

Financial Statement Analysis

PRACTICE PROBLEMS

- Expenses on the income statement may be grouped by:
 - nature, but not by function.
 - function, but not by nature.
 - either function or nature.
- An example of an expense classification by function is:
 - tax expense.
 - interest expense.
 - cost of goods sold.

- Denali Limited, a manufacturing company, had the following income statement information:

Revenue	\$4,000,000
Cost of goods sold	\$3,000,000
Other operating expenses	\$500,000
Interest expense	\$100,000
Tax expense	\$120,000

Denali's gross profit is equal to:

- \$280,000.
 - \$500,000.
 - \$1,000,000.
- Under IFRS, income includes increases in economic benefits from:
 - increases in liabilities not related to owners' contributions.
 - enhancements of assets not related to owners' contributions.
 - increases in owners' equity related to owners' contributions.
 - Fairplay had the following information related to the sale of its products during 2009, which was its first year of business:

Revenue	\$1,000,000
Returns of goods sold	\$100,000
Cash collected	\$800,000
Cost of goods sold	\$700,000

Under the accrual basis of accounting, how much net revenue would be reported on Fairplay's 2009 income statement?

- \$200,000.
- \$900,000.

C. \$1,000,000.

6. Apex Consignment sells items over the internet for individuals on a consignment basis. Apex receives the items from the owner, lists them for sale on the internet, and receives a 25 percent commission for any items sold. Apex collects the full amount from the buyer and pays the net amount after commission to the owner. Unsold items are returned to the owner after 90 days. During 2009, Apex had the following information:

- Total sales price of items sold during 2009 on consignment was €2,000,000.
- Total commissions retained by Apex during 2009 for these items was €500,000.

How much revenue should Apex report on its 2009 income statement?

- A. €500,000.
- B. €2,000,000.
- C. €1,500,000.

7. A company previously expensed the incremental costs of obtaining a contract. All else being equal, adopting the May 2014 IASB and FASB converged accounting standards on revenue recognition makes the company's profitability initially appear:

- A. lower.
- B. unchanged.
- C. higher.

8. During 2009, Accent Toys Plc., which began business in October of that year, purchased 10,000 units of a toy at a cost of £10 per unit in October. The toy sold well in October. In anticipation of heavy December sales, Accent purchased 5,000 additional units in November at a cost of £11 per unit. During 2009, Accent sold 12,000 units at a price of £15 per unit. Under the first in, first out (FIFO) method, what is Accent's cost of goods sold for 2009?

- A. £120,000.
- B. £122,000.
- C. £124,000.

9. Using the same information as in the previous question, what would Accent's cost of goods sold be under the weighted average cost method?

- A. £120,000.
- B. £122,000.
- C. £124,000.

10. Which inventory method is least likely to be used under IFRS?

- A. First in, first out (FIFO).
- B. Last in, first out (LIFO).
- C. Weighted average.

11. At the beginning of 2009, Glass Manufacturing purchased a new machine for its assembly line at a cost of \$600,000. The machine has an estimated useful life of 10 years and estimated residual value of \$50,000. Under the straight-line method, how much depreciation would Glass take in 2010 for financial reporting purposes?
- A. \$55,000.
 - B. \$60,000.
 - C. \$65,000.
12. Using the same information as in Question 11, how much depreciation would Glass take in 2009 for financial reporting purposes under the double-declining balance method?
- A. \$60,000.
 - B. \$110,000.
 - C. \$120,000.
13. Which combination of depreciation methods and useful lives is most conservative in the year a depreciable asset is acquired?
- A. Straight-line depreciation with a short useful life.
 - B. Declining balance depreciation with a long useful life.
 - C. Declining balance depreciation with a short useful life.
14. Under IFRS, a loss from the destruction of property in a fire would most likely be classified as:
- A. continuing operations.
 - B. discontinued operations.
 - C. other comprehensive income.
15. A company chooses to change an accounting policy. This change requires that, if practical, the company restate its financial statements for:
- A. all prior periods.
 - B. current and future periods.
 - C. prior periods shown in a report.
16. For 2009, Flamingo Products had net income of \$1,000,000. At 1 January 2009, there were 1,000,000 shares outstanding. On 1 July 2009, the company issued 100,000 new shares for \$20 per share. The company paid \$200,000 in dividends to common shareholders. What is Flamingo's basic earnings per share for 2009?
- A. \$0.80.
 - B. \$0.91.
 - C. \$0.95.
17. A company with no debt or convertible securities issued publicly traded common

stock three times during the current fiscal year. Under both IFRS and US GAAP, the company's:

- A. basic EPS equals its diluted EPS.
 - B. capital structure is considered complex at year-end.
 - C. basic EPS is calculated by using a simple average number of shares outstanding.
18. For its fiscal year-end, Sublyme Corporation reported net income of \$200 million and a weighted average of 50,000,000 common shares outstanding. There are 2,000,000 convertible preferred shares outstanding that paid an annual dividend of \$5. Each preferred share is convertible into two shares of the common stock. The diluted EPS is *closest to*:
- A. \$3.52.
 - B. \$3.65.
 - C. \$3.70.
19. For its fiscal year-end, Calvin Water Corporation (CWC) reported net income of \$12 million and a weighted average of 2,000,000 common shares outstanding. The company paid \$800,000 in preferred dividends and had 100,000 options outstanding with an average exercise price of \$20. CWC's market price over the year averaged \$25 per share. CWC's diluted EPS is *closest to*:
- A. \$5.33.
 - B. \$5.54.
 - C. \$5.94.
20. Laurelli Builders (LB) reported the following financial data for year-end 31 December:
- | | |
|--|-------------|
| Common shares outstanding, 1 January | 2,020,000 |
| Common shares issued as stock dividend, 1 June | 380,000 |
| Warrants outstanding, 1 January | 500,000 |
| Net income | \$3,350,000 |
| Preferred stock dividends paid | \$430,000 |
| Common stock dividends paid | \$240,000 |
- Which statement about the calculation of LB's EPS is *most* accurate?
- A. LB's basic EPS is \$1.12.
 - B. LB's diluted EPS is equal to or less than its basic EPS.
 - C. The weighted average number of shares outstanding is 2,210,000.
21. Cell Services Inc. (CSI) had 1,000,000 average shares outstanding during all of 2009. During 2009, CSI also had 10,000 options outstanding with exercise prices of \$10 each. The average stock price of CSI during 2009 was \$15. For purposes of computing diluted earnings per share, how many shares would be used in the denominator?
- A. 1,003,333.

- B. 1,006,667.
- C. 1,010,000.
22. When calculating diluted EPS, which of the following securities in the capital structure increases the weighted average number of common shares outstanding without affecting net income available to common shareholders?
- A. Stock options
- B. Convertible debt that is dilutive
- C. Convertible preferred stock that is dilutive
23. Which statement is *most* accurate? A common size income statement:
- A. restates each line item of the income statement as a percentage of net income.
- B. allows an analyst to conduct cross-sectional analysis by removing the effect of company size.
- C. standardizes each line item of the income statement but fails to help an analyst identify differences in companies' strategies.
24. Selected year-end financial statement data for Workhard are shown below.

