
  - (c) decreasing its debt ratio.
  - (d) decreasing its total asset turnover.

Answer: A

Level of Difficulty: 3

Learning Goal: 6

Topic: Dupont System Analysis

105. The three summary ratios basic to the DuPont system of analysis are
- (a) net profit margin, total asset turnover, and return on investment.
  - (b) net profit margin, total asset turnover, and return on equity.
  - (c) net profit margin, total asset turnover, and equity multiplier.
  - (d) net profit margin, financial leverage multiplier, and return on equity.

Answer: C

Level of Difficulty: 3

Learning Goal: 6

Topic: Dupont System Analysis

106. The financial leverage multiplier is an indicator of a corporation utilizing
- (a) operating leverage.
  - (b) long-term debt.
  - (c) total debt.
  - (d) total assets.

Answer: C

Level of Difficulty: 3

Learning Goal: 6

Topic: Leverage Analysis

107. The financial leverage multiplier is an indicator of a corporation utilizing
- (a) operating leverage.
  - (b) financial leverage.
  - (c) long-term debt.
  - (d) current liabilities.

Answer: B

Level of Difficulty: 3

Learning Goal: 6

Topic: Leverage Analysis

108. An increase in financial leverage will result in \_\_\_\_\_ in the return on equity.
- (a) an increase
  - (b) a decrease
  - (c) no change
  - (d) an undetermined change

Answer: A

Level of Difficulty: 3

Learning Goal: 6

Topic: Dupont System Analysis

109. A firm with a total asset turnover lower than the industry standard and a current ratio which meets the industry standard may have
- (a) excessive fixed assets.
  - (b) excessive inventory.
  - (c) excessive accounts receivable.
  - (d) excessive debt.

Answer: A

Level of Difficulty: 3

Learning Goal: 6

Topic: Activity Analysis

110. A firm with a total asset turnover lower than the industry standard may have
- (a) excessive debt.
  - (b) excessive cost of goods sold.
  - (c) insufficient sales.
  - (d) insufficient fixed assets.

Answer: C

Level of Difficulty: 3

Learning Goal: 6

Topic: Activity Analysis

**Table 2.2**

<b>Dana Dairy Products Key Ratios</b>			
	<b>Industry Average</b>	<b>Actual 2004</b>	<b>Actual 2005</b>
Current Ratio	1.3	1.0	
Quick Ratio	0.8	0.75	
Average collection Period	23 days	30 days	
Inventory Turnover	21.7	19	
Debt Ratio	64.7%	50%	
Times Interest Earned	4.8	5.5	
Gross Profit Margin	13.6%	12.0%	
Net Profit Margin	1.0%	0.5%	
Return on total assets	2.9%	2.0%	
Return on Equity	8.2%	4.0%	

**Income Statement  
Dana Dairy Products  
For the Year Ended December 31, 2005**

Sales Revenue	\$100,000
Less: Cost of Goods Sold	87,000
Gross Profits	\$13,000
Less: Operating Expenses	11,000
Operating Profits	\$2,000
Less: Interest Expense	500
Net Profits Before Taxes	\$1,500
Less: Taxes (40%)	600
Net Profits After Taxes	\$900

**Balance Sheet**  
**Dana Dairy Products**  
**December 31, 2005**

<b>Assets</b>		
Cash		\$ 1,000
Accounts Receivable		8,900
Inventories		4,350
Total Current Assets		\$14,250
Gross Fixed Assets	\$35,000	
Less: Accumulated Depreciation	13,250	
Net Fixed Assets		21,750
Total Assets		\$36,000
<b>Liabilities &amp; Stockholders' Equity</b>		
Accounts Payable		\$ 9,000
Accruals		6,675
Total Current Liabilities		\$15,675
Long-term Debt		4,125
Total Liabilities		\$19,800
Common Stock		1,000
Retained Earnings		15,200
Total Stockholders' Equity		\$16,200
Total Liabilities & Stockholders Equity		\$36,000

111. The current ratio for Dana Dairy Products in 2005 was \_\_\_\_\_. (See Table 2.2)

- (a) 1.58
- (b) 0.63
- (c) 1.10
- (d) 0.91

Answer: D

Level of Difficulty: 3

Learning Goal: 6

Topic: Liquidity Analysis

112. Since 2004, the liquidity of Dana Dairy Products \_\_\_\_\_. (See Table 2.2)

- (a) has deteriorated
- (b) remained the same
- (c) has improved
- (d) cannot be determined

