PRACTICE MULTIPLE-CHOICE QUESTIONS

**14-1.** (LO 1)

Comparisons of data within a company are an example of the following comparative basis:

(a) Industry averages.

(b) Intracompany.

(c) Intercompany.

(d) Both (b) and (c).

**Answer**

(b) Intracompany.

**14-2.** (LO 3)

In horizontal analysis, each item is expressed as a percentage of the:

(a) net income amount.

(b) equity amount.

(c) total assets amount.

(d) base year amount.

**Answer**

(d) base year amount.

**14-3.** (LO 3)

Sammy plc reported net sales of £300,000, £330,000, and £360,000 in the years, 2015, 2016, and 2017, respectively. If 2015 is the base year, what is the trend percentage for 2017?

(a) 77%.

(b) 108%.

(c) 120%.

(d) 130%.

**Answer**

(c) 120%.

**14-4.** (LO 4)

The following schedule is a display of what type of analysis?

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Amount** |  | **Percent** |
| Property, plant, |  |  |  |
| and equipment | €600,000 |  | 75% |
| Current assets | 200,000 |  | 25% |
| Total assets | €800,000 |  |  |

(a) Horizontal analysis.

(b) Differential analysis.

(c) Vertical analysis.

(d) Ratio analysis.

**Answer**

(c) Vertical analysis.

**14-5.** (LO 4)

In vertical analysis, the base amount for depreciation expense is generally:

(a) net sales.

(b) depreciation expense in a previous year.

(c) gross profit.

(d) fixed assets.

**Answer**

(a) net sales.

**14-6.** (LO 5)

Which of the following measures is an evaluation of a firm's ability to pay current liabilities?

(a) Acid-test ratio.

(b) Current ratio.

(c) Both (a) and (b).

(d) Return on assets.

**Answer**

(c) Both (a) and (b).

**14-7.** (LO 5)

A measure useful in evaluating the efficiency in managing inventories is:

(a) inventory turnover.

(b) days to sell inventory.

(c) Both (a) and (b).

(d) None of the above.

**Answer**

(c) Both (a) and (b).

**Use the following financial statement information as of the end of each year to answer Questions 8-12.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2017** |  | **2016** |
| Inventory | £54,000 |  | £48,000 |
| Current assets | 81,000 |  | 106,000 |
| Total assets | 382,000 |  | 326,000 |
| Current liabilities | 27,000 |  | 36,000 |
| Total liabilities | 102,000 |  | 88,000 |
| Share capital—preference | 40,000 |  | 40,000 |
| Ordinary shareholders' equity | 240,000 |  | 198,000 |
| Net sales | 784,000 |  | 697,000 |
| Cost of goods sold | 306,000 |  | 277,000 |
| Net income | 134,000 |  | 90,000 |
| Tax expense | 22,000 |  | 18,000 |
| Interest expense | 12,000 |  | 12,000 |
| Dividends paid to preference |  |  |  |
| shareholders | 4,000 |  | 4,000 |
| Dividends paid to ordinary |  |  |  |
| shareholders | 15,000 |  | 10,000 |

**14-8.** (LO 5)

Compute the days in inventory for 2017.

(a) 64.4 days.

(b) 60.8 days.

(c) 6 days.

(d) 24 days.

**Answer**

(b) 60.8 days.

**14-9.** (LO 5)

Compute the current ratio for 2017.

(a) 1.26:1.

(b) 3.0:1.

(c) .80:1.

(d) 3.75:1.

**Answer**

(b) 3.0:1.

**14-10.** (LO 5)

Compute the profit margin for 2017.

(a) 17.1%.

(b) 18.1%.

(c) 37.9%.

(d) 5.9%.

**Answer**

(a) 17.1%.

**14-11.** (LO 5)

Compute the return on ordinary shareholders' equity for 2017.

(a) 47.9%.

(b) 51.7%.

(c) 61.2%.

(d) 59.4%.

**Answer**

(d) 59.4%.

**14-12.** (LO 5)

Compute the times interest earned for 2017.

(a) 11.2 times.

(b) 65.3 times.

(c) 14.0 times.

(d) 13.0 times.

**Answer**

(c) 14.0 times.

**14-13.** (LO 6)

In reporting discontinued operations, the income statement should show in a special section:

(a) gains and losses on the disposal of the discontinued component.

(b) gains and losses from operations of the discontinued component.

(c) Both (a) and (b).

(d) None of the above.

**Answer**

(c) Both (a) and (b).

**14-14.** (LO 6)

Scout Ltd. has income before taxes of £400,000, loss on operation of a discontinued division of £40,000, and a £60,000 loss on disposal of a division. If the income tax rate is 25% on all items, the income statement should show income from continuing operations and net income, respectively, of:

(a) £400,000 and £100,000.

(b) £400,000 and £75,000.

(c) £300,000 and £100,000.

(d) £300,000 and £75,000.

**Answer**

(d) $300,000 and $75,000.

**14-15.** (LO 7)

Which situation below might indicate a company has a low quality of earnings?

(a) The same accounting principles are used each year.

(b) Revenue is recognized when earned.

(c) Maintenance costs are expensed as incurred.

(d) The company is continually reporting pro forma income numbers.

**Answer**

(d) The company is continually reporting pro forma income numbers.

QUESTIONS

**14-1.** (a) Kurt Gibson believes that the analysis of financial statements is directed at two characteristics of a company: liquidity and profitability. Is Kurt correct? Explain.

(b) Are short-term creditors, long-term creditors, and shareholders interested primarily in the same characteristics of a company? Explain.

**14-2.** (a) Distinguish among the following bases of comparison: (1) intracompany, (2) industry averages, and (3) intercompany.

(b) Give the principal value of using each of the three bases of comparison.

**14-3.** Two popular methods of financial statement analysis are horizontal analysis and vertical analysis. Explain the difference between these two methods.

**14-4.** (a) If Nimoy SA had net income of €350,000 in 2016 and it experienced a 22.4% increase in net income for 2017, what is its net income for 2017?

(b) If five cents of every euro of Nimoy revenue is net income in 2016, what is the euro amount of 2016 revenue?

**14-5.** What is a ratio? What are the different ways of expressing the relationship of two amounts? What information does a ratio provide?

**14-6.** Name the major ratios useful in assessing (a) liquidity and (b) solvency.

**14-7.** Maribel Ortiz is puzzled. Her company had a profit margin of 10% in 2017. She feels that this is an indication that the company is doing well. Gordon Liddy, her accountant, says that more information is needed to determine the firm's financial well-being. Who is correct? Why?

**14-8.** What do the following classes of ratios measure? (a) Liquidity ratios. (b) Profitability ratios. (c) Solvency ratios.

**14-9.** What is the difference between the current ratio and the acid-test ratio?

**14-10.** Monte Company, a retail store, has an accounts receivable turnover of 4.5 times. The industry average is 12.5 times. Does Monte have a collection problem with its accounts receivable?

**14-11.** Which ratios should be used to help answer the following questions?

(a) How efficient is a company in using its assets to produce sales?

(b) How near to sale is the inventory on hand?

(c) How many dollars of net income were earned for each dollar invested by the owners?

(d) How able is a company to meet interest charges as they fall due?

**14-12.** The price-earnings ratio of General Motors (USA) (automobile builder) was 8, and the price-earnings ratio of Microsoft (USA) (computer software) was 38. Which company did the securities market favor? Explain.

**14-13.** What is the formula for computing the payout ratio? Would you expect this ratio to be high or low for a growth company?

**14-14.** Holding all other factors constant, indicate whether each of the following changes generally signals good or bad news about a company.

(a) Increase in profit margin.

(b) Decrease in inventory turnover.

(c) Increase in the current ratio.

(d) Decrease in earnings per share.

(e) Increase in price-earnings ratio.

(f) Increase in debt to total assets ratio.

(g) Decrease in times interest earned.

**14-15.** The return on assets for Miller Limited is 7.6%. During the same year, Miller's return on ordinary shareholders' equity is 12.8%. What is the explanation for the difference in the two rates?