	\$ millions
Beginning shareholders' equity	475
Ending shareholders' equity	493
Unrealized gain on available-for-sale securities	5
Unrealized loss on derivatives accounted for as hedges	-3
Foreign currency translation gain on consolidation	2
Dividends paid	1
Net income	15

- Workhard's comprehensive income for the year:
- A. is \$18 million.
- B. is increased by the derivatives accounted for as hedges.
- C. includes \$4 million in other comprehensive income.
25. When preparing an income statement, which of the following items would *most likely* be classified as other comprehensive income?
- A. A foreign currency translation adjustment
- B. An unrealized gain on a security held for trading purposes
- C. A realized gain on a derivative contract not accounted for as a hedge

PRACTICE PROBLEMS

1. Resources controlled by a company as a result of past events are:
 - A. equity.
 - B. assets.
 - C. liabilities.
2. Equity equals:
 - A. Assets – Liabilities.
 - B. Liabilities – Assets.
 - C. Assets + Liabilities.
3. Shareholders' equity reported on the balance sheet is *most likely* to differ from the market value of shareholders' equity because:
 - A. historical cost basis is used for all assets and liabilities.
 - B. some factors that affect the generation of future cash flows are excluded.
 - C. shareholders' equity reported on the balance sheet is updated continuously.
4. The information provided by a balance sheet item is limited because of uncertainty regarding:
 - A. measurement of its cost or value with reliability.
 - B. the change in current value following the end of the reporting period.
 - C. the probability that any future economic benefit will flow to or from the entity.
5. Distinguishing between current and non-current items on the balance sheet and presenting a subtotal for current assets and liabilities is referred to as:
 - A. a classified balance sheet.
 - B. an unclassified balance sheet.
 - C. a liquidity-based balance sheet.
6. The *most likely* company to use a liquidity-based balance sheet presentation is a:
 - A. bank.
 - B. computer manufacturer holding inventories.
 - C. software company with trade receivables and payables.
7. An example of a contra asset account is:
 - A. depreciation expense.
 - B. sales returns and allowances.

- C. allowance for doubtful accounts.
8. The carrying value of inventories reflects:
- A. their historical cost.
 - B. their current value.
 - C. the lower of historical cost or net realizable value.
9. When a company pays its rent in advance, its balance sheet will reflect a reduction in:
- A. assets and liabilities.
 - B. assets and shareholders' equity.
 - C. one category of assets and an increase in another.
10. Which of the following is *most likely* classified as a current liability?
- A. Payment received for a product due to be delivered at least one year after the balance sheet date
 - B. Payments for merchandise due at least one year after the balance sheet date but still within a normal operating cycle
 - C. Payment on debt due in six months for which the company has the unconditional right to defer settlement for at least one year after the balance sheet date
11. Money received from customers for products to be delivered in the future is recorded as:
- A. revenue and an asset.
 - B. an asset and a liability.
 - C. revenue and a liability.
12. Accrued expenses (accrued liabilities) are:
- A. expenses that have been paid.
 - B. created when another liability is reduced.
 - C. expenses that have been reported on the income statement but not yet paid.
13. The *most likely* costs included in both the cost of inventory and property, plant, and equipment are:
- A. selling costs.
 - B. storage costs.
 - C. delivery costs.
14. All of the following are current assets *except*:
- A. cash.

- B. goodwill.
 - C. inventories.
15. The initial measurement of goodwill is *most likely* affected by:
- A. an acquisition's purchase price.
 - B. the acquired company's book value.
 - C. the fair value of the acquirer's assets and liabilities.
16. For financial assets classified as trading securities, how are unrealized gains and losses reflected in shareholders' equity?
- A. They are not recognized.
 - B. They flow through income into retained earnings.
 - C. They are a component of accumulated other comprehensive income.
17. For financial assets classified as available for sale, how are unrealized gains and losses reflected in shareholders' equity?
- A. They are not recognized.
 - B. They flow through retained earnings.
 - C. They are a component of accumulated other comprehensive income.
18. For financial assets classified as held to maturity, how are unrealized gains and losses reflected in shareholders' equity?
- A. They are not recognized.
 - B. They flow through retained earnings.
 - C. They are a component of accumulated other comprehensive income.
19. Debt due within one year is considered:
- A. current.
 - B. preferred.
 - C. convertible.
20. The non-controlling (minority) interest in consolidated subsidiaries is presented on the balance sheet:
- A. as a long-term liability.
 - B. separately, but as a part of shareholders' equity.
 - C. as a mezzanine item between liabilities and shareholders' equity.
21. The item "retained earnings" is a component of:
- A. assets.
 - B. liabilities.

- C. shareholders' equity.
22. When a company buys shares of its own stock to be held in treasury, it records a reduction in:
- A. both assets and liabilities.
 - B. both assets and shareholders' equity.
 - C. assets and an increase in shareholders' equity.
23. A company has total liabilities of £35 million and total stockholders' equity of £55 million. Total liabilities are represented on a vertical common-size balance sheet by a percentage *closest* to:
- A. 35%.
 - B. 39%.
 - C. 64%.
24. Which of the following would an analyst *most likely* be able to determine from a common-size analysis of a company's balance sheet over several periods?
- A. An increase or decrease in sales.
 - B. An increase or decrease in financial leverage.
 - C. A more efficient or less efficient use of assets.
25. Defining total asset turnover as revenue divided by average total assets, all else equal, impairment write-downs of long-lived assets owned by a company will *most likely* result in an increase for that company in:
- A. the debt-to-equity ratio but not the total asset turnover.
 - B. the total asset turnover but not the debt-to-equity ratio.
 - C. both the debt-to-equity ratio and the total asset turnover.
26. An investor concerned whether a company can meet its near-term obligations is *most likely* to calculate the:
- A. current ratio.
 - B. return on total capital.
 - C. financial leverage ratio.
27. The most stringent test of a company's liquidity is its:
- A. cash ratio.
 - B. quick ratio.
 - C. current ratio.
28. An investor worried about a company's long-term solvency would *most likely* examine its:
- A. current ratio.

- B. return on equity.
- C. debt-to-equity ratio.
29. Using the information presented in Exhibit 4 of the reading, the quick ratio for SAP Group at 31 December 2017 is *closest* to:
- A. 1.00.
- B. 1.07.
- C. 1.17.
30. Using the information presented in Exhibit 14 of the reading, the financial leverage ratio for SAP Group at 31 December 2017 is *closest* to:
- A. 1.50.
- B. 1.66.
- C. 2.00.

The following information relates to questions 31-34

Exhibit 1: Common-Size Balance Sheets for Company A, Company B, and Sector Average

	Company A	Company B	Sector Average
ASSETS			
Current assets			
Cash and cash equivalents	5	5	7
Marketable securities	5	0	2
Accounts receivable, net	5	15	12
Inventories	15	20	16
Prepaid expenses	5	15	11
Total current assets	35	55	48
Property, plant, and equipment, net	40	35	37
Goodwill	25	0	8
Other assets	0	10	7
Total assets	100	100	100
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities			
Accounts payable	10	10	10
Short-term debt	25	10	15
Accrued expenses	0	5	3

LIABILITIES AND SHAREHOLDERS' EQUITY

Total current liabilities	35	25	28
Long-term debt	45	20	28
Other non-current liabilities	0	10	7
Total liabilities	80	55	63
Total shareholders' equity	20	45	37
Total liabilities and shareholders' equity	100	100	100

31. Based on Exhibit 1, which statement is *most likely* correct?
- A. Company A has below-average liquidity risk.
 - B. Company B has above-average solvency risk.
 - C. Company A has made one or more acquisitions.
32. The quick ratio for Company A is *closest* to:
- A. 0.43.
 - B. 0.57.
 - C. 1.00.
33. Based on Exhibit 1, the financial leverage ratio for Company B is *closest* to:
- A. 0.55.
 - B. 1.22.
 - C. 2.22.
34. Based on Exhibit 1, which ratio indicates lower liquidity risk for Company A compared with Company B?
- A. Cash ratio
 - B. Quick ratio
 - C. Current ratio

PRACTICE PROBLEMS

1. The three major classifications of activities in a cash flow statement are:
 - A. inflows, outflows, and net flows.
 - B. operating, investing, and financing.
 - C. revenues, expenses, and net income.
2. The sale of a building for cash would be classified as what type of activity on the cash flow statement?
 - A. Operating.
 - B. Investing.
 - C. Financing.
3. Under which section of a manufacturing company's cash flow statement are the following activities reported?