Answer: A

Level of Difficulty: 3

Learning Goal: 6

Topic: Liquidity Analysis



113. The net working capital for Dana Dairy Products in 2005 was \_\_\_\_\_. (See Table 2.2)
- (a) \$10,325
  - (b) \$ 1,425
  - (c) -\$ 1,425
  - (d) \$14,250

Answer: C

Level of Difficulty: 3

Learning Goal: 6

Topic: Liquidity Analysis

114. The inventory turnover for Dana Dairy Products in 2005 was \_\_\_\_\_. (See Table 2.2)
- (a) 43
  - (b) 5
  - (c) 20
  - (d) 25

Answer: C

Level of Difficulty: 3

Learning Goal: 6

Topic: Activity Analysis

115. The inventory management at Dana Dairy Products \_\_\_\_\_ since 2004. (See Table 2.2)
- (a) has deteriorated
  - (b) remained the same
  - (c) has improved slightly
  - (d) cannot be determined

Answer: C

Level of Difficulty: 3

Learning Goal: 6

Topic: Activity Analysis

116. The average collection period for Dana Dairy Products in 2005 was (See Table 2.2)
- (a) 32.5 days.
  - (b) 11.8 days.
  - (c) 25.3 days.
  - (d) 35.9 days.

Answer: A

Level of Difficulty: 3

Learning Goal: 6

Topic: Activity Analysis

117. If Dana Dairy Products has credit terms which specify that accounts receivable should be paid in 25 days, the average collection period \_\_\_\_\_ since 2004. (See Table 2.2)
- (a) has deteriorated
  - (b) remained the same
  - (c) has improved
  - (d) cannot be determined

Answer: A

Level of Difficulty: 3

Learning Goal: 6

Topic: Activity Analysis

118. Dana Dairy Products had a \_\_\_\_\_ degree of financial leverage than the industry standard, resulting in \_\_\_\_\_. (See Table 2.2)
- (a) lower; lower return on total assets
  - (b) lower; lower return on equity
  - (c) higher; higher return on equity
  - (d) higher; higher return on total assets

Answer: B

Level of Difficulty: 3

Learning Goal: 6

Topic: Leverage Analysis

119. The debt ratio for Dana Dairy Products in 2005 was (See Table 2.2)
- (a) 50 percent.
  - (b) 11 percent.
  - (c) 55 percent.
  - (d) 44 percent.

Answer: C

Level of Difficulty: 3

Learning Goal: 6

Topic: Leverage Analysis

120. Dana Dairy Products' gross profit margin was inferior to the industry standard. This may have resulted from (See Table 2.2)
- (a) a high sales price.
  - (b) the high cost of goods sold.
  - (c) excessive selling and administrative expenses.
  - (d) excessive interest expense.

Answer: B

Level of Difficulty: 3

Learning Goal: 6

Topic: Profitability Analysis

121. The gross profit margin and net profit margin for Dana Dairy Products in 2005 were (See Table 2.2)
- (a) 13 percent and 0.9 percent, respectively.
  - (b) 13 percent and 1.5 percent, respectively.
  - (c) 2 percent and 0.9 percent, respectively.
  - (d) 2 percent and 1.5 percent, respectively.

Answer: A

Level of Difficulty: 3

Learning Goal: 6

Topic: Profitability Analysis

122. The return on total assets for Dana Dairy Products for 2005 was (See Table 2.2)
- (a) 0.9 percent.
  - (b) 5.5 percent.
  - (c) 25 percent.
  - (d) 2.5 percent.

Answer: D

Level of Difficulty: 3

Learning Goal: 6

Topic: Profitability Analysis

123. The return on equity for Dana Dairy Products for 2005 was (See Table 2.2)
- (a) 0.6 percent.
  - (b) 5.6 percent.
  - (c) 0.9 percent.
  - (d) 50 percent.