**14-16.** Which two ratios do you think should be of greatest interest to:

(a) A pension fund considering the purchase of 20-year bonds?

(b) A bank contemplating a short-term loan?

(c) An ordinary shareholder?

**14-17.** Why must preference dividends be subtracted from net income in computing earnings per share?

**14-18.** (a) What is meant by trading on the equity?

(b) How would you determine the profitability of trading on the equity?

**14-19.** Tillman SA has net income of R$160,000, weighted-average ordinary shares outstanding of 50,000, and preference dividends for the period of R$30,000. What is Tillman's earnings per share? Pat Tillman, the president of Tillman SA, believes the computed EPS of the company is high. Comment.

**14-20.** Why is it important to report discontinued operations separately from income from continuing operations?

**14-21.** You are considering investing in Cherokee Transportation. The company reports 2017 earnings per share of €6.50 on income from continuing operations and €4.75 on net income. Which EPS figure would you consider more relevant to your investment decision? Why?

**14-22.** MRT Ltd. reported 2016 earnings per share of £3.20 and had no discontinued operations. In 2017, EPS on income from continuing operations was £2.99, and EPS on net income was £3.49. Is this a favorable trend?

**14-23.** Identify and explain factors that affect quality of earnings.

BRIEF EXERCISES

**BE14-1.** *Discuss need for comparative analysis*.

(LO 1)

You recently received a letter from your Uncle Liam. A portion of the letter is presented below.

You know that I have a significant amount of money I saved over the years. I am thinking about starting an investment program. I want to do the investing myself, based on my own research and analysis of financial statements. I know that you are studying accounting, so I have a couple of questions for you. I have heard that different users of financial statements are interested in different characteristics of companies. Is this true, and, if so, why? Also, some of my friends, who are already investing, have told me that comparisons involving a company's financial data can be made on a number of different bases. Can you explain these bases to me?

***Instructions***

Write a letter to your Uncle Liam which answers his questions.

**BE14-2.** *Identify and use tools of financial statement analysis*.

(LO 2, 3, 4, 5)

Maria Fierro SpA reported the following amounts in 2015, 2016, and 2017.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **2015** |  | **2016** |  | **2017** |
| Current assets | €220,000 |  | €230,000 |  | €240,000 |
| Current liabilities | €160,000 |  | €170,000 |  | €184,000 |
| Total assets | €500,000 |  | €600,000 |  | €630,000 |

***Instructions***

(a) Identify and describe the three tools of financial statement analysis.

(b) Perform each of the three types of analysis on Maria Fierro's current assets.

**BE14-3.** *Prepare horizontal analysis*.

(LO 3)

Using the following data from the comparative statements of financial position of Dotte NV, illustrate horizontal analysis.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **December 31, 2017** |  | **December 31, 2016** |
| Inventory | € 840,000 |  | € 500,000 |
| Accounts receivable | € 520,000 |  | € 350,000 |
| Total assets | €2,500,000 |  | €3,000,000 |

**BE14-4.** *Prepare vertical analysis*.

(LO 4)

Using the same data presented above in BE14-3 for Dotte NV, illustrate vertical analysis.

**BE14-5.** *Calculate percentage of change*.

(LO 3)

Net income was €550,000 in 2015, €500,000 in 2016, and €525,000 in 2017. What is the percentage of change from (a) 2015 to 2016 and (b) 2016 to 2017? Is the change an increase or a decrease?

**BE14-6.** *Calculate net income*.

(LO 3)

If Valdamorte plc had net income of £560,000 in 2017 and it experienced a 40% increase in net income over 2016, what was its 2016 net income?

**BE14-7.** *Calculate change in net income*.

(LO 3)

Horizontal analysis (trend analysis) percentages for Kemplar Company's sales revenue, cost of goods sold, and expenses are shown below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Horizontal Analysis** |  | **2017** |  | **2016** |  | **2015** |
| Sales revenue |  | 97.8 |  | 103.3 |  | 100.0 |
| Cost of goods sold |  | 103.0 |  | 96.0 |  | 100.0 |
| Expenses |  | 105.2 |  | 99.3 |  | 100.0 |

Did Kemplar's net income increase, decrease, or remain unchanged over the 3-year period?

**BE14-8.** *Calculate change in net income*.

(LO 4)

Vertical analysis (common size) percentages for Dagman Company's sales revenue, cost of goods sold, and expenses are shown below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Vertical Analysis** |  | **2017** |  | **2016** |  | **2015** |
| Sales revenue |  | 100.0 |  | 100.0 |  | 100.0 |
| Cost of goods sold |  | 59.2 |  | 62.4 |  | 64.5 |
| Expenses |  | 25.0 |  | 25.6 |  | 27.5 |

Did Dagman's net income as a percentage of sales increase, decrease, or remain unchanged over the 3-year period? Provide numerical support for your answer.

**BE14-9.** *Calculate liquidity ratios*.

(LO 5)

Selected condensed data taken from a recent statement of financial position of Morino Ltd. are as follows.

|  |  |
| --- | --- |
| **MORINO LTD.**  **Statement of Financial Position (partial)** | |
| Other current assets | £ 6,271,000 |
| Inventory | 14,814,000 |
| Accounts receivable | 12,545,000 |
| Short-term investments | 4,947,000 |
| Cash | 8,113,000 |
| Total current assets | £46,690,000 |
| Total current liabilities | £41,200,000 |

What are the (a) working capital, (b) current ratio, and (c) acid-test ratio?

**BE14-10.** *Calculate profitability ratios*.

(LO 5)

Huntsinger SE has net income of €12.76 million and net revenue of €88 million in 2017. Its assets are €14 million at the beginning of the year and €18 million at the end of the year. What are Huntsinger's (a) asset turnover and (b) profit margin?

**BE14-11.** *Evaluate collection of accounts receivable*.

(LO 5)

The following data are taken from the financial statements of Gladow Company.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2017** |  | **2016** |
| Accounts receivable (net), end of year | € 550,000 |  | € 520,000 |
| Net sales on account | 3,680,000 |  | 3,000,000 |
| Terms for all sales are 1/10, n/60. |  | | |

(a) Compute for each year (1) the accounts receivable turnover and (2) the average collection period. At the end of 2015, accounts receivable (net) was €480,000.

(b) What conclusions about the management of accounts receivable can be drawn from these data?

**BE14-12.** *Evaluate management of inventory*.

(LO 5)

The following data are from the income statements of Charles A.S.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2017** |  | **2016** |
| Sales revenue | 6,420,000 |  | 6,240,000 |
| Beginning inventory | 980,000 |  | 860,000 |
| Purchases | 4,440,000 |  | 4,720,000 |
| Ending inventory | 1,020,000 |  | 980,000 |

(a) Compute for each year (1) the inventory turnover and (2) the average days to sell the inventory.

(b) What conclusions concerning the management of the inventory can be drawn from these data?

**BE14-13.** *Calculate amounts from profitability ratios*.

(LO 5)

Feng Company has equity of HK$4,000,000 and net income of HK$680,000. It has a payout ratio of 22% and a rate of return on assets of 16%. How much did Feng pay in cash dividends, and what were its average assets?

**BE14-14.** *Prepare income statement including discontinued operations*.

(LO 6)

An inexperienced accountant for Ming Limited showed the following in the income statement: income before income taxes and discontinued operations £400,000, income from operation of discontinued retail division (before taxes) £10,000, and loss from disposal of discontinued retail division (before taxes) £80,000. The applicable tax rate is 30%. Prepare a correct income statement.

**BE14-15.** *Prepare discontinued operations section of income statement*.

(LO 6)

On June 30, Blevins ASA discontinued its operations in Europe. During the year, the operating loss was €320,000 before taxes. On September 1, Blevins disposed of its European facilities at a pretax loss of €150,000. The applicable tax rate is 30%. Show the discontinued operations section of the income statement.

**BE14-16.** *Prepare discontinued operations section of income statement*.

(LO 6)

An inexperienced accountant for Silva AG showed the following in the income statement: income before income taxes €450,000 and unrealized gain on non-trading securities (before taxes) €70,000. The unrealized gain on non-trading securities and income before income taxes are both subject to a 25% tax rate. Prepare a correct partial statement of comprehensive income, beginning with income before income taxes.