Item 1: Purchases of securities held for trading

Item 2: Purchases of securities held for investment

 - A. Both items are investing activities.
 - B. Only Item 1 is an operating activity.
 - C. Only Item 2 is an operating activity.
4. A conversion of a face value \$1 million convertible bond for \$1 million of common stock would most likely be:
 - A. reported as a \$1 million investing cash inflow and outflow.
 - B. reported as a \$1 million financing cash outflow and inflow.
 - C. reported as supplementary information to the cash flow statement.
5. A company recently engaged in a non-cash transaction that significantly affected its property, plant, and equipment. The transaction is:
 - A. reported under the investing section of the cash flow statement.
 - B. reported differently in cash flow from operations under the direct and indirect methods.
 - C. disclosed as a separate note or in a supplementary schedule to the cash flow statement.
6. Which of the following is an example of a financing activity on the cash flow statement under US GAAP?
 - A. Payment of interest.
 - B. Receipt of dividends.

- C. Payment of dividends.
7. Interest paid is classified as an operating cash flow under:
- A. US GAAP but may be classified as either operating or investing cash flows under IFRS.
 - B. IFRS but may be classified as either operating or investing cash flows under US GAAP.
 - C. US GAAP but may be classified as either operating or financing cash flows under IFRS.
8. Cash flows from taxes on income must be separately disclosed under:
- A. IFRS only.
 - B. US GAAP only.
 - C. both IFRS and US GAAP.
9. A benefit of using the direct method rather than the indirect method when reporting operating cash flows is that the direct method:
- A. mirrors a forecasting approach.
 - B. is easier and less costly.
 - C. provides specific information on the sources of operating cash flows.
10. Which of the following is *most likely* to appear in the operating section of a cash flow statement under the indirect method?
- A. Net income.
 - B. Cash paid to suppliers.
 - C. Cash received from customers.
11. Which of the following components of the cash flow statement may be prepared under the indirect method under both IFRS and US GAAP?
- A. Operating.
 - B. Investing.
 - C. Financing.
12. Mabel Corporation (MC) reported accounts receivable of \$66 million at the end of its second fiscal quarter. MC had revenues of \$72 million for its third fiscal quarter and reported accounts receivable of \$55 million at the end of its third fiscal quarter. Based on this information, the amount of cash MC collected from customers during the third fiscal quarter is:
- A. \$61 million.
 - B. \$72 million.
 - C. \$83 million.
13. Red Road Company, a consulting company, reported total revenues of \$100

million, total expenses of \$80 million, and net income of \$20 million in the most recent year. If accounts receivable increased by \$10 million, how much cash did the company receive from customers?

- A. \$90 million.
- B. \$100 million.
- C. \$110 million.

14. In 2018, a company using US GAAP made cash payments of \$6 million for salaries, \$2 million for interest expense, and \$4 million for income taxes. Additional information for the company is provided in the table:

(\$ millions)	2017	2018
Revenue	42	37
Cost of goods sold	18	16
Inventory	36	40
Accounts receivable	22	19
Accounts payable	14	12

Based only on the information given, the company's operating cash flow for 2018 is *closest to*:

- A. \$6 million.
 - B. \$10 million.
 - C. \$14 million.
15. Green Glory Corp., a garden supply wholesaler, reported cost of goods sold for the year of \$80 million. Total assets increased by \$55 million, including an increase of \$5 million in inventory. Total liabilities increased by \$45 million, including an increase of \$2 million in accounts payable. The cash paid by the company to its suppliers is most likely *closest to*:
- A. \$73 million.
 - B. \$77 million.
 - C. \$83 million.
16. Purple Fleur S.A., a retailer of floral products, reported cost of goods sold for the year of \$75 million. Total assets increased by \$55 million, but inventory declined by \$6 million. Total liabilities increased by \$45 million, and accounts payable increased by \$2 million. The cash paid by the company to its suppliers is most likely *closest to*:
- A. \$67 million.
 - B. \$79 million.
 - C. \$83 million.
17. White Flag, a women's clothing manufacturer, reported salaries expense of \$20 million. The beginning balance of salaries payable was \$3 million, and the ending balance of salaries payable was \$1 million. How much cash did the company pay

in salaries?

- A. \$18 million.
- B. \$21 million.
- C. \$22 million.

18. An analyst gathered the following information from a company's 2018 financial statements (in \$ millions):

Year ended 31 December	2017	2018
Net sales	245.8	254.6
Cost of goods sold	168.3	175.9
Accounts receivable	73.2	68.3
Inventory	39.0	47.8
Accounts payable	20.3	22.9

Based only on the information above, the company's 2018 statement of cash flows in the direct format would include amounts (in \$ millions) for cash received from customers and cash paid to suppliers, respectively, that are *closest* to:

	cash received from customers	cash paid to suppliers
A	249.7	169.7
B	259.5	174.5
C	259.5	182.1

19. Golden Cumulus Corp., a commodities trading company, reported interest expense of \$19 million and taxes of \$6 million. Interest payable increased by \$3 million, and taxes payable decreased by \$4 million over the period. How much cash did the company pay for interest and taxes?

- A. \$22 million for interest and \$10 million for taxes.
- B. \$16 million for interest and \$2 million for taxes.
- C. \$16 million for interest and \$10 million for taxes.

20. The following information is extracted from Sweetfall Incorporated's financial statements.

Income Statement		Balance Sheet Changes	
Revenue	\$56,800	Decrease in accounts receivable	\$1,324
Cost of goods sold	27,264	Decrease in inventory	501
Other operating expense	562	Increase in prepaid expense	6
Depreciation expense	2,500	Increase in accounts payable	1,063

The amount of cash Sweetfall Inc. paid to suppliers is:

- A. \$25,700.
- B. \$26,702.
- C. \$27,826.

21. Silverago Incorporated, an international metals company, reported a loss on the sale of equipment of \$2 million in 2018. In addition, the company's income statement shows depreciation expense of \$8 million and the cash flow statement shows capital expenditure of \$10 million, all of which was for the purchase of new equipment. Using the following information from the comparative balance sheets, how much cash did the company receive from the equipment sale?

Balance Sheet Item	12/31/2017	12/31/2018	Change
Equipment	\$100 million	\$105 million	\$5 million
Accumulated depreciation—equipment	\$40 million	\$46 million	\$6 million

- A. \$1 million.
- B. \$2 million.
- C. \$3 million.
22. Jaderong Plinkett Stores reported net income of \$25 million. The company has no outstanding debt. Using the following information from the comparative balance sheets (in millions), what should the company report in the financing section of the statement of cash flows in 2018?