Answer: B

Level of Difficulty: 3

Learning Goal: 6

Topic: Profitability Analysis

124. Using the modified DuPont formula allows the analyst to break Dana Dairy Products return on equity into 3 components: the net profit margin, the total asset turnover, and a measure of leverage (the financial leverage multiplier). Which of the following mathematical expressions represents the modified DuPont formula relative to Dana Dairy Products' 2005 performance? (See Table 2.2)
- (a)  $5.6(\text{ROE}) = 2.5(\text{ROA}) \times 2.24(\text{Financial leverage multiplier})$
  - (b)  $5.6(\text{ROE}) = 3.3(\text{ROA}) \times 1.70(\text{Financial leverage multiplier})$
  - (c)  $4.0(\text{ROE}) = 2.0(\text{ROA}) \times 2.00(\text{Financial leverage multiplier})$
  - (d)  $2.5(\text{ROE}) = 5.6(\text{ROA}) \times 0.44(\text{Financial leverage multiplier})$

Answer: A

Level of Difficulty: 3

Learning Goal: 6

Topic: DuPont System Analysis

125. As the financial leverage multiplier increases this may result in
- (a) an increase in the net profit margin and return on investment, due to the decrease in interest expense as debt decreases.
  - (b) an increase in the net profit margin and return on investment, due to the increase in interest expense as debt increases.
  - (c) a decrease in the net profit margin and return on investment, due to the increase in interest expense as debt increases.
  - (d) a decrease in the net profit margin and return on investment, due to the decrease in interest expense as debt decreases.

Answer: C

Level of Difficulty: 4

Learning Goal: 6

Topic: DuPont System Analysis

126. The 2002 law that established the Public Company Accounting Oversight Board (PCAOB) was called
- (a) The McCain-Feingold Act.
  - (b) The Harkins-Oxley Act.
  - (c) The Sarbanes-Harkins Act.
  - (d) The Sarbanes-Oxley Act.

Answer: D

Level of Difficulty: 2

Learning Goal: 1

Topic: Accounting Standards and Regulation

127. The 2002 Sarbanes-Oxley Act was designed to
- (a) limit the compensation that could be paid to corporate CEOs
  - (b) eliminate the many disclosure and conflict of interest problems of corporations
  - (c) provide uniform international accounting standards
  - (d) two of the above

Answer: B

Level of Difficulty: 3

Learning Goal: 1

Topic: Accounting Standards and Regulation

128. The Public Company Accounting Oversight Board (PCAOB)
- (a) is a not-for-profit corporation that oversees auditors of public corporations.
  - (b) is a not-for-profit corporation that oversees managers of public corporations.
  - (c) is a for-profit corporation that oversees auditors of public corporations.
  - (d) is a for-profit corporation that oversees managers of public corporations.

Answer: A

Level of Difficulty: 3

Learning Goal: 1

Topic: Accounting Standards and Regulation

129. If Nico Corporation has cost of goods sold of \$300,000 and inventory of \$30,000, then the inventory turnover is \_\_\_\_\_ and the average age of inventory is \_\_\_\_\_.

- (a) 36.5; 10
- (b) 10; 36.5
- (c) 36.0; 10
- (d) 10; 36.0

Answer: B

Level of Difficulty: 3

Learning Goal: 3

Topic: Activity Analysis

130. If Nico Corporation has annual purchases of \$300,000 and accounts payable of \$30,000, then average purchases per day are \_\_\_\_\_ and the average payment period is \_\_\_\_\_.

- (a) 36.5; 821.9
- (b) 36.0; 833.3
- (c) 821.9; 36.5
- (d) 833.3; 36.0

Answer: C

Level of Difficulty: 3

Learning Goal: 3

Topic: Activity Analysis

## ■ Essay Questions

1. Ag Silver Mining, Inc. has \$500,000 of earnings before interest and taxes at the year end. Interest expenses for the year were \$10,000. The firm expects to distribute \$100,000 in dividends. Calculate the earnings after taxes for the firm assuming a 40 percent tax on ordinary income.

**Answer:**

Earnings before interest and taxes	\$500,000
Less: Interest	<u>10,000</u>
Earnings before taxes	\$490,000
Less: Taxes (40%)	<u>196,000</u>
Earnings after taxes	<u>\$294,000</u>

Level of Difficulty: 2

Learning Goal: 1

Topic: Income Statement

2. At the end of 2005, the Long Life Light Bulb Company announced it had produced a gross profit of \$1 million. The company has also established that over the course of this year it has incurred \$345,000 in operating expenses and \$125,000 in interest expenses. The company is subject to a 30 percent tax rate and has declared \$57,000 total preferred stock dividends.
- (a) How much is the earnings available for common stockholders?
- (b) Compute the increased retained earnings for 2005 if the company were to declare a \$4.25 common stock dividend. The company has 15,000 shares of common stock outstanding.