**DO IT! REVIEW**

**DO IT! 14-1.** *Prepare horizontal analysis*.

(LO 3)

Summary financial information for Rapture Company is as follows.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **December 31, 2017** | | |  | **December 31, 2016** | | |
| Plant assets | £ 821,000 | | |  | £750,000 | | |
| Current assets | 188,000 | | |  | 225,000 | | |
| Total assets |  | £1,009,000 |  |  |  | £975,000 |  |

Compute the amount and percentage changes in 2017 using horizontal analysis, assuming 2016 is the base year.

**DO IT! 14-2.** *Compute ratios*.

(LO 5)

The condensed financial statements of Soule SpA for the years 2016 and 2017 are presented below.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **SOULE SpA**  **Statements of Financial Position**  **December 31** | | | | | | | |
|  | **2017** | | |  | **2016** | | |
| Intangibles and other assets |  |  | €530 |  |  |  | €510 |
| Property, plant, and equipment |  |  | 420 |  |  |  | 380 |
| Investments |  |  | 10 |  |  |  | 10 |
| Current assets |  |  |  |  |  |  |  |
| Prepaid expenses | €120 |  |  |  | €160 |  |  |
| Inventory | 430 |  |  |  | 390 |  |  |
| Accounts receivable (net) | 470 |  |  |  | 433 |  |  |
| Cash and cash equivalents | 330 |  | 1,350 |  | 360 |  | 1,343 |
| Total assets |  |  | €2,310 |  |  |  | €2,243 |
| Equity |  |  | €1,020 |  |  |  | €1,040 |
| Non-current liabilities |  |  | 390 |  |  |  | 393 |
| Current liabilities |  |  | 900 |  |  |  | 810 |
| Total equity and liabilities |  |  | €2,310 |  |  |  | €2,243 |

|  |  |  |  |
| --- | --- | --- | --- |
| **SOULE SpA**  **Income Statements**  **For the Years Ended December 31** | | | |
|  | **2017** |  | **2016** |
| Sales revenue | €4,000 |  | €3,600 |
| Costs and expenses |  |  |  |
| Cost of goods sold | 984 |  | 895 |
| Selling and administrative expenses | 2,400 |  | 2,330 |
| Interest expense | 10 |  | 20 |
| Total costs and expenses | 3,394 |  | 3,245 |
| Income before income taxes | 606 |  | 355 |
| Income tax expense | 243 |  | 142 |
| Net income | € 364 |  | € 213 |

Compute the following ratios for 2017 and 2016.

(a) Current.

(b) Inventory turnover. (Inventory on 12/31/15 was €326.)

(c) Profit margin.

(d) Return on assets. (Assets on 12/31/15 were €2,100.)

(e) Return on ordinary shareholders' equity. (Equity on 12/31/15 was €960.)

(f) Debt to total assets.

(g) Times interest earned.

**DO IT! 14-3.** *Prepare income statement*.

(LO 6)

In its proposed 2017 income statement, Grinders Limited reports income before income taxes £500,000, income taxes £160,000 (not including irregular items), loss on operation of discontinued music division £60,000, and gain on disposal of discontinued music division £50,000, and unrealized loss on non-trading securities of £30,000. The income tax rate is 32%. Prepare a correct partial statement of comprehensive income beginning with income before income taxes.

**DO IT! 14-4.** *Match terms relating to quality of earnings and financial statement analysis*.

(LO 3, 5, 6, 7)

Match each of the following terms with the phrase that best describes it.

|  |  |
| --- | --- |
| Quality of earnings | Pro forma income |
| Current ratio | Discontinued operations |
| Horizontal analysis | Comprehensive income |

1. \_\_\_\_\_\_\_\_ A measure used to evaluate a company's liquidity.

2. \_\_\_\_\_\_\_\_ Usually excludes items that a company thinks are unusual or non-recurring.

3. \_\_\_\_\_\_\_\_ Indicates the level of full and transparent information provided to users of the financial statements.

4. \_\_\_\_\_\_\_\_ The disposal of a significant component of a business.

5. \_\_\_\_\_\_\_\_ Determines increases or decreases in a series of financial statement data.

6. \_\_\_\_\_\_\_\_ Includes all changes in equity during a period except those resulting from investments by shareholders and distributions to shareholders.

EXERCISES

**E14-1.** *Prepare horizontal analysis*.

(LO 3)

Financial information for Gallup SA is presented below.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **December 31, 2017** |  | **December 31, 2016** |
| Plant assets (net) | €396,000 |  | €320,000 |
| Current assets | 128,000 |  | 110,000 |
| Share capital—ordinary, €1 par | 159,000 |  | 115,000 |
| Retained earnings | 135,300 |  | 150,000 |
| Non-current liabilities | 138,700 |  | 95,000 |
| Current liabilities | 91,000 |  | 70,000 |

***Instructions***

Prepare a schedule showing a horizontal analysis for 2017 using 2016 as the base year.

**E14-2.** *Prepare vertical analysis*.

(LO 4)

Operating data for Conard Limited are presented below.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2017** |  | **2016** |
| Net sales | £750,000 |  | £600,000 |
| Cost of goods sold | 480,000 |  | 408,000 |
| Selling expenses | 105,000 |  | 84,000 |
| Administrative expenses | 75,000 |  | 54,000 |
| Income tax expense | 36,000 |  | 18,000 |
| Net income | 54,000 |  | 36,000 |

***Instructions***

Prepare a schedule showing a vertical analysis for 2017 and 2016.

**E14-3.** *Prepare horizontal and vertical analyses*.

(LO 3, 4)

The comparative condensed statements of financial position of Garcia SLU are presented below.

|  |  |  |  |
| --- | --- | --- | --- |
| **GARCIA SLU**  **Comparative Condensed Statements of Financial Position**  **December 31** | | | |
|  | **2017** |  | **2016** |
| Assets |  |  |  |
| Intangibles | €24,000 |  | €40,000 |
| Property, plant, and equipment (net) | 100,000 |  | 92,000 |
| Current assets | 76,000 |  | 82,000 |
| Total assets | €200,000 |  | €214,000 |
| Equity and liabilities |  |  |  |
| Equity | €20,000 |  | €16,000 |
| Non-current liabilities | 140,000 |  | 150,000 |
| Current liabilities | 40,000 |  | 48,000 |
| Total equity and liabilities | €200,000 |  | €214,000 |

***Instructions***

(a) Prepare a horizontal analysis of the statement of financial position data for Garcia using 2016 as a base.

(b) Prepare a vertical analysis of the statement of financial position data for Garcia in columnar form for 2017.

**E14-4.** *Prepare horizontal and vertical analyses*.

(LO 3, 4)

The comparative condensed income statements of Hendi A.S. are shown below.

|  |  |  |  |
| --- | --- | --- | --- |
| **HENDI A.S.**  **Comparative Condensed Income Statements**  **For the Years Ended December 31** | | | |
|  | **2017** |  | **2016** |
| Net sales | 600,000 |  | 500,000 |
| Cost of goods sold | 468,000 |  | 400,000 |
| Gross profit | 132,000 |  | 100,000 |
| Operating expenses | 60,000 |  | 54,000 |
| Net income | [Turkish lira symbol black.svg](http://zh.wikipedia.org/wiki/%E5%9C%9F%E8%80%B3%E5%85%B6%E9%87%8C%E6%8B%89%E7%AC%A6%E5%8F%B7) 72,000 |  | [Turkish lira symbol black.svg](http://zh.wikipedia.org/wiki/%E5%9C%9F%E8%80%B3%E5%85%B6%E9%87%8C%E6%8B%89%E7%AC%A6%E5%8F%B7) 46,000 |

***Instructions***

(a) Prepare a horizontal analysis of the income statement data for Hendi Corporation using 2016 as a base. (Show the amounts of increase or decrease.)