Balance Sheet Item	12/31/2017	12/31/2018	Change
Common stock	\$100	\$102	\$2
Additional paid-in capital common stock	\$100	\$140	\$40
Retained earnings	\$100	\$115	\$15
Total stockholders' equity	\$300	\$357	\$57

- A. Issuance of common stock of \$42 million; dividends paid of \$10 million.
- B. Issuance of common stock of \$38 million; dividends paid of \$10 million.
- C. Issuance of common stock of \$42 million; dividends paid of \$40 million.
23. When computing net cash flow from operating activities using the indirect method, an addition to net income is *most likely* to occur when there is a:
- A. gain on the sale of an asset.
- B. loss on the retirement of debt.
- C. decrease in a deferred tax liability.
24. An analyst gathered the following information from a company's 2018 financial statements (in \$ millions):

Balances as of Year Ended 31 December	2017	2018
Retained earnings	120	145
Accounts receivable	38	43
Inventory	45	48
Accounts payable	36	29

In 2018, the company declared and paid cash dividends of \$10 million and recorded depreciation expense in the amount of \$25 million. The company considers dividends paid a financing activity. The company's 2018 cash flow from operations (in \$ millions) was *closest* to

- A. 25.
- B. 45.
- C. 75.

25. Based on the following information for Star Inc., what are the total net adjustments that the company would make to net income in order to derive operating cash flow?

Year Ended			
Income Statement Item	12/31/2018		
Net income	\$20 million		
Depreciation	\$2 million		
Balance Sheet Item	12/31/2017	12/31/2018	Change
Accounts receivable	\$25 million	\$22 million	(\$3 million)
Inventory	\$10 million	\$14 million	\$4 million
Accounts payable	\$8 million	\$13 million	\$5 million

- A. Add \$2 million.
 - B. Add \$6 million.
 - C. Subtract \$6 million.
26. The first step in cash flow statement analysis should be to:
- A. evaluate consistency of cash flows.
 - B. determine operating cash flow drivers.
 - C. identify the major sources and uses of cash.
27. Which of the following would be valid conclusions from an analysis of the cash flow statement for Telefónica Group presented in Exhibit 3?
- A. The primary use of cash is financing activities.
 - B. The primary source of cash is operating activities.
 - C. Telefónica classifies dividends paid as an operating activity.
28. Which is an appropriate method of preparing a common-size cash flow statement?
- A. Show each item of revenue and expense as a percentage of net revenue.
 - B. Show each line item on the cash flow statement as a percentage of net revenue.

- C.** Show each line item on the cash flow statement as a percentage of total cash outflows.
- 29. Which of the following is an appropriate method of computing free cash flow to the firm?
 - A.** Add operating cash flows to capital expenditures and deduct after-tax interest payments.
 - B.** Add operating cash flows to after-tax interest payments and deduct capital expenditures.
 - C.** Deduct both after-tax interest payments and capital expenditures from operating cash flows.
- 30. An analyst has calculated a ratio using as the numerator the sum of operating cash flow, interest, and taxes and as the denominator the amount of interest. What is this ratio, what does it measure, and what does it indicate?
 - A.** This ratio is an interest coverage ratio, measuring a company's ability to meet its interest obligations and indicating a company's solvency.
 - B.** This ratio is an effective tax ratio, measuring the amount of a company's operating cash flow used for taxes and indicating a company's efficiency in tax management.
 - C.** This ratio is an operating profitability ratio, measuring the operating cash flow generated accounting for taxes and interest and indicating a company's liquidity.

PRACTICE PROBLEMS

- Comparison of a company's financial results to other peer companies for the same time period is called:
 - technical analysis.
 - time-series analysis.
 - cross-sectional analysis.
- An analyst observes a decrease in a company's inventory turnover. Which of the following would *most likely* explain this trend?
 - The company installed a new inventory management system, allowing more efficient inventory management.
 - Due to problems with obsolescent inventory last year, the company wrote off a large amount of its inventory at the beginning of the period.
 - The company installed a new inventory management system but experienced some operational difficulties resulting in duplicate orders being placed with suppliers.
- Which of the following would *best* explain an increase in receivables turnover?
 - The company adopted new credit policies last year and began offering credit to customers with weak credit histories.
 - Due to problems with an error in its old credit scoring system, the company had accumulated a substantial amount of uncollectible accounts and wrote off a large amount of its receivables.
 - To match the terms offered by its closest competitor, the company adopted new payment terms now requiring net payment within 30 days rather than 15 days, which had been its previous requirement.
- Brown Corporation had average days of sales outstanding of 19 days in the most recent fiscal year. Brown wants to improve its credit policies and collection practices and decrease its collection period in the next fiscal year to match the industry average of 15 days. Credit sales in the most recent fiscal year were \$300 million, and Brown expects credit sales to increase to \$390 million in the next fiscal year. To achieve Brown's goal of decreasing the collection period, the change in the average accounts receivable balance that must occur is *closest* to:
 - +\$0.41 million.
 - −\$0.41 million.
 - −\$1.22 million.
- An analyst is interested in assessing both the efficiency and liquidity of Spherion PLC. The analyst has collected the following data for Spherion:

	FY3	FY2	FY1
Days of inventory on hand	32	34	40

	FY3	FY2	FY1
Days sales outstanding	28	25	23
Number of days of payables	40	35	35

Based on this data, what is the analyst *least likely* to conclude?

- A. Inventory management has contributed to improved liquidity.
 - B. Management of payables has contributed to improved liquidity.
 - C. Management of receivables has contributed to improved liquidity.
6. In order to assess a company's ability to fulfill its long-term obligations, an analyst would *most likely* examine:
- A. activity ratios.
 - B. liquidity ratios.
 - C. solvency ratios.
7. An analyst is evaluating the solvency and liquidity of Apex Manufacturing and has collected the following data (in millions of euro):

	FY5 (€)	FY4 (€)	FY3 (€)
Total debt	2,000	1,900	1,750
Total equity	4,000	4,500	5,000

Which of the following would be the analyst's *most likely* conclusion?

- A. The company is becoming increasingly less solvent, as evidenced by the increase in its debt-to-equity ratio from 0.35 to 0.50 from FY3 to FY5.
 - B. The company is becoming less liquid, as evidenced by the increase in its debt-to-equity ratio from 0.35 to 0.50 from FY3 to FY5.
 - C. The company is becoming increasingly more liquid, as evidenced by the increase in its debt-to-equity ratio from 0.35 to 0.50 from FY3 to FY5.
8. With regard to the data in Problem 6, what would be the *most* reasonable explanation of the financial data?
- A. The decline in the company's equity results from a decline in the market value of this company's common shares.
 - B. The €250 increase in the company's debt from FY3 to FY5 indicates that lenders are viewing the company as increasingly creditworthy.
 - C. The decline in the company's equity indicates that the company may be incurring losses, paying dividends greater than income, and/or repurchasing shares.
9. An analyst observes the following data for two companies:

	Company A (\$)	Company B (\$)
Revenue	4,500	6,000

	Company A (\$)	Company B (\$)
Net income	50	1,000
Current assets	40,000	60,000
Total assets	100,000	700,000
Current liabilities	10,000	50,000
Total debt	60,000	150,000
Shareholders' equity	30,000	500,000

Which of the following choices *best* describes reasonable conclusions that the analyst might make about the two companies' ability to pay their current and long-term obligations?

- A. Company A's current ratio of 4.0 indicates it is more liquid than Company B, whose current ratio is only 1.2, but Company B is more solvent, as indicated by its lower debt-to-equity ratio.
 - B. Company A's current ratio of 0.25 indicates it is less liquid than Company B, whose current ratio is 0.83, and Company A is also less solvent, as indicated by a debt-to-equity ratio of 200 percent compared with Company B's debt-to-equity ratio of only 30 percent.
 - C. Company A's current ratio of 4.0 indicates it is more liquid than Company B, whose current ratio is only 1.2, and Company A is also more solvent, as indicated by a debt-to-equity ratio of 200 percent compared with Company B's debt-to-equity ratio of only 30 percent.
10. Which ratio would a company *most likely* use to measure its ability to meet short-term obligations?
- A. Current ratio.
 - B. Payables turnover.
 - C. Gross profit margin.
11. Which of the following ratios would be *most* useful in determining a company's ability to cover its lease and interest payments?
- A. ROA.
 - B. Total asset turnover.
 - C. Fixed charge coverage.
12. Assuming no changes in other variables, which of the following would decrease ROA?
- A. A decrease in the effective tax rate.
 - B. A decrease in interest expense.
 - C. An increase in average assets.