**Answers:**

(a) Gross Profits	\$1,000,000
Less: Operating expenses	(345,000)
Operating Profits	\$ 655,000
Less: Interest	(125,000)
Net Profits before taxes	\$ 530,000
Less: Taxes (30%)	(159,000)
Net Profits After Taxes	\$ 371,000
Less: Preferred Stock Dividend	(57,000)
Earnings Available for Common Stock	\$ 314,000
(b) Earnings Available for Common Stock	\$ 314,000
Dividend = (4.25)(15,000 shares)	(63,750)
Increased Retained Earnings	\$ 250,250

Level of Difficulty: 3

Learning Goal: 1

Topic: Income Statement

3. Reliable Auto Parts has 5,000 shares of common stock outstanding. The company also has the following amounts in revenue and expense accounts.

Sales revenue	\$ 85,000
General and administrative expense	7,500
Interest expense	3,500
Depreciation expense	5,000
Preferred stock dividends	500
Selling expense	4,000
Cost of goods sold	50,000

Calculate

- (a) gross profits.
- (b) operating profits.
- (c) net profits before taxes.
- (d) net profits after taxes (assume a 40 percent tax rate).
- (e) cash flow from operations.
- (f) earnings available to common stockholders.
- (g) earnings per share.



4. Colonial Furniture's net profits before taxes for 2002 totaled \$354,000. The company's total retained earnings were \$338,000 for 2004 year end and \$389,000 for 2005 year end. Colonial is subject to a 26 percent tax rate. How large was the cash dividend declared by Colonial Furniture in 2005?

**Answer:**

Net Profits Before Taxes	\$354,000
Less: Taxes (26%)	<u>92,040</u>
Net Profits After Taxes	\$261,960
Retained Earnings (2004)	\$338,000
Net Profits After Taxes (2005)	261,960
Dividends	X
-----	-----
Retained Earnings (2005)	\$389,000
Dividends = \$210,960	

Level of Difficulty: 3

Learning Goal: 1

Topic: Statement of Retained Earnings

5. On December 31, 2004, the Bradshaw Corporation had \$485,000 as an ending balance for its retained earnings account. During 2005, the corporation declared a \$3.50/share dividend to its stockholders. The Bradshaw Corporation has 35,000 shares of common stock outstanding. When the books were closed for 2005 year end, the corporation had a final retained earnings balance of \$565,000. What was the net profit earned by Bradshaw Corporation during 2005?

**Answer:**

Dividends = (\$3.50/share)(35,000 shares)	= \$122,500
Retained Earnings (2004)	\$485,000
Net Profits After Taxes (2005)	X
Dividends	122,500
-----	-----
Retained Earnings (2005)	\$565,000
Net Profits After Taxes = \$202,500	

Level of Difficulty: 3

Learning Goal: 1

Topic: Statement of Retained Earnings



6. The Sunshine Company had a retained earnings balance of \$850,000 at the beginning of 2005. By the end of 2005, the company's retained earnings balance was \$950,000. During 2005, the company earned \$245,000 as net profits after paying its taxes. The company was then able to pay its preferred stockholders \$45,000. Compute the common stock dividend per share in 2005 assuming 10,000 shares of common stock outstanding.

**Answer:**

Retained Earnings (2004)	\$850,000
Net Profits After Taxes (2005)	245,000
Preferred Stock Dividend	(45,000)
Common Stock Dividend	X
-----	-----
Retained Earnings (2005)	\$950,000
Total common stock dividend = \$100,000	
Common stock dividend per share =	
100,000/10,000 = \$10	

Level of Difficulty: 3

Learning Goal: 1

Topic: Statement of Retained Earnings

7. Discuss the limitations of ratio analysis and the cautions which must be taken when reviewing a cross-sectional and time-series analysis.