(b) Prepare a vertical analysis of the income statement data for Hendi Corporation in columnar form for both years.

**E14-5.** *Compute liquidity ratios and compare results*.

(LO 5)

Nordstrom, Inc. (USA), operates department stores in numerous states. Selected financial statement data for the year ending February 1, 2014, are shown below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **NORDSTROM, INC.**  Statement of Financial Position (partial) | | | | |  |
|  | **(in millions)** |  | **End-of-Year** |  | **Beginning-of-Year** |  |
|  | Other current assets |  | $ 239 |  | $227 |  |
|  | Prepaid expenses |  | 87 |  | 80 |  |
|  | Merchandise inventory |  | 1,531 |  | 1,360 |  |
|  | Accounts receivable (net) |  | 2,177 |  | 2,129 |  |
|  | Cash and cash equivalents |  | 1,194 |  | 1,285 |  |
|  | Total current assets |  | $5,228 |  | $5,081 |  |
|  | Total current liabilities |  | $2,541 |  | $2,226 |  |

For the year, net sales were $12,166 and cost of goods sold was $7,737 (in millions).

***Instructions***

(a) Compute the four liquidity ratios at the end of the year.

(b) Using the data in the chapter, compare Nordstrom's liquidity with (1) that of Park Street, and (2) the industry averages for department stores.

**E14-6.** *Perform current and acid-test ratio analysis*.

(LO 5)

Bennis SA had the following transactions occur involving current assets and current liabilities during February 2017.

Feb. 3 Accounts receivable of R$15,000 are collected.

7 Equipment is purchased for R$28,000 cash.

11 Paid R$3,000 for a 3-year insurance policy.

14 Accounts payable of R$12,000 are paid.

18 Cash dividends of R$5,000 are declared.

Additional information:

1. As of February 1, 2017, current assets were R$140,000, and current liabilities were R$50,000.

2. As of February 1, 2017, current assets included R$10,000 of inventory and R$5,000 of prepaid expenses.

***Instructions***

(a) Compute the current ratio as of the beginning of the month and after each transaction.

(b) Compute the acid-test ratio as of the beginning of the month and after each transaction.

**E14-7.** *Compute selected ratios*.

(LO 5)

Willingham Company Ltd. has the following comparative statements of financial position data.

|  |  |  |  |
| --- | --- | --- | --- |
| **WILLINGHAM COMPANY LTD.**  **Statements of Financial Position**  **December 31** | | | |
|  | **2017** |  | **2016** |
| Plant assets (net) | £205,000 |  | £190,000 |
| Inventory | 60,000 |  | 50,000 |
| Accounts receivable (net) | 70,000 |  | 50,000 |
| Cash | 10,000 |  | 30,000 |
|  | £345,000 |  | £320,000 |
| Share capital—ordinary, £10 par | £140,000 |  | £120,000 |
| Retained earnings | 55,000 |  | 40,000 |
| Mortgage payable (6%) | 100,000 |  | 100,000 |
| Accounts payable | 50,000 |  | 60,000 |
|  | £345,000 |  | £320,000 |

Additional information for 2017:

1. Net income was £28,000.

2. Sales on account were £418,000. Sales returns and allowances were £22,000.

3. Cost of goods sold was £190,000.

***Instructions***

Compute the following ratios at December 31, 2017.

(a) Current.

(b) Acid-test.

(c) Accounts receivable turnover.

(d) Inventory turnover.

**E14-8.** *Compute selected ratios*.

(LO 5)

Selected comparative statement data for Molini Products Company are presented below. All statement of financial position data are as of December 31.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2017** |  | **2016** |
| Net sales | £700,000 |  | £680,000 |
| Cost of goods sold | 480,000 |  | 400,000 |
| Interest expense | 7,000 |  | 5,000 |
| Net income | 42,000 |  | 34,000 |
| Accounts receivable | 120,000 |  | 100,000 |
| Inventory | 85,000 |  | 75,000 |
| Total assets | 580,000 |  | 540,000 |
| Total ordinary shareholders' equity | 425,000 |  | 325,000 |

***Instructions***

Compute the following ratios for 2017.

(a) Profit margin.

(b) Asset turnover.

(c) Return on assets.

(d) Return on ordinary shareholders' equity.

**E14-9.** *Compute selected ratios*.

(LO 5)

The income statement for Christiansen, A/S, appears below.

|  |  |
| --- | --- |
| **CHRISTIANSEN, A/S.**  **Income Statement**  **For the Year Ended December 31, 2017** | |
| Net sales | €400,000 |
| Cost of goods sold | 235,000 |
| Gross profit | 165,000 |
| Expenses (including €14,000 interest and €17,000 income taxes) | 105,000 |
| Net income | €60,000 |

Additional information:

1. The weighted-average ordinary shares outstanding in 2017 were 32,000 shares.

2. The market price of Christiansen, A/S was €10.80 per share in 2017.

3. Cash dividends of €20,000 were paid, €5,000 of which were to preference shareholders.

***Instructions***

Compute the following ratios for 2017.

(a) Earnings per share.

(b) Price-earnings.

(c) Payout.

(d) Times interest earned.

**E14-10.** *Compute amounts from ratios*.

(LO 5)

Rees Corporation experienced a fire on December 31, 2017, in which its financial records were partially destroyed. It has been able to salvage some of the records and has ascertained the following balances.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **December 31, 2017** |  | **December 31, 2016** |
| Inventory | €200,000 |  | €180,000 |
| Accounts receivable (net) | 73,000 |  | 126,000 |
| Cash | 30,000 |  | 10,000 |
| Share capital—ordinary, €100 par | 400,000 |  | 400,000 |
| Retained earnings | 134,000 |  | 122,000 |
| Accounts payable | 50,000 |  | 90,000 |
| Notes payable | 30,000 |  | 60,000 |

Additional information:

1. The inventory turnover is 3.4 times.

2. The return on ordinary shareholders' equity is 25%.

3. The accounts receivable turnover is 8.8 times.

4. The return on assets is 20%.

5. Total assets at December 31, 2016, were €650,000.

***Instructions***

Compute the following for Rees Corporation.

(a) Cost of goods sold for 2017.

(b) Net sales (credit) for 2017.

(c) Net income for 2017.

(d) Total assets at December 31, 2017.

**E14-11.** *Compute ratios*.

(LO 5)

Yadier NV's comparative statements of financial position are presented below.

|  |  |  |  |
| --- | --- | --- | --- |
| **YADIER NV**  **Statements of Financial Position**  **December 31** | | | |
|  | **2017** |  | **2016** |
| Land | €20,000 |  | €26,000 |
| Buildings | 70,000 |  | 70,000 |
| Accumulated depreciation—buildings | (15,000) |  | (10,000) |
| Inventory | 10,000 |  | 7,000 |
| Accounts receivable | 22,000 |  | 24,000 |
| Cash | 4,300 |  | 3,700 |
| Total | €111,300 |  | €120,700 |
| Share capital—ordinary | €72,000 |  | €69,000 |
| Retained earnings | 24,300 |  | 20,600 |
| Accounts payable | 15,000 |  | 31,100 |
| Total | €111,300 |  | €120,700 |

Yadier's 2017 income statement included net sales of €100,000, cost of goods sold of €60,350, and net income of €14,000.

***Instructions***

Compute the following ratios for 2017.

(a) Current.

(b) Acid-test.

(c) Accounts receivable turnover.

(d) Inventory turnover.

(e) Profit margin.

(f) Asset turnover.

(g) Return on assets.

(h) Return on ordinary shareholders' equity.

(i) Debt to total assets.

**E14-12.** *Prepare a correct income statement*.

(LO 6)

For its fiscal year ending October 31, 2017, Douglas Limited reports the following partial data shown below.

|  |  |
| --- | --- |
| Income before income taxes | £550,000 |
| Income tax expense (30% × £400,000) | 120,000 |
| Income before discontinued operations | 430,000 |
| Loss on discontinued division | 150,000 |
| Net income | £280,000 |

The loss on discontinued division consists of £60,000 loss from operations of the division and £90,000 loss on disposal of the division. The income tax rate is 30% on all items.