The following information relates to questions 13-16

The data in Exhibit 1 appear in the five-year summary of a major international company. A business combination with another major manufacturer took place in FY13.

Exhibit 1

	FY10	FY11	FY12	FY13	FY14
Financial statements	GBP m	GBP m	GBP m	GBP m	GBP m
Income statements					
Revenue	4,390	3,624	3,717	8,167	11,366
Profit before interest and taxation (EBIT)	844	700	704	933	1,579
Net interest payable	-80	-54	-98	-163	-188
Taxation	-186	-195	-208	-349	-579
Minorities	-94	-99	-105	-125	-167
Profit for the year	484	352	293	296	645
Balance sheets					
Fixed assets	3,510	3,667	4,758	10,431	11,483
Current asset investments, cash at bank and in hand	316	218	290	561	682
Other current assets	558	514	643	1,258	1,634
Total assets	4,384	4,399	5,691	12,250	13,799
Interest bearing debt (long term)	-602	-1,053	-1,535	-3,523	-3,707
Other creditors and provisions (current)	-1,223	-1,054	-1,102	-2,377	-3,108
Total liabilities	-1,825	-2,107	-2,637	-5,900	-6,815
Net assets	2,559	2,292	3,054	6,350	6,984
Shareholders' funds	2,161	2,006	2,309	5,572	6,165
Equity minority interests	398	286	745	778	819
Capital employed	2,559	2,292	3,054	6,350	6,984
Cash flow					
Working capital movements	-53	5	71	85	107
Net cash inflow from operating activities	864	859	975	1,568	2,292

13. The company's total assets at year-end FY9 were GBP 3,500 million. Which of the following choices *best* describes reasonable conclusions an analyst might make about the company's efficiency?

- A. Comparing FY14 with FY10, the company's efficiency improved, as indicated by a total asset turnover ratio of 0.86 compared with 0.64.
- B. Comparing FY14 with FY10, the company's efficiency deteriorated, as indicated by its current ratio.
- C. Comparing FY14 with FY10, the company's efficiency deteriorated due to asset growth faster than turnover revenue growth.

14. Which of the following choices *best* describes reasonable conclusions an analyst might make about the company's solvency?
- A. Comparing FY14 with FY10, the company's solvency improved, as indicated by an increase in its debt-to-assets ratio from 0.14 to 0.27.
 - B. Comparing FY14 with FY10, the company's solvency deteriorated, as indicated by a decrease in interest coverage from 10.6 to 8.4.
 - C. Comparing FY14 with FY10, the company's solvency improved, as indicated by the growth in its profits to GBP 645 million.
15. Which of the following choices *best* describes reasonable conclusions an analyst might make about the company's liquidity?
- A. Comparing FY14 with FY10, the company's liquidity improved, as indicated by an increase in its debt-to-assets ratio from 0.14 to 0.27.
 - B. Comparing FY14 with FY10, the company's liquidity deteriorated, as indicated by a decrease in interest coverage from 10.6 to 8.4.
 - C. Comparing FY14 with FY10, the company's liquidity improved, as indicated by an increase in its current ratio from 0.71 to 0.75.
16. Which of the following choices *best* describes reasonable conclusions an analyst might make about the company's profitability?
- A. Comparing FY14 with FY10, the company's profitability improved, as indicated by an increase in its debt-to-assets ratio from 0.14 to 0.27.
 - B. Comparing FY14 with FY10, the company's profitability deteriorated, as indicated by a decrease in its net profit margin from 11.0 percent to 5.7 percent.
 - C. Comparing FY14 with FY10, the company's profitability improved, as indicated by the growth in its shareholders' equity to GBP 6,165 million.

17. An analyst compiles the following data for a company:

	FY13	FY14	FY15
ROE	19.8%	20.0%	22.0%
Return on total assets	8.1%	8.0%	7.9%
Total asset turnover	2.0	2.0	2.1

Based only on the information above, the *most* appropriate conclusion is that, over the period FY13 to FY15, the company's:

- A. net profit margin and financial leverage have decreased.
- B. net profit margin and financial leverage have increased.
- C. net profit margin has decreased but its financial leverage has increased.

18. A decomposition of ROE for Integra SA is as follows:

	FY12	FY11
ROE	18.90%	18.90%

	FY12	FY11
Tax burden	0.70	0.75
Interest burden	0.90	0.90
EBIT margin	10.00%	10.00%
Asset turnover	1.50	1.40
Leverage	2.00	2.00

Which of the following choices *best* describes reasonable conclusions an analyst might make based on this ROE decomposition?

- A. Profitability and the liquidity position both improved in FY12.
- B. The higher average tax rate in FY12 offset the improvement in profitability, leaving ROE unchanged.
- C. The higher average tax rate in FY12 offset the improvement in efficiency, leaving ROE unchanged.

19. A decomposition of ROE for Company A and Company B is as follows:

	Company A		Company B	
	FY15	FY14	FY15	FY14
ROE	26.46%	18.90%	26.33%	18.90%
Tax burden	0.7	0.75	0.75	0.75
Interest burden	0.9	0.9	0.9	0.9
EBIT margin	7.00%	10.00%	13.00%	10.00%
Asset turnover	1.5	1.4	1.5	1.4
Leverage	4	2	2	2

An analyst is *most likely* to conclude that:

- A. Company A's ROE is higher than Company B's in FY15, and one explanation consistent with the data is that Company A may have purchased new, more efficient equipment.
- B. Company A's ROE is higher than Company B's in FY15, and one explanation consistent with the data is that Company A has made a strategic shift to a product mix with higher profit margins.
- C. The difference between the two companies' ROE in FY15 is very small and Company A's ROE remains similar to Company B's ROE mainly due to Company A increasing its financial leverage.

20. What does the P/E ratio measure?

- A. The "multiple" that the stock market places on a company's EPS.
- B. The relationship between dividends and market prices.
- C. The earnings for one common share of stock.

21. A creditor *most likely* would consider a decrease in which of the following ratios

to be positive news?

- A. Interest coverage (times interest earned).
- B. Debt-to-total assets.
- C. Return on assets.

22. When developing forecasts, analysts should *most likely*:

- A. develop possibilities relying exclusively on the results of financial analysis.
- B. use the results of financial analysis, analysis of other information, and judgment.
- C. aim to develop extremely precise forecasts using the results of financial analysis.

PRACTICE PROBLEMS

1. Inventory cost is *least likely* to include:
 - A. production-related storage costs.
 - B. costs incurred as a result of normal waste of materials.
 - C. transportation costs of shipping inventory to customers.
2. Mustard Seed PLC adheres to IFRS. It recently purchased inventory for €100 million and spent €5 million for storage prior to selling the goods. The amount it charged to inventory expense (€ millions) was *closest* to:
 - A. €95.
 - B. €100.
 - C. €105.