**Answer:** In summarizing a large number of ratios, all aspects of the firm's activities can be assessed. However, limitations of ratio analysis must be recognized. A comparison of current and past ratios may reveal mismanagement. But, the ratio does not give definitive cause to the problem. Additional investigation is necessary to confirm the possible problem. The analyst must be cautious of the following points: 1) a single ratio does not provide sufficient information to judge the overall performance of the firm, 2) the dates of the financial statements should be the same, 3) audited statements should be used, 4) similar accounting treatment of comparative data is essential, and 5) inflation and differing asset ages can distort ratio comparisons.

Level of Difficulty: 3

Learning Goal: 2

Topic: Ratio Analysis Basics

8.

<b>Key Financial Data</b>		
<b>Ratio (% of Sales)</b>	<b>Dreamscape, Inc. For the Year Ended December 31, 2004</b>	<b>Industry Average For the Year Ended December 31, 2005</b>
Cost of goods sold	74.5%	70.0%
Gross profits	25.5	30.0
Selling expense	8.0	7.0
Gen. & admin. expense	5.1	4.9
Depreciation expense	2.4	2.0
Total operating expense	15.5	13.9
Operating profits	10.0	16.1
Interest expense	1.4	1.0
Net profits before taxes	8.6	15.1
Taxes	2.4	6.0
Net profits after taxes	5.2	9.1

**Income Statement, Dreamscape, Inc.  
For the Year Ended December 31, 2005**

Sales revenue	\$1,000,000
Less: Cost of goods sold	<u>750,000</u>
Gross profits	\$ 250,000
Less: Operating expenses	
Selling Expense	\$70,000
Gen. & admin. expense	48,000
Depreciation expense	<u>20,000</u>
Total operating expense	<u>\$ 138,000</u>
Operating profits	\$ 112,000
Less: Interest expense	<u>\$ 20,000</u>
Net profits before taxes	\$ 92,000
Less: Taxes	<u>\$ 36,800</u>
Net profits after taxes	<u>\$ 55,200</u>

Prepare a common-size income statement for Dreamscape, Inc. for the year ended December 31, 2005. Evaluate the company's performance against industry average ratios and against last year's results.

**Answer:**

**Common-Size Income Statement**  
**Dreamscape, Inc.**  
**For the Year Ended December 31, 2005**

Sales revenue	100%
Less: Cost of goods sold	<u>75%</u>
Gross profits	25%
Less: Operating expenses	
Selling Expense	7.0%
Gen. & admin. expense	4.8%
Depreciation expense	<u>2.0%</u>
Total operating expense	<u>13.8%</u>
Operating profits	11.2%
Less: Interest expense	<u>2.0%</u>
Net profits before taxes	9.2%
Less: Taxes	<u>3.68%</u>
Net profits after taxes	<u>5.52%</u>

Dreamscape, Inc. performs significantly below industry average. All profitability ratios (gross profit margin, operating profit margin, and net profit margin) trail the industry norms. In 2004 expenses as a percent of sales were high.

Dreamscape, Inc. improved the management of operating expenses in 2005 meeting industry averages. However, cost of goods sold as a percent of sales increased and is a full 5 percent above the industry average, further reducing the gross profit margin. Interest expense is two times the average indicating high cost of debt or a high debt level. The firm must concentrate on reducing the cost of goods sold and interest expense to improve performance.

Level of Difficulty: 4

Learning Goal: 6

Topic: Common Size Statement Analysis

9. In an effort to analyze Clockwork Company finances, Jim realized that he was missing the company's net profits after taxes for the current year. Find the company's net profits after taxes using the following information.

Return on total assets = 2%

Total Asset Turnover = 0.5

Cost of Goods Sold = \$105,000

Gross Profit Margin = 0.30

**Answer:** Sales = CGS/(1 – GPM) = 105,000/(1 – 0.30) = \$150,000

Total Assets = Sales/(Total Asset Turnover)

= 150,000/0.50 = \$300,000

Net Profits After Taxes = (ROA) × (Total Assets)

= (0.02) × (300,000) = \$6,000

Level of Difficulty: 4

Learning Goal: 6

Topic: Ratio and Financial Statement Analysis

10. Construct the DuPont system of analysis using the following financial data for Key Wahl Industries and determine which areas of the firm need further analysis.