***Instructions***

(a) Prepare a correct income statement, beginning with income before income taxes.

(b) Explain in memo form why the income statement data are misleading.

**E14-13.** *Prepare income statement*.

(LO 6)

Trayer plc has income from continuing operations of £290,000 for the year ended December 31, 2017. It also has the following items (before considering income taxes).

1. An unrealized loss of £80,000 on non-trading securities.

2. A gain of £30,000 on the discontinuance of a division. (comprised of a £10,000 loss from operations and a £40,000 gain on disposal).

3. A correction of an error in last year's financial statements that resulted in a £20,000 understatement of 2016 income before income taxes.

Assume all items are subject to income taxes at a 20% tax rate.

***Instructions***

Prepare a statement of comprehensive income, beginning with income from continuing operations.

PROBLEMS: SET A AND PROBLEMS: SET B

**P14-1.** *Prepare vertical analysis and comment on profitability*.

(LO 4, 5)

Comparative statement data for Lionel Company and Barrymore Company, two competitors, appear below. All statement of financial position data are as of December 31, 2017, and December 31, 2016.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Lionel Company** | | |  | **Barrymore Company** | | |
|  | **2017** |  | **2016** |  | **2017** |  | **2016** |
| Net sales | £1,549,035 |  |  |  | £339,038 |  |  |
| Cost of goods sold | 1,053,345 |  |  |  | 237,325 |  |  |
| Operating expenses | 263,336 |  |  |  | 77,979 |  |  |
| Interest expense | 7,745 |  |  |  | 2,034 |  |  |
| Income tax expense | 61,960 |  |  |  | 8,476 |  |  |
| Plant assets (net) | 596,920 |  | £575,610 |  | 142,842 |  | £128,927 |
| Current assets | 401,584 |  | 388,020 |  | 86,450 |  | 82,581 |
| Share capital—ordinary, £5 par | 578,765 |  | 578,765 |  | 137,435 |  | 137,435 |
| Retained earnings | 252,224 |  | 225,358 |  | 55,528 |  | 47,430 |
| Non-current liabilities | 102,500 |  | 84,000 |  | 16,711 |  | 11,989 |
| Current liabilities | 65,015 |  | 75,507 |  | 19,618 |  | 14,654 |

***Instructions***

(a) Prepare a vertical analysis of the 2017 income statement data for Lionel Company and Barrymore Company in columnar form.

(b) Comment on the relative profitability of the companies by computing the return on assets and the return on ordinary shareholders' equity for both companies.

**P14-2.** *Compute ratios from statement of financial position and income statement*.

(LO 5)

The comparative statements of Larker Tool SA are presented below.

|  |  |  |  |
| --- | --- | --- | --- |
| **LARKER TOOL SA**  **Income Statement**  **For the Years Ended December 31** | | | |
|  | **2017** |  | **2016** |
| Net sales | R$1,818,500 |  | R$1,750,500 |
| Cost of goods sold | 1,011,500 |  | 996,000 |
| Gross profit | 807,000 |  | 754,500 |
| Selling and administrative expense | 516,000 |  | 479,000 |
| Income from operations | 291,000 |  | 275,500 |
| Interest expense | 15,000 |  | 14,000 |
| Income before income taxes | 276,000 |  | 261,500 |
| Income tax expense | 84,000 |  | 77,000 |
| Net income | R$192,000 |  | R$184,500 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **LARKER TOOL SA**  **Statement of Financial Position**  **December 31** | | | | | | | | | |
| **Assets** |  | | **2017** | | |  | **2016** | | |
| Plant assets (net) | | |  |  | R$600,300 |  |  |  | R$520,300 |
| Current assets | | |  |  |  |  |  |  |  |
| Inventory | | | R$110,950 |  |  |  | R$115,500 |  |  |
| Accounts receivable (net) | | | 105,750 |  |  |  | 102,800 |  |  |
| Short-term investments | | | 69,000 |  |  |  | 50,000 |  |  |
| Cash | | | 60,100 |  | 345,800 |  | 64,200 |  | 332,500 |
| Total assets | | |  |  | R$946,100 |  |  |  | R$852,800 |
|  | | |  |  |  |  |  |  |  |
| **Equity and Liabilities** | |  |  |  | **2017** |  |  |  | **2016** |
| Equity | | |  |  |  |  |  |  |  |
| Share capital—ordinary (R$5 par) | | |  |  | R$300,000 |  |  |  | R$300,000 |
| Retained earnings | | |  |  | 242,600 |  |  |  | 165,400 |
| Total equity | | |  |  | 542,600 |  |  |  | 465,400 |
| Bonds payable | | |  |  | 200,000 |  |  |  | 200,000 |
| Current liabilities | | |  |  |  |  |  |  |  |
| Accounts payable | | |  |  | 160,000 |  |  |  | 145,400 |
| Income taxes payable | | |  |  | 43,500 |  |  |  | 42,000 |
| Total current liabilities | | |  |  | 203,500 |  |  |  | 187,400 |
| Total liabilities | | |  |  | 403,500 |  |  |  | 387,400 |
| Total equity and liabilities | | |  |  | R$946,100 |  |  |  | R$852,800 |

All sales were on account.

***Instructions***

Compute the following ratios for 2017. (Weighted-average ordinary shares in 2017 were 60,000.)

(a) Earnings per share.

(b) Return on ordinary shareholders' equity.

(c) Return on assets.

(d) Current.

(e) Acid-test.

(f) Accounts receivable turnover.

(g) Inventory turnover.

(h) Times interest earned.

(i) Asset turnover.

(j) Debt to total assets.

**P14-3.** *Perform ratio analysis, and evaluate financial position and operating results*.

(LO 5)

Condensed statement of financial position and income statement data for Clarence Limited appear below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CLARENCE LIMITED**  **Statements of Financial Position**  **December 31** | | | | | |
|  | **2017** |  | **2016** |  | **2015** |
| Plant and equipment (net) | £400,000 |  | £370,000 |  | £358,000 |
| Investments | 75,000 |  | 70,000 |  | 45,000 |
| Other current assets | 90,000 |  | 95,000 |  | 64,000 |
| Receivables (net) | 50,000 |  | 45,000 |  | 48,000 |
| Cash | 25,000 |  | 20,000 |  | 18,000 |
|  | £640,000 |  | £600,000 |  | £533,000 |
| Share capital—ordinary, £10 par | £345,000 |  | £315,000 |  | £300,000 |
| Retained earnings | 145,000 |  | 123,000 |  | 113,000 |
| Non-current liabilities | 80,000 |  | 87,000 |  | 50,000 |
| Current liabilities | 70,000 |  | 75,000 |  | 70,000 |
|  | £640,000 |  | £600,000 |  | £533,000 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CLARENCE LIMITED**  **Statements of Financial Position**  **December 31** | | | | |
|  |  | **2017** |  | **2016** |
| Sales revenue |  | £740,000 |  | £700,000 |
| Less: Sales returns and allowances |  | 40,000 |  | 60,000 |
| Net sales |  | 700,000 |  | 640,000 |
| Cost of goods sold |  | 420,000 |  | 400,000 |
| Gross profit |  | 280,000 |  | 240,000 |
| Operating expenses (including income taxes) |  | 236,000 |  | 210,000 |
| Net income |  | £44,000 |  | £30,000 |

Additional information:

1. The market price of Clarence's ordinary shares was £4.00, £5.00, and £7.00 for 2015, 2016, and 2017, respectively.

2. All dividends were paid in cash.

***Instructions***

(a) Compute the following ratios for 2016 and 2017.

1. Profit margin.

2. Asset turnover.

3. Earnings per share. (Weighted-average ordinary shares in 2017 were 32,000 and in 2016 were 31,000.)

4. Price-earnings.

5. Payout.

6. Debt to total assets.

(b) Based on the ratios calculated, discuss briefly the improvement or lack thereof in financial position and operating results from 2016 to 2017 of Clarence Corporation.