The following information relates to questions 3-10

Hans Annan, CFA, a food and beverage analyst, is reviewing Century Chocolate's inventory policies as part of his evaluation of the company. Century Chocolate, based in Switzerland, manufactures chocolate products and purchases and resells other confectionery products to complement its chocolate line. Annan visited Century Chocolate's manufacturing facility last year. He learned that cacao beans, imported from Brazil, represent the most significant raw material and that the work-in-progress inventory consists primarily of three items: roasted cacao beans, a thick paste produced from the beans (called chocolate liquor), and a sweetened mixture that needs to be "conched" to produce chocolate. On the tour, Annan learned that the conching process ranges from a few hours for lower-quality products to six days for the highest-quality chocolates. While there, Annan saw the facility's climate-controlled area where manufactured finished products (cocoa and chocolate) and purchased finished goods are stored prior to shipment to customers. After touring the facility, Annan had a discussion with Century Chocolate's CFO regarding the types of costs that were included in each inventory category.

Annan has asked his assistant, Joanna Kern, to gather some preliminary information regarding Century Chocolate's financial statements and inventories. He also asked Kern to calculate the inventory turnover ratios for Century Chocolate and another chocolate manufacturer for the most recent five years. Annan does not know Century Chocolate's most direct competitor, so he asks Kern to do some research and select the most appropriate company for the ratio comparison.

Kern reports back that Century Chocolate prepares its financial statements in accordance with IFRS. She tells Annan that the policy footnote states that raw materials and purchased finished goods are valued at purchase cost whereas work in progress and manufactured finished goods are valued at production cost. Raw material inventories and purchased finished goods are accounted for using the FIFO (first-in, first-out) method, and the weighted average cost method is used for other inventories. An allowance is established when the net realisable value of any inventory item is lower than the value calculated above.

Kern provides Annan with the selected financial statements and inventory data for Century Chocolate shown in Exhibits 1 through 5. The ratio exhibit Kern prepared compares Century Chocolate's inventory turnover ratios to those of Gordon's Goodies, a US-based company. Annan returns the exhibit and tells Kern to select a different competitor that reports using IFRS rather than US GAAP. During this initial review, Annan asks Kern why she has not indicated whether Century Chocolate uses a perpetual or a periodic inventory system. Kern replies that she learned that Century Chocolate uses a perpetual system but did not include this information in her report because inventory values would be the same under either a perpetual or periodic inventory system. Annan tells Kern she is wrong and directs her to research the matter.

While Kern is revising her analysis, Annan reviews the most recent month's Cocoa Market Review from the International Cocoa Organization. He is drawn to the statement that "the ICCO daily price, averaging prices in both futures markets, reached a 29-year high in US\$ terms and a 23-year high in SDRs terms (the SDR unit comprises a basket of major currencies used in international trade: US\$, euro, pound sterling and yen)." Annan makes a note that he will need to factor the potential continuation of this trend into his analysis.

Exhibit 1: Century Chocolate Income Statements (CHF Millions)

For Years Ended 31 December	2018	2017
Sales	95,290	93,248
Cost of sales	−41,043	−39,047
Marketing, administration, and other expenses	−35,318	−42,481
Profit before taxes	18,929	11,720
Taxes	−3,283	−2,962
Profit for the period	15,646	8,758

Exhibit 2: Century Chocolate Balance Sheets (CHF Millions)

31 December	2018	2017
Cash, cash equivalents, and short-term investments	6,190	8,252
Trade receivables and related accounts, net	11,654	12,910
Inventories, net	8,100	7,039
Other current assets	2,709	2,812
Total current assets	28,653	31,013
Property, plant, and equipment, net	18,291	19,130
Other non-current assets	45,144	49,875
Total assets	92,088	100,018
Trade and other payables	10,931	12,299
Other current liabilities	17,873	25,265
Total current liabilities	28,804	37,564
Non-current liabilities	15,672	14,963
Total liabilities	44,476	52,527

31 December	2018	2017
Equity		
Share capital	332	341
Retained earnings and other reserves	47,280	47,150
Total equity	47,612	47,491
Total liabilities and shareholders' equity	92,088	100,018

**Exhibit 3: Century Chocolate Supplementary Footnote Disclosures:
Inventories (CHF Millions)**

31 December	2018	2017
Raw Materials	2,154	1,585
Work in Progress	1,061	1,027
Finished Goods	5,116	4,665
Total inventories before allowance	8,331	7,277
Allowance for write-downs to net realisable value	-231	-238
Total inventories net of allowance	8,100	7,039

Exhibit 4: Century Chocolate Inventory Record for Purchased Lemon Drops

Date		Cartons	Per Unit Amount (CHF)
	Beginning inventory	100	22
4 Feb 2018	Purchase	40	25
3 Apr 2018	Sale	50	32
23 Jul 2018	Purchase	70	30
16 Aug 2018	Sale	100	32
9 Sep 2018	Sale	35	32
15 Nov 2018	Purchase	100	28

**Exhibit 5: Century Chocolate Net Realisable Value Information for Black
Licorice Jelly Beans**

	2018	2017
FIFO cost of inventory at 31 December (CHF)	314,890	374,870
Ending inventory at 31 December (Kilograms)	77,750	92,560
Cost per unit (CHF)	4.05	4.05
Net Realisable Value (CHF per Kilograms)	4.20	3.95

3. The costs *least likely* to be included by the CFO as inventory are:
- A. storage costs for the chocolate liquor.

- B. excise taxes paid to the government of Brazil for the cacao beans.
 - C. storage costs for chocolate and purchased finished goods awaiting shipment to customers.
4. What is the *most likely* justification for Century Chocolate's choice of inventory valuation method for its purchased finished goods?
- A. It is the preferred method under IFRS.
 - B. It allocates the same per unit cost to both cost of sales and inventory.
 - C. Ending inventory reflects the cost of goods purchased most recently.
5. In Kern's comparative ratio analysis, the 2018 inventory turnover ratio for Century Chocolate is *closest* to:
- A. 5.07.
 - B. 5.42.
 - C. 5.55.
6. The *most accurate* statement regarding Annan's reasoning for requiring Kern to select a competitor that reports under IFRS for comparative purposes is that under US GAAP:
- A. fair values are used to value inventory.
 - B. the LIFO method is permitted to value inventory.
 - C. the specific identification method is permitted to value inventory.
7. Annan's statement regarding the perpetual and periodic inventory systems is most significant when which of the following costing systems is used?
- A. LIFO.
 - B. FIFO.
 - C. Specific identification.
8. Using the inventory record for purchased lemon drops shown in Exhibit 4, the cost of sales for 2018 will be *closest* to:
- A. CHF 3,550.
 - B. CHF 4,550.
 - C. CHF 4,850.
9. Ignoring any tax effect, the 2018 net realisable value reassessment for the black licorice jelly beans will *most likely* result in:
- A. an increase in gross profit of CHF 7,775.
 - B. an increase in gross profit of CHF 11,670.
 - C. no impact on cost of sales because under IFRS, write-downs cannot be reversed.

10. If the trend noted in the ICCO report continues and Century Chocolate plans to maintain constant or increasing inventory quantities, the *most likely* impact on Century Chocolate's financial statements related to its raw materials inventory will be:
- A. a cost of sales that more closely reflects current replacement values.
 - B. a higher allocation of the total cost of goods available for sale to cost of sales.
 - C. a higher allocation of the total cost of goods available for sale to ending inventory.

