**Chapter 6 - Comprehensive Example**

Consecutive five-year balance sheets and income statements of Anne Gibson Corporation follow:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ANNE GIBSON CORPORATION Balance Sheet December 31, 2017 through December 31, 2021 | | | | | |
| **(Dollars in thousands)** | **2021** | **2020** | **2019** | **2018** | **2017** |
| Assets: |  |  |  |  |  |
| Current assets |  |  |  |  |  |
| Cash | 47,200 | 46,000 | 45,000 | 44,000 | 43,000 |
| Marketable securities | 2,000 | 2,500 | 3,000 | 3,000 | 3,000 |
| Accounts receivable | 132,000 | 128,900 | 127,900 | 126,800 | 126,200 |
| allowance of Doubtful accounts | 1,000 | 900 | 900 | 800 | 1,200 |
| Inventories | 122,000 | 124,000 | 126,000 | 127,000 | 125,000 |
| Prepaid expenses | 3,000 | 2,500 | 2,000 | 1,000 | 1,000 |
| Total current assets | 305,200 | 303,000 | 303,000 | 301,000 | 297,000 |
| Property, plant and equipment, net | 240,000 | 239,000 | 238,000 | 237,500 | 234,000 |
| Other assets | 10,000 | 8,000 | 7,000 | 6,500 | 7,000 |
| Total assets | 555,200 | 550,000 | 548,000 | 545,000 | 538,000 |
| Liabilities and stockholders’ equity: |  |  |  |  |  |
| Current liabilities |  |  |  |  |  |
| Accounts payable | 72,000 | 73,000 | 75,000 | 76,000 | 78,500 |
| Accrued compensation | 26,000 | 25,000 | 25,500 | 26,000 | 26,000 |
| Income taxes | 11,500 | 12,000 | 13,000 | 12,500 | 11,000 |
| Total current liabilities | 109,500 | 110,000 | 113,500 | 114,500 | 115,500 |
| Long-term debt | 68,000 | 60,000 | 58,000 | 60,000 | 62,000 |
| Deferred income taxes | 25,000 | 24,000 | 23,000 | 22,000 | 21,000 |
| Stockholders’ equity | 352,700 | 356,000 | 353,500 | 348,500 | 339,500 |
| **Total liabilities and stockholders’ equity** | 555,200 | 550,000 | 548,000 | 545,000 | 538,000 |

ANNE GIBSON CORPORATION

Statement of Earnings

For Years Ended December 31, 2007–2011

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **(In thousands, except per share)** | **2021** | **2020** | **2019** | **2018** | **2017** |
| Net sales | 880,000 | 910,000 | 840,000 | $825,000 | $820,000 |
| Cost of goods sold | 740,000 | 760,000 | 704,000 | 695,000 | 692,000 |
| Gross profit | 140,000 | 150,000 | 136,000 | 130,000 | 128,000 |
| Selling and administrative expense | 53,000 | 52,000 | 50,000 | 49,800 | 49,000 |
| Interest expense | 6,700 | 5,900 | 5,800 | 5,900 | 6,000 |
| Earnings from continuing operations before income taxes | 80,300 | 92,100 | 80,200 | 74,300 | 73,000 |
| Income taxes | 26,000 | 27,500 | 28,000 | 23,000 | 22,500 |
| Net earnings | 54,300 | 64,600 | 52,200 | $ 51,300 | $ 50,500 |
| Earnings per share | $ 1.40 | $ 1.65 | $ 1.38 | $ 1.36 | $ 1.33 |
| **Required**   1. Compute the following for the maximum number of years, based on the available data:  1. Accounts receivable turnover 2. Accounts receivable turnover in days 3. Inventory turnover 4. Inventory turnover in days 5. Operating cycle 6. Working capital 7. Current ratio 8. Acid-test ratio 9. Cash ratio 10. Sales to working capital 2. Using **average balance sheet figures** 3. Using **year-end balance sheet figures** 4. Comment on trends indicated in short-term liquidity. | | | | | | |
|