**P14-4.** *Compute ratios, and comment on overall liquidity and profitability*.

(LO 5)

Financial information for Ernie Bishop Company is presented below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ERNIE BISHOP COMPANY**  **Statements of Financial Position**  **December 31** | | | | | |
| **Assets** |  | | **2016** |  | **2015** |
| Land | | | €130,000 |  | €130,000 |
| Building and equipment (net) | | | 168,000 |  | 175,000 |
| Prepaid expenses | | | 29,000 |  | 23,000 |
| Inventory | | | 125,000 |  | 135,000 |
| Accounts receivable (net) | | | 98,000 |  | 80,000 |
| Short-term investments | | | 52,000 |  | 40,000 |
| Cash | | | 70,000 |  | 65,000 |
|  | | | €672,000 |  | €648,000 |
|  | | |  |  |  |
| **Equity and Liabilities** | |  |  |  |  |
| Share capital—ordinary, €10 par | | | €200,000 |  | €200,000 |
| Retained earnings | | | 130,000 |  | 116,000 |
| Bonds payable, due 2019 | | | 150,000 |  | 150,000 |
| Notes payable | | | 100,000 |  | 100,000 |
| Accounts payable | | | 48,000 |  | 42,000 |
| Accrued liabilities | | | 44,000 |  | 40,000 |
|  | | | €672,000 |  | €648,000 |

|  |  |  |  |
| --- | --- | --- | --- |
| **ERNIE BISHOP COMPANY**  **Income Statements**  **For the Years Ended December 31** | | | |
|  | **2016** |  | **2015** |
| Net sales | €858,000 |  | €798,000 |
| Cost of goods sold | 611,000 |  | 575,000 |
| Gross profit | 247,000 |  | 223,000 |
| Operating expenses | 204,500 |  | 181,000 |
| Net income | €42,500 |  | €42,000 |

Additional information:

1. Inventory at the beginning of 2015 was €118,000.

2. Total assets at the beginning of 2015 were €632,000.

3. No ordinary share transactions occurred during 2015 or 2016.

4. All sales were on account.

5. Receivables (net) at the beginning of 2015 were €88,000.

6. Notes payable are classified as a current liability.

***Instructions***

(a) Indicate, by using ratios, the change in liquidity and profitability of Ernie Bishop Company from 2015 to 2016. (*Note:* Not all profitability ratios can be computed.)

(b) Given below are three independent situations and a ratio that may be affected. For each situation, compute the affected ratio (1) as of December 31, 2016, and (2) as of December 31, 2017, after giving effect to the situation. Net income for 2017 was €50,000. Total assets on December 31, 2017, were €700,000.

|  |  |  |
| --- | --- | --- |
| **Situation** |  | **Ratio** |
| (1) 18,000 ordinary shares were sold  at par on July 1, 2017. |  | Return on ordinary shareholders' equity |
| (2) All of the notes payable were paid in 2017. The only change in liabilities was that the notes payable were paid. |  | Debt to total assets |
| (3) Market price of ordinary shares was €9  on December 31, 2016, and €12.50 on December 31, 2017. |  | Price-earnings ratio |

**P14-5.** *Compute selected ratios, and compare liquidity, profitability, and solvency for two companies*.

(LO 5)

Selected financial data of Target (USA) and Wal-Mart Stores, Inc. (USA) for a recent year are presented below (in millions).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Target Corporation** | | | | | | | | |  | **Wal-Mart Stores, Inc.** | | | | | | | | |
|  | **Income Statement Data for Year** | | | | | | | | | | | | | | | | | | |
| Net sales | $72,596 | | | | | | | | |  | $476,294 | | | | | | | | |
| Cost of goods sold | 51,160 | | | | | | | | |  | 358,069 | | | | | | | | |
| Selling and administrative expenses | 16,816 | | | | | | | | |  | 91,353 | | | | | | | | |
| Interest expense | 1,126 | | | | | | | | |  | 2,335 | | | | | | | | |
| Other income (expense) | (391) | | | | | | | | |  | (410) | | | | | | | | |
| Income tax expense | 1,132 | | | | | | | | |  | 8,105 | | | | | | | | |
| Net income |  | | | | $1,971 | | | |  |  |  | | | $16,022 | |  | | | |
|  | | | | | | | | | | | | | | | | | | | |
|  | **Statement of Financial Position Data (End of Year)** | | | | | | | | | | | | | | | | | | |
| Non-current assets | $32,980 | | | | | | | | |  | $143,566 | | | | | | | | |
| Current assets | 11,573 | | | | | | | | |  | 61,185 | | | | | | | | |
| Total assets |  | | | $44,553 | | | |  | |  |  | $204,751 | | | | | | |  |
| Total equity | $16,231 | | | | | | | | |  | $81,339 | | | | | | | | |
| Non-current liabilities | 15,545 | | | | | | | | |  | 54,067 | | | | | | | | |
| Current liabilities | 12,777 | | | | | | | | |  | 69,345 | | | | | | | | |
| Total equity and liabilities |  | | $44,553 | | | |  | | |  |  | | $204,751 | | | |  | | |
|  | | | | | | | | | | | | | | | | | | | |
|  |  | **Beginning-of-Year Balances** | | | | | | | | | | | | | | | |  | |
| Total assets | $48,163 | | | | | | | | |  | $203,105 | | | | | | | | |
| Total equity | 16,558 | | | | | | | | |  | 81,738 | | | | | | | | |
| Current liabilities | 14,031 | | | | | | | | |  | 71,818 | | | | | | | | |
| Total liabilities | 31,605 | | | | | | | | |  | 131,287 | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | **Other Data** | | | | | | | | |  | | | | |
| Average net accounts receivable | $2,921 | | | | | | | | |  | $6,723 | | | | | | | | |
| Average inventory | 8,335 | | | | | | | | |  | 44,331 | | | | | | | | |
| Net cash provided by operating activities | 6,520 | | | | | | | | |  | 23,257 | | | | | | | | |

***Instructions***

(a) For each company, compute the following ratios.

1. Current.

2. Accounts receivable turnover.

3. Average collection period.

4. Inventory turnover.

5. Days in inventory.

6. Profit margin.

7. Asset turnover.

8. Return on assets.

9. Return on ordinary shareholders' equity.

10. Debt to total assets.

11. Times interest earned.

(b) Compare the liquidity, profitability, and solvency of the two companies.

**P14-6.** *Compute numerous ratios*.

(LO 5)

The comparative statements of Beulah Company Limited are presented below.

|  |  |  |  |
| --- | --- | --- | --- |
| **BEULAH COMPANY LIMITED**  **Income Statement**  **For the Years Ended December 31** | | | |
|  | **2017** |  | **2016** |
| Net sales (all on account) | £500,000 |  | £420,000 |
| Expenses |  |  |  |
| Cost of goods sold | 315,000 |  | 254,000 |
| Selling and administrative | 120,800 |  | 114,800 |
| Interest expense | 7,500 |  | 6,500 |
| Income tax expense | 20,000 |  | 15,000 |
| Total expenses | 463,300 |  | 390,300 |
| Net income | £36,700 |  | £29,700 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **BEULAH COMPANY LIMITED**  **Statements of Financial Position**  **December 31** | | | | | |
| **Assets** |  | | **2017** |  | **2016** |
| Plant assets (net) | | | £423,000 |  | £383,000 |
| Current assets | | |  |  |  |
| Inventory | | | 80,000 |  | 60,000 |
| Accounts receivable (net) | | | 85,000 |  | 75,000 |
| Short-term investments | | | 18,000 |  | 15,000 |
| Cash | | | 21,000 |  | 18,000 |
| Total current assets | | | 204,000 |  | 168,000 |
| Total assets | | | £627,000 |  | £551,000 |
|  | | |  |  |  |
| **Equity and Liabilities** | |  |  |  |  |
| Equity | | |  |  |  |
| Share capital—ordinary (£5 par) | | | £150,000 |  | £150,000 |
| Retained earnings | | | 223,000 |  | 200,000 |
| Total equity | | | 373,000 |  | 350,000 |
| Non-current liabilities | | |  |  |  |
| Bonds payable | | | 120,000 |  | 80,000 |
| Current liabilities | | |  |  |  |
| Accounts payable | | | 122,000 |  | 110,000 |
| Income taxes payable | | | 12,000 |  | 11,000 |
| Total current liabilities | | | 134,000 |  | 121,000 |
| Total liabilities | | | 254,000 |  | 201,000 |
| Total equity and liabilities | | | £627,000 |  | £551,000 |

Additional data:

The ordinary shares recently sold at £19.50 per share.