The following information relates to questions 11-22

11. Cinnamon Corp. started business in 2017 and uses the weighted average cost method. During 2017, it purchased 45,000 units of inventory at €10 each and sold 40,000 units for €20 each. In 2018, it purchased another 50,000 units at €11 each and sold 45,000 units for €22 each. Its 2018 cost of sales (€ thousands) was *closest* to:
- A. €490.
 - B. €491.
 - C. €495.
12. Zimt AG started business in 2017 and uses the FIFO method. During 2017, it purchased 45,000 units of inventory at €10 each and sold 40,000 units for €20 each. In 2018, it purchased another 50,000 units at €11 each and sold 45,000 units for €22 each. Its 2018 ending inventory balance (€ thousands) was *closest* to:
- A. €105.
 - B. €109.
 - C. €110.
13. Zimt AG uses the FIFO method, and Nutmeg Inc. uses the LIFO method. Compared to the cost of replacing the inventory, during periods of rising prices, the cost of sales reported by:
- A. Zimt is too low.
 - B. Nutmeg is too low.
 - C. Nutmeg is too high.
14. Zimt AG uses the FIFO method, and Nutmeg Inc. uses the LIFO method. Compared to the cost of replacing the inventory, during periods of rising prices the ending inventory balance reported by:
- A. Zimt is too high.
 - B. Nutmeg is too low.

- C. Nutmeg is too high.
15. Like many technology companies, TechnoTools operates in an environment of declining prices. Its reported profits will tend to be *highest* if it accounts for inventory using the:
- A. FIFO method.
 - B. LIFO method.
 - C. weighted average cost method.
16. Compared to using the weighted average cost method to account for inventory, during a period in which prices are generally rising, the current ratio of a company using the FIFO method would *most likely* be:
- A. lower.
 - B. higher.
 - C. dependent upon the interaction with accounts payable.
17. Zimt AG wrote down the value of its inventory in 2017 and reversed the write-down in 2018. Compared to the ratios that would have been calculated if the write-down had never occurred, Zimt's reported 2017:
- A. current ratio was too high.
 - B. gross margin was too high.
 - C. inventory turnover was too high.
18. Zimt AG wrote down the value of its inventory in 2017 and reversed the write-down in 2018. Compared to the results the company would have reported if the write-down had never occurred, Zimt's reported 2018:
- A. profit was overstated.
 - B. cash flow from operations was overstated.
 - C. year-end inventory balance was overstated.
19. Compared to a company that uses the FIFO method, during periods of rising prices a company that uses the LIFO method will *most likely* appear more:
- A. liquid.
 - B. efficient.
 - C. profitable.
20. Nutmeg, Inc. uses the LIFO method to account for inventory. During years in which inventory unit costs are generally rising and in which the company purchases more inventory than it sells to customers, its reported gross profit margin will *most likely* be:
- A. lower than it would be if the company used the FIFO method.
 - B. higher than it would be if the company used the FIFO method.
 - C. about the same as it would be if the company used the FIFO method.

21. Compared to using the FIFO method to account for inventory, during periods of rising prices, a company using the LIFO method is *most likely* to report higher:
- net income.
 - cost of sales.
 - income taxes.
22. Carey Company adheres to US GAAP, whereas Jonathan Company adheres to IFRS. It is *least likely* that:
- Carey has reversed an inventory write-down.
 - Jonathan has reversed an inventory write-down.
 - Jonathan and Carey both use the FIFO inventory accounting method.

The following information relates to questions 23-24

A retail company is comparing different approaches to valuing inventory. The company has one product that it sells for \$50.

Exhibit 1: Units Purchased and Sold (first quarter)

Date	Units Purchased	Purchase Price	Units Sold	Selling Price	Inventory Units on Hand
2 Jan	1,000	\$20.00			1,000
17 Jan			500	\$50.00	500
16 Feb	1,000	\$18.00			1,500
3 Mar			1,200	\$50.00	300
13 Mar	1,000	\$17.00			1,300
23 Mar			500	\$50.00	800
End of quarter totals:	3,000	\$55,000	2,200	\$110,000	

Exhibit 2: Comparison of Inventory Methods and Models

End of Quarter Valuations 31 March	Perpetual LIFO	Periodic LIFO	Perpetual FIFO
Sales	\$110,000	\$110,000	\$110,000
Ending inventory		\$16,000	\$13,600
Cost of goods sold		\$39,000	\$41,400
Gross profit		\$71,000	\$68,600
Inventory turnover ratio	279%		

Note: LIFO is last in, first out and FIFO is first in, first out.

23. What is the value of ending inventory for the first quarter if the company uses a perpetual LIFO inventory valuation method?
- A. \$14,500
 - B. \$15,000
 - C. \$16,000
24. Which inventory accounting method results in the lowest inventory turnover ratio for the first quarter?
- A. Periodic LIFO
 - B. Perpetual LIFO
 - C. Perpetual FIFO
25. During periods of rising inventory unit costs, a company using the FIFO method rather than the LIFO method will report a lower:
- A. current ratio.
 - B. inventory turnover.
 - C. gross profit margin.
26. Compared with a company that uses the FIFO method, during a period of rising unit inventory costs, a company using the LIFO method will *most likely* appear more:
- A. liquid.
 - B. efficient.
 - C. profitable.
27. In a period of declining inventory unit costs and constant or increasing inventory quantities, which inventory method is *most likely* to result in a higher debt-to-equity ratio?
- A. LIFO
 - B. FIFO
 - C. Weighted average cost

The following information relates to questions 28-33

Robert Groff, an equity analyst, is preparing a report on Crux Corp. As part of his report, Groff makes a comparative financial analysis between Crux and its two main competitors, Rolby Corp. and Mikko Inc. Crux and Mikko report under US GAAP and Rolby reports under IFRS.

Groff gathers information on Crux, Rolby, and Mikko. The relevant financial information he compiles is in Exhibit 1. Some information on the industry is in Exhibit 2.

Exhibit 1: Selected Financial Information (US\$ Millions)

	Crux	Rolby	Mikko
Inventory valuation method	LIFO	FIFO	LIFO
From the Balance Sheets			
As of 31 December 2018			
Inventory, gross	480	620	510
Valuation allowance	20	25	14
Inventory, net	460	595	496
Total debt	1,122	850	732
Total shareholders' equity	2,543	2,403	2,091
As of 31 December 2017			
Inventory, gross	465	602	401
Valuation allowance	23	15	12
Inventory, net	442	587	389
From the Income Statements			
Year Ended 31 December 2018			
Revenues	4,609	5,442	3,503
Cost of goods sold ^a	3,120	3,782	2,550
Net income	229	327	205
^a Charges included in cost of goods sold for inventory write-downs*	13	15	15
* This does not match the change in the inventory valuation allowance because the valuation allowance is reduced to reflect the valuation allowance attached to items sold and increased for additional necessary write-downs.			
LIFO Reserve			
As of 31 December 2018	55	0	77
As of 31 December 2017	72	0	50
As of 31 December 2016	96	0	43
Tax Rate			
Effective tax rate	30%	30%	30%

Exhibit 2: Industry Information

	2018	2017	2016
Raw materials price index	112	105	100
Finished goods price index	114	106	100

To compare the financial performance of the three companies, Groff decides to convert LIFO figures into FIFO figures, and adjust figures to assume no valuation allowance is recognized by any company.