**Key Financial Data**

**Key Wahl Industries:**

Sales	\$4,500,000
Net profits after taxes	337,500
Total assets	6,750,000
Total liabilities	3,375,000

**Industry Averages:**

Total asset turnover	0.71
Debt ratio	33.00%
Financial leverage multiplier	1.50
Return on total assets	6.75%
Return on equity	10.00%
Net profit margin	9.50%

**Answer:** Ratios for Key Wahl Industries

$$\text{Total asset turnover} = \frac{4,500,000}{6,750,000} = 0.67$$

$$\text{Debt ratio} = \frac{3,375,000}{6,750,000} = 50\%$$

$$\text{Financial leverage multiplier} = \frac{1}{1 - 0.5} = 2$$

$$\text{ROA} = \frac{337,500}{6,750,000} = 5\%$$

$$\text{ROE} = \text{ROA} \times \text{Financial leverage multiplier} = 10\%$$

$$\text{Net profit margin} = \frac{337,500}{4,500,000} = 7.5\%$$

DuPont System of Analysis: Key Wahl Industries performs equally to industry averages according to the return on equity. However, when dissecting the financial data further into the three key components of the DuPont system (a profit-on-sale, efficiency-of-asset use, and a use-of-leverage component), some areas of improvement may be highlighted. Key Wahl Industries has a lower net profit margin and return on total assets than industry averages. Nevertheless, the firm makes up for the low profit margin through excessive use of leverage (a 50 percent debt ratio versus 33 percent for the industry). Financial risk could be reduced resulting in the same return on equity by increasing the net profit margin and reducing debt.

Level of Difficulty: 4

Learning Goal: 6

Topic: Dupont System Analysis

11. Given the following balance sheet, income statement, historical ratios and industry averages, calculate the Pulp, Paper, and Paperboard, Inc. financial ratios for the most recent year. Analyze its overall financial situation for the most recent year. Analyze its overall financial situation from both a cross-sectional and time-series viewpoint. Break your analysis into an evaluation of the firm's liquidity, activity, debt, and profitability.

**Income Statement**  
**Pulp, Paper and Paperboard, Inc.**  
**For the Year Ended December 31, 2005**

Sales Revenue	\$2,080,976
Less: Cost of Goods Sold	<u>1,701,000</u>
Gross Profits	\$379,976
Less: Operating Expenses	<u>273,846</u>
Operating Profits	\$106,130
Less: Interest Expense	<u>19,296</u>
Net Profits Before Taxes	\$86,834
Less: Taxes (40%)	<u>34,810</u>
Net Profits After Taxes	\$52,024

**Balance Sheet**  
**Pulp, Paper and Paperboard, Inc.**  
**December 31, 2005**

<b>Assets</b>	
Cash	\$ 95,000
Accounts receivable	237,000
Inventories	<u>243,000</u>
Total current assets	\$ 575,000
Gross fixed assets	500,000
Less: Accumulated depreciation	<u>75,000</u>
Net fixed assets	<u>\$ 425,000</u>
Total assets	\$1,000,000
<b>Liabilities and stockholders' equity</b>	
Current liabilities	
Accounts payable	\$ 89,000
Notes payable	169,000
Accruals	<u>87,000</u>
Total current liabilities	\$ 345,000
Long-term debt	<u>188,000</u>
Total liabilities	\$ 533,000
Stockholders' equity	
Common stock	255,000
Retained earnings	<u>212,000</u>
Total stockholders' equity	<u>\$ 467,000</u>
Total liabilities and stockholders' equity	\$1,000,000

**Historical and Industry Average Ratios  
Pulp, Paper and Paperboard, Inc.**

<b>Ratio</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>Industry 2005</b>
Current Ratio	1.6	1.7	—	1.6
Quick Ratio	0.9	1.0	—	0.9
Inventory Turnover	8.1	9.3	—	8.4
Average Collection Period	33 days	37 days	—	39 days
Total Asset Turnover	2.3	2.2	—	2.2
Debt Ratio	60%	56%	—	58%
Times Interest Earned	2.5	3.5	—	2.3
Gross Profit Margin	21%	19.7%	—	20.4%
Operating Profit Margin	4.7%	4.8%	—	4.7%
Net Profit Margin	1.8%	1.6%	—	1.4%
Return on total assets	4.1%	3.5%	—	3.08%
Return on Equity	10.3%	7.9%	—	7.3%