***Instructions***

Compute the following ratios for 2017.

(a) Current.

(b) Acid-test.

(c) Accounts receivable turnover.

(d) Inventory turnover.

(e) Profit margin.

(f) Asset turnover.

(g) Return on assets.

(h) Return on ordinary shareholders' equity.

(i) Earnings per share.

(j) Price-earnings.

(k) Payout.

(l) Debt to total assets.

(m) Times interest earned.

**P14-7.** *Compute missing information given a set of ratios*.

(LO 5)

Presented below is an incomplete income statement and incomplete comparative statements of financial position of Bondi ASA.

|  |  |
| --- | --- |
| **BONDI ASA**  **Income Statement**  **For the Year Ended December 31, 2017** | |
| Net sales | €10,500,000 |
| Cost of goods sold | ? |
| Gross profit | ? |
| Operating expenses | 1,500,000 |
| Income from operations | ? |
| Interest expense | ? |
| Income before income taxes | ? |
| Income tax expense | 550,000 |
| Net income | € ? |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **BONDI ASA**  **Statements of Financial Position**  **December 31** | | | | | |
| **Assets** |  | | **2017** |  | **2016** |
| Plant assets (net) | | | €4,620,000 |  | €4,355,000 |
| Current assets | | |  |  |  |
| Inventory | | | ? |  | 1,720,000 |
| Accounts receivable (net) | | | ? |  | 1,050,000 |
| Cash | | | 480,000 |  | 375,000 |
| Total current assets | | | ? |  | 3,145,000 |
| Total assets | | | € ? |  | €7,500,000 |
|  | | |  |  |  |
| **Equity and Liabilities** | |  | **2017** |  | **2016** |
| Share capital—ordinary, €1 par | | | €3,000,000 |  | €3,000,000 |
| Retained earnings | | | 400,000 |  | 375,000 |
| Total equity | | | 3,400,000 |  | 3,375,000 |
| Long-term notes payable | | | ? |  | 3,300,000 |
| Current liabilities | | | ? |  | 825,000 |
| Total liabilities | | | ? |  | 4,125,000 |
| Total equity and liabilities | | | € ? |  | €7,500,000 |

Additional information:

1. The accounts receivable turnover for 2017 is 8 times.

2. All sales are on account.

3. The profit margin for 2017 is 14.5%.

4. Return on assets is 20% for 2017.

5. The current ratio on December 31, 2017, is 2.5.

6. The inventory turnover for 2017 is 4.9 times.

***Instructions***

Compute the missing information given the ratios above. Show computations. (*Note:* Start with one ratio and derive as much information as possible from it before trying another ratio. List all missing amounts under the ratio used to find the information.)

**P14-8.** *Prepare income statement with discontinued operations*.

(LO 6)

Violet Bick SA owns a number of cruise ships and a chain of hotels. The hotels, which have not been profitable, were discontinued on September 1, 2017. The 2017 operating results for the company were as follows.

|  |  |
| --- | --- |
| Operating revenues | €12,900,000 |
| Operating expenses | 8,700,000 |
| Operating income | €4,200,000 |

Analysis discloses that these data include the operating results of the hotel chain, which were operating revenues €2,000,000 and operating expenses €2,500,000. The hotels were sold at a gain of €300,000 before taxes. This gain is not included in the operating results. During the year, the company had other expense of €200,000, which is not included in the operating results. The corporation is in the 30% income tax bracket.

***Instructions***

Prepare a condensed statement of comprehensive income.

**P14-9.** *Prepare income statement with non-typical items*.

(LO 6)

The ledger of Gower Limited at December 31, 2017, contains the following summary data.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Net sales | £1,580,000 |  | Cost of goods sold | £1,100,000 |
| Selling expenses | 70,000 |  | Administrative expenses | 90,000 |
| Other income and expense | (6,000) |  |  |  |

Your analysis reveals the following additional information that is not included in the above data.

1. The entire puzzles division was discontinued on August 31. The income from operations for this division before income taxes was £15,000. The puzzles division was sold at a loss of £74,000 before income taxes.

2. The company had an unrealized gain on non-trading securities of £120,000 before income taxes for the year.

3. The income tax rate on all items is 30%.

***Instructions***

Prepare an income statement for the year ended December 31, 2017. Use the format illustrated in the Practice Problem (page 741).

MATCHA CREATIONS

(*Note*: This is a continuation of the Matcha Creations problem from Chapter 1-13.)

**MC14**Mei-ling and Curtis have comparative statements of financial position and income statements for Matcha & Coffee Creations Inc. They have been told that they can use these financial statements to prepare horizontal and vertical analyses, to calculate financial ratios, to analyze how their business is doing, and to make some decisions they have been considering.

**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

**BYP14-1. Financial Reporting Problem: TSMC, Ltd. (TWN)**

Your parents are considering investing in TSMC ordinary shares. They ask you, as an accounting expert, to make an analysis of the company for them. TSMC's financial statements are presented in Appendix A. The complete annual report, including the notes to the financial statements, is available in the Investor section of the company's website at *www.tsmc.com*.

***Instructions***

(Follow the approach in the chapter for rounding numbers.)

(a) Compute for 2013 and 2012 the (1) profit margin, (2) asset turnover, (3) return on assets, and (4) return on ordinary shareholders' equity. How would you evaluate TSMC's profitability?

(b) Compute for 2013 and 2012 the (1) debt to total assets and (2) times interest earned ratio. How would you evaluate TSMC's long-term solvency?

(c) What information outside the annual report may also be useful to your parents in making a decision about TSMC?

**BYP14-2. Comparative Analysis Problem: Nestlé SA (CHE) vs. Petra Foods Ltd. (SGP)**

Nestlé's financial statements are presented in Appendix B. Financial statements for Petra Foods are presented in Appendix C.

***Instructions***

(a) Based on the information contained in these financial statements, determine each of the following for each company for the most recent fiscal year shown.

1. The percentage increase (decrease) in (i) net sales and (ii) net income.

2. The percentage increase in (i) total assets and (ii) total ordinary shareholders' equity.

(b) What conclusions concerning the two companies can be drawn from these data?

Critical Thinking

**BYP14-3. Decision-Making Across the Organization**

As the chartered public accountant for Bonita Ltd., you have been asked to develop some key ratios from the comparative financial statements. This information is to be used to convince creditors that the company is solvent and will continue as a going concern. The data requested and the computations developed from the financial statements follow.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2017** |  | **2016** |
| Current ratio | 3.4 times |  | 2.1 times |
| Acid-test ratio | .8 times |  | 1.3 times |
| Asset turnover | 2.6 times |  | 2.2 times |
| Net income | Up 32% |  | Down 9% |
| Earnings per share | $3.30 |  | $2.50 |

***Instructions***

With the class divided into groups, complete the following.

Bonita Ltd. asks you to prepare a list of brief comments stating how each of these items supports the solvency and going-concern potential of the business. The company wishes to use these comments to support its presentation of data to its creditors. You are to prepare the comments as requested, giving the implications and the limitations of each item separately. Then prepare a collective inference that may be drawn from the individual items about Bonita's solvency and going-concern potential.

**BYP14-4. Communication Activity**

Kyle Benson is the CEO of McCarty's Electronics. Benson is an expert engineer but a novice in accounting. He asks you to explain (1) the bases for comparison in analyzing McCarty's financial statements, and (2) the factors affecting quality of earnings.

***Instructions***

Write a letter to Kyle Benson that explains the bases for comparison and factors affecting quality of earnings.