1. **a. Using average balance sheet figures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Ratio** | **2021** | **2020** | **2019** | **2018** | **2017** |
| 1 | Working capital |  |  |  |  |  |
| 2 | Current ratio |  |  |  |  |  |
| 3 | Acid-test ratio |  |  |  |  |  |
| 4 | Cash ratio |  |  |  |  |  |
| 5 | Sales to working capital |  |  |  |  |  |
| 6 | Accounts receivable turnover |  |  |  |  |  |
| 7 | Accounts receivable turnover in days |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 8 | Inventory turnover |  |  |  |  |  |
| 9 | Inventory turnover in days |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 10 | Operating cycle |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Ratio** | **2021** | **2020** | **2019** | **2018** | **2017** |
| 1 | Working capital |  |  |  |  |  |
| 2 | Current ratio |  |  |  |  |  |
| 3 | Acid-test ratio |  |  |  |  |  |
| 4 | Cash ratio |  |  |  |  |  |
| 5 | Sales to working capital |  |  |  |  |  |
| 6 | Accounts receivable turnover |  |  |  |  |  |
| 7 | Accounts receivable turnover in days |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 8 | Inventory turnover |  |  |  |  |  |
| 9 | Inventory turnover in days |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 10 | Operating cycle |  |  |  |  |  |

1. **Using year-end balance sheet figures:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Ratio** | **2021** | **2020** | **2019** | **2018** | **2017** |
| 1 | Working capital |  |  |  |  |  |
| 2 | Current ratio |  |  |  |  |  |
| 3 | Acid-test ratio |  |  |  |  |  |
| 4 | Cash ratio |  |  |  |  |  |
| 5 | Sales to working capital |  |  |  |  |  |
| 6 | Accounts receivable turnover |  |  |  |  |  |
| 7 | Accounts receivable turnover in days |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 8 | Inventory turnover |  |  |  |  |  |
| 9 | Inventory turnover in days |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 10 | Operating cycle |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Ratio** | **2021** | **2020** | **2019** | **2018** | **2017** |
| 1 | Working capital |  |  |  |  |  |
| 2 | Current ratio |  |  |  |  |  |
| 3 | Acid-test ratio |  |  |  |  |  |
| 4 | Cash ratio |  |  |  |  |  |
| 5 | Sales to working capital |  |  |  |  |  |
| 6 | Accounts receivable turnover |  |  |  |  |  |
| 7 | Accounts receivable turnover in days |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 8 | Inventory turnover |  |  |  |  |  |
| 9 | Inventory turnover in days |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 10 | Operating cycle |  |  |  |  |  |

2. **Using average balance sheet figures**

|  |  |  |
| --- | --- | --- |
| **Ratio** | **Formula** |  |
| Working capital | Current assets - current liabilities | $ |
| Current ratio | Current assets / current liabilities | Ratio |
| Acid-test ratio | Cash equiv+ Marketable securitie + Accounts Receivable / CL | Ratio |
| Cash ratio | Cash equiv+ Marketable securities / CL | Ratio |
| Sales to working capital | Sales / average working capital | Ratio |
| Accounts receivable turnover | Net Sales / average Gross Receivables | Times per year |
| Accounts receivable turnover in days | Average Gross Receivables / (Net Sales/365) | Days |
|  | 365 / Accounts receivable turnover |  |
| Inventory turnover | Cost of Goods Sold / average Inventory | Times per year |
| Inventory turnover in days | Average Inventory/ (Cost of Goods Sold/365) | Days |
|  | 365 / Inventory turnover | Days |
| Operating cycle | Accounts Receivable in Days + Inventory Turnover in Days | Days |

**Using year-end balance sheet figures**

|  |  |  |
| --- | --- | --- |
| **Ratio** | **Formula** |  |
| Working capital | Current assets - current liabilities | $ |
| Current ratio | Current assets / current liabilities | Ratio |
| Acid-test ratio | Cash equiv+ Marketable securitie + Accounts Receivable / CL | Ratio |
| Cash ratio | Cash equiv+ Marketable securities / CL | Ratio |
| Sales to working capital | Sales / working capital | Ratio |
| Accounts receivable turnover | Net Sales / Gross Receivables | Times per year |
| Accounts receivable turnover in days | Gross Receivables / (Net Sales/365) | Days |
|  | 365 / Accounts receivable turnover |  |
| Inventory turnover | Cost of Goods Sold / Inventory | Times per year |
| Inventory turnover in days | Inventory/ (Cost of Goods Sold/365) | Days |
|  | 365 / Inventory turnover | Days |
| Operating cycle | Accounts Receivable in Days + Inventory Turnover in Days | Days |