**Answer:**

**Historical and Industry Average Ratios  
Pulp, Paper and Paperboard, Inc.**

<b>Ratio</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>Industry 2005</b>
Current Ratio	1.6	1.7	1.67	1.6
Quick Ratio	0.9	1.0	0.96	0.9
Inventory Turnover	8.1	9.3	7.0	8.4
Average Collection Period	33 days	37 days	41 days	39 days
Total Asset Turnover	2.3	2.2	2.1	2.2
Debt Ratio	60%	56%	53%	58%
Times Interest Earned	2.5	3.5	5.5%	2.3
Gross Profit Margin	21%	19.7%	18.0%	20.4%
Operating Profit Margin	4.7%	4.8%	5.1%	4.7%
Net Profit Margin	1.8%	1.6%	2.5%	1.4%
Return on total assets	4.1%	3.5%	5.2%	3.08%
Return on Equity	0.3%	7.9%	11.1%	7.3%

**LIQUIDITY:** The liquidity of 3P is on target with the industry standard in 2005 and shows no trend since 2000.

**ACTIVITY:** Inventory and accounts receivable management has deteriorated since 2004 and is inferior when compared to the industry standard. The low inventory turnover may be caused by overstocking and/or obsolete inventories. The high average collection period may have resulted from poor collections procedures. Further investigation is necessary to determine the cause of the variances.

**DEBT:** 3P has less debt than the industry average. The trend since 2003 has been toward reducing the debt ratio. The firm, therefore, is subject to less financial risk than the average firm in the industry.

**PROFITABILITY:** Although the gross profit margin is inferior to the industry average, the operating and net profit margin far exceed the standards, boosting return on total assets and return on equity. The trend in the gross profit margin is unfavorable and may either be caused by a slide in product prices or an escalation in cost of sales. The cause of the poor gross profit margin should be investigated.

Overall, the firm needs to focus attention on inventory and accounts receivable management and the cause of the poor gross profit margin. In general, the firm is in good financial condition.

Level of Difficulty: 4

Learning Goal: 6

Topic: Complete Ratio Analysis

12. Complete the balance sheet for General Aviation, Inc. based on the following financial data.

**Balance Sheet**  
**General Aviation, Inc.**  
**December 31, 2005**

<b>Assets</b>	
Cash	\$ 8,005
Marketable securities	—
Accounts receivable	—
Inventories	—
Total current assets	—
Gross fixed assets	—
Less: Accumulated depreciation	\$50,000
Net fixed assets	—
Total assets	—
<b>Liabilities and Stockholders' Equity</b>	
Accounts payable	\$28,800
Notes payable	—
Accruals	\$18,800
Total current liabilities	—
Long-term debts	—
Total liabilities	—
Stockholders' equity	
Preferred stock	2,451
Common stock at par	30,000
Paid-in capital in excess of par	6,400
Retained earnings	90,800
Total stockholders' equity	—
Total liabilities and stockholders' equity	—

## Key Financial Data (2005)

1. Sales totaled \$720,000.
2. The gross profit margin was 38.7 percent.
3. Inventory turned 6 times.
4. There are 360 days in a year.
5. The average collection period was 31 days.
6. The current ratio was 2.35.
7. The total asset turnover was 2.81.
8. The debt ratio was 49.4 percent.
9. Total current assets equal \$159,565.

**Answer:**

**Balance Sheet**  
**General Aviation, Inc.**  
**December 31, 2005**

Assets	
Cash	\$ 8,005
Marketable securities	16,000
Accounts receivable	62,000
Inventories	<u>73,560</u>
Total current assets	\$159,565
Gross fixed assets	146,663
Less: Accumulated depreciation	<u>\$50,000</u>
Net fixed assets	<u>\$ 96,663</u>
Total assets	\$256,228
Liabilities and Stockholders' Equity	
Current liabilities	
Accounts payable	\$28,800
Notes payable	20,300
Accruals	<u>\$18,800</u>
Total current liabilities	\$67,900
Long-term debts	<u>58,677</u>
Total liabilities	\$126,577
Stockholders' equity	
Preferred stock	2,451
Common stock at par	30,000
Paid-in capital in excess of par	6,400
Retained earnings	<u>90,800</u>
Total stockholders' equity	\$129,651
Total liabilities and stockholders' equity	\$256,228

Level of Difficulty: 4

Learning Goal: 6

Topic: Ratio and Financial Statement Analysis