**BYP14-5. Ethics Case**

Robert Turnbull, president of Turnbull Industries, wishes to issue a press release to bolster his company's image and maybe even its share price, which has been gradually falling. As controller, you have been asked to provide a list of 20 financial ratios along with some other operating statistics relative to Turnbull Industries' first quarter financials and operations.

Two days after you provide the ratios and data requested, Perry Jarvis, the public relations director of Turnbull, asks you to prove the accuracy of the financial and operating data contained in the press release written by the president and edited by Perry. In the press release, the president highlights the sales increase of 25% over last year's first quarter and the positive change in the current ratio from 1.5:1 last year to 3:1 this year. He also emphasizes that production was up 50% over the prior year's first quarter.

You note that the press release contains only positive or improved ratios and none of the negative or deteriorated ratios. For instance, no mention is made that the debt to total assets ratio has increased from 35% to 55%, that inventories are up 89%, and that while the current ratio improved, the acid-test ratio fell from 1:1 to .5:1. Nor is there any mention that the reported profit for the quarter would have been a loss had not the estimated lives of Turnbull's plant and machinery been increased by 30%. Perry emphasizes, “The prez wants this release by early this afternoon.”

***Instructions***

(a) Who are the stakeholders in this situation?

(b) Is there anything unethical in president Turnbull's actions?

(c) Should you as controller remain silent? Does Perry have any responsibility?

A LOOK at U.S. GAAP

The tools of financial analysis are the same throughout the world. Techniques such as vertical and horizontal analysis, for example, are tools used by analysts regardless of whether GAAP- or IFRS-related financial statements are being evaluated. In addition, the ratios provided in the textbook are the same ones that are used globally.

**Key Points**

* + The tools of financial statement analysis covered in this chapter are universal and therefore no significant differences exist in the analysis methods used.
  + The basic objectives of the income statement are the same under both GAAP and IFRS. As indicated in the textbook, a very important objective is to ensure that users of the income statement can evaluate the earning power of the company. Earning power is the normal level of income to be obtained in the future. Thus, both the IASB and the FASB are interested in distinguishing normal levels of income from irregular items in order to better predict a company's future profitability.
  + The basic accounting for discontinued operations is the same under GAAP and IFRS.
  + The accounting for changes in accounting principles and changes in accounting estimates are the same for both GAAP and IFRS.
  + Both IFRS and GAAP follow the same approach in reporting comprehensive income. The statement of comprehensive income can be prepared under the one-statement approach or the two-statement approach.

Under the one-statement approach, all components of revenue and expense are reported in the income statement. This combined statement of comprehensive income first computes net income or loss, which is then followed by components of other comprehensive income or loss items to arrive at comprehensive income. An example appears below.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Walter Company**  Statement of Comprehensive Income  For the Year Ended December 31, 2017 | |  |
|  | Sales revenue | $5,100,000 |  |
|  | Cost of goods sold | 3,800,000 |  |
|  | Gross profit | 1,300,000 |  |
|  | Operating expenses | 700,000 |  |
|  | Net income | 600,000 |  |
|  | Other comprehensive income |  |  |
|  | Unrealized gain on trading securities | 75,000 |  |
|  | Comprehensive income | $ 675,000 |  |
|  |  |  |  |

Under the two-statement approach, all the components of revenues and expenses are reported in a traditional income statement *except* for other comprehensive income or loss. In addition, a second statement (the statement of comprehensive income) is then prepared, starting with net income and followed by other comprehensive income or loss items to arrive at comprehensive income. An example of the two-statement approach, using the same data as that used above for Walter Company, is as follows.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Walter Company**  Statement of Comprehensive Income  For the Year Ended December 31, 2017 | |  |
|  | Sales revenue | $5,100,000 |  |
|  | Cost of goods sold | 3,800,000 |  |
|  | Gross profit | 1,300,000 |  |
|  | Operating expenses | 700,000 |  |
|  | Net income | 600,000 |  |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Walter Company**  Statement of Comprehensive Income  For the Year Ended December 31, 2017 | |  |
|  | Net income | $ 600,000 |  |
|  | Other comprehensive income |  |  |
|  | Unrealized gain on trading securities | 75,000 |  |
|  | Comprehensive income | $ 675,000 |  |
|  |  |  |  |

* The issues related to quality of earnings are the same under both GAAP and IFRS. It is hoped that by adopting a more principles-based approach, as found in IFRS, many of the earnings quality issues will disappear.

**Looking to the Future**

The FASB and the IASB are working on a project that would rework the structure of financial statements. One part of this project addresses 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, the approach draws attention away from one number—net income.

**GAAP Practice**

**GAAP Self-Test Questions**

**1.** The basic tools of financial analysis are the same under both GAAP and IFRS **except** that:

(a) horizontal analysis cannot be done because the format of the statements is sometimes different.

(b) analysis is different because vertical analysis cannot be done under GAAP.

(c) the current ratio cannot be computed because current liabilities are often reported before current assets in GAAP statements of position.

(d) None of the above.

**Answer**

(d) None of the above.

**2.** Under GAAP:

(a) the reporting of discontinued items is different than IFRS.

(b) the reporting of extraordinary items is prohibited.

(c) the reporting of changes in accounting principles is different than under IFRS.

(d) None of the above.

**Answer**

(d) None of the above.

**3.** Presentation of comprehensive income must be reported under GAAP in:

(a) the statement of stockholders' equity.

(b) the income statement ending with net income.

(c) the notes to the financial statements.

(d) a statement of comprehensive income.

**Answer**

(d) a statement of comprehensive income.

**4.** Parmalane reports the following information:

|  |  |
| --- | --- |
| Sales revenue | $500,000 |
| Cost of goods sold | 200,000 |
| Operating expense | 40,000 |
| Unrealized loss on non-trading securities | 10,000 |

Parmalane should report the following under the two-statement approach using GAAP:

(a) net income of $260,000 and comprehensive income of $270,000.

(b) net income of $270,000 and comprehensive income of $260,000.

(c) other comprehensive income of $10,000 and comprehensive income of $270,000.

(d) other comprehensive loss of $10,000 and comprehensive income of 250,000.

**Answer**

(d) other comprehensive loss of $10,000 and comprehensive income of 250,000.

**5.** Assuming the same information as in Question 4, Parmalane should report the following using a one-statement approach under GAAP:

(a) net income of $260,000 and comprehensive income of $270,000.

(b) net income of $270,000 and comprehensive income of $260,000.

(c) other comprehensive income of $10,000 and comprehensive income of $270,000.

(d) other comprehensive loss of $10,000 and comprehensive income of $250,000.

**Answer**

(d) other comprehensive loss of $10,000 and comprehensive income of $250,000.

**GAAP Exercises**

**GAAP14-1.** Chen Company reports the following information for the year ended December 31, 2017: sales revenue $1,000,000, cost of goods sold $700,000, operating expenses $200,000, and an unrealized gain on non-trading securities of $75,000. Prepare a statement of comprehensive income using the one-statement approach.

**GAAP14-2.** Assume the same information for Chen Company as in GAAP14-1. Prepare the income statement using the two-statement approach.

**GAAP Financial Reporting Problem: Apple Inc.**

**GAAP14-3.** Your parents are considering investing in Apple common stock. They ask you, as an accounting expert, to make an analysis of the company for them. The financial statements and the notes to the financial statements from a recent annual report of Apple are presented at *http://investor.apple.com*..

**Instructions**

(a) Make a 3-year trend analysis, using 2011 as the base year, of (1) net sales and (2) net earnings. Comment on the significance of the trend results.

(b) Compute for 2013 and 2012 the (1) debt to total assets ratio and (2) times interest earned ratio. (See Note 6 for interest expense.) How would you evaluate Apple's long-term solvency?

(c) Compute for 2013 and 2012 the (1) profit margin, (2) asset turnover, (3) return on assets, and (4) return on common stockholders' equity. How would you evaluate Apple's profitability? Total assets at September 24, 2011, were $116,371 million, and total stockholders' equity at September 24, 2011, was $76,615 million.

(d) What information outside the annual report may also be useful to your parents in making a decision about Apple?