After reading Groff's draft report, his supervisor, Rachel Borghi, asks him the following questions:

- | | |
|------------|---|
| Question 1 | Which company's gross profit margin would best reflect current costs of the industry? |
| Question 2 | Would Rolby's valuation method show a higher gross profit margin than Crux's under an inflationary, a deflationary, or a stable price scenario? |
| Question 3 | Which group of ratios usually appears more favorable with an inventory write-down? |
28. Crux's inventory turnover ratio computed as of 31 December 2018, after the adjustments suggested by Groff, is *closest* to:
- A. 5.67.
 - B. 5.83.
 - C. 6.13.
29. Rolby's net profit margin for the year ended 31 December 2018, after the adjustments suggested by Groff, is *closest* to:
- A. 6.01%.
 - B. 6.20%.
 - C. 6.28%.
30. Compared with its unadjusted debt-to-equity ratio, Mikko's debt-to-equity ratio as of 31 December 2018, after the adjustments suggested by Groff, is:
- A. lower.
 - B. higher.
 - C. the same.
31. The *best* answer to Borghi's Question 1 is:
- A. Crux's.
 - B. Rolby's.
 - C. Mikko's.
32. The *best* answer to Borghi's Question 2 is:
- A. Stable.
 - B. Inflationary.
 - C. Deflationary.
33. The *best* answer to Borghi's Question 3 is:
- A. Activity ratios.
 - B. Solvency ratios.

C. Profitability ratios.

The following information relates to questions 34-40

ZP Corporation is a (hypothetical) multinational corporation headquartered in Japan that trades on numerous stock exchanges. ZP prepares its consolidated financial statements in accordance with US GAAP. Excerpts from ZP's 2018 annual report are shown in Exhibits 1–3.

Exhibit 1: Consolidated Balance Sheets (¥ Millions)

31 December	2017	2018
Current Assets		
Cash and cash equivalents	¥542,849	¥814,760
⋮	⋮	⋮
Inventories	608,572	486,465
⋮	⋮	⋮
Total current assets	4,028,742	3,766,309
⋮	⋮	⋮
Total assets	¥10,819,440	¥9,687,346
⋮	⋮	⋮
Total current liabilities	¥3,980,247	¥3,529,765
⋮	⋮	⋮
Total long-term liabilities	2,663,795	2,624,002
Minority interest in consolidated subsidiaries	218,889	179,843
Total shareholders' equity	3,956,509	3,353,736
Total liabilities and shareholders' equity	¥10,819,440	¥9,687,346

Exhibit 2: Consolidated Statements of Income (¥ Millions)

For the years ended 31 December	2016	2017	2018
Net revenues			
Sales of products	¥7,556,699	¥8,273,503	¥6,391,240
Financing operations	425,998	489,577	451,950
	7,982,697	8,763,080	6,843,190
Cost and expenses			
Cost of products sold	6,118,742	6,817,446	5,822,805
Cost of financing operations	290,713	356,005	329,128
Selling, general and administrative	827,005	832,837	844,927
⋮	⋮	⋮	⋮
Operating income (loss)	746,237	756,792	−153,670
⋮	⋮	⋮	⋮

For the years ended 31 December	2016	2017	2018
Net income	¥548,011	¥572,626	–¥145,646

Exhibit 3: Selected Disclosures in the 2018 Annual Report

Management's Discussion and Analysis of Financial Condition and Results of Operations

Cost reduction efforts were offset by increased prices of raw materials, other production materials and parts ... Inventories decreased during fiscal 2018 by ¥122.1 billion, or 20.1%, to ¥486.5 billion. This reflects the impacts of decreased sales volumes and fluctuations in foreign currency translation rates.

Management & Corporate Information

Risk Factors

Industry and Business Risks

The worldwide market for our products is highly competitive. ZP faces intense competition from other manufacturers in the respective markets in which it operates. Competition has intensified due to the worldwide deterioration in economic conditions. In addition, competition is likely to further intensify because of continuing globalization, possibly resulting in industry reorganization. Factors affecting competition include product quality and features, the amount of time required for innovation and development, pricing, reliability, safety, economy in use, customer service and financing terms. Increased competition may lead to lower unit sales and excess production capacity and excess inventory. This may result in a further downward price pressure.

ZP's ability to adequately respond to the recent rapid changes in the industry and to maintain its competitiveness will be fundamental to its future success in maintaining and expanding its market share in existing and new markets.

Notes to Consolidated Financial Statements

2. Summary of significant accounting policies:

Inventories. Inventories are valued at cost, not in excess of market. Cost is determined on the "average-cost" basis, except for the cost of finished products carried by certain subsidiary companies which is determined "last-in, first-out" ("LIFO") basis. Inventories valued on the LIFO basis totaled ¥94,578 million and ¥50,037 million at December 31, 2017 and 2018, respectively. Had the "first-in, first-out" basis been used for those companies using the LIFO basis, inventories would have been ¥10,120 million and ¥19,660 million higher than reported at December 31, 2017 and 2018, respectively.

9. Inventories:

Inventories consist of the following:

31 December (¥ Millions)	2017	2018
Finished goods	¥ 403,856	¥ 291,977
Raw materials	99,869	85,966
Work in process	79,979	83,890
Supplies and other	24,868	24,632

31 December (¥ Millions)	2017	2018
	¥ 608,572	¥ 486,465

34. The MD&A indicated that the prices of raw material, other production materials, and parts increased. Based on the inventory valuation methods described in Note 2, which inventory classification would *least accurately* reflect current prices?
- Raw materials.
 - Finished goods.
 - Work in process.
35. The 2017 inventory value as reported on the 2018 Annual Report if the company had used the FIFO inventory valuation method instead of the LIFO inventory valuation method for a portion of its inventory would be *closest* to:
- ¥104,698 million.
 - ¥506,125 million.
 - ¥618,692 million.
36. If ZP had prepared its financial statement in accordance with IFRS, the inventory turnover ratio (using average inventory) for 2018 would be:
- lower.
 - higher.
 - the same.
37. Inventory levels decreased from 2017 to 2018 for all of the following reasons *except*:
- LIFO liquidation.
 - decreased sales volume.
 - fluctuations in foreign currency translation rates.
38. Which observation is *most likely* a result of looking only at the information reported in Note 9?
- Increased competition has led to lower unit sales.
 - There have been significant price increases in supplies.
 - Management expects a further downturn in sales during 2019.
39. Note 2 indicates that, "Inventories valued on the LIFO basis totaled ¥94,578 million and ¥50,037 million at December 31, 2017 and 2018, respectively." Based on this, the LIFO reserve should *most likely*:
- increase.

- B. decrease.
- C. remain the same.
40. The Industry and Business Risk excerpt states that, “Increased competition may lead to lower unit sales and excess production capacity and excess inventory. This may result in a further downward price pressure.” The downward price pressure could lead to inventory that is valued above current market prices or net realisable value. Any write-downs of inventory are *least likely* to have a significant effect on the inventory valued using:
- A. weighted average cost.
- B. first-in, first-out (FIFO).
- C. last-in, first-out (LIFO).
41. LIFO reserve is *most likely* to increase when inventory unit:
- A. costs are increasing.
- B. costs are decreasing.
- C. levels are decreasing.
42. A company using the LIFO method reports the following in £:

	2018	2017
Cost of goods sold (COGS)	50,800	48,500
Ending inventories	10,550	10,000
LIFO reserve	4,320	2,600

Cost of goods sold for 2018 under the FIFO method is *closest* to:

- A. £48,530.
- B. £49,080.
- C. £52,520.

The following information relates to questions 43-48

John Martinson, CFA, is an equity analyst with a large pension fund. His supervisor, Linda Packard, asks him to write a report on Karp Inc. Karp prepares its financial statements in accordance with US GAAP. Packard is particularly interested in the effects of the company’s use of the LIFO method to account for its inventory. For this purpose, Martinson collects the financial data presented in Exhibits 1 and 2.

Exhibit 1: Balance Sheet Information (US\$ Millions)

As of 31 December	2018	2017
Cash and cash equivalents	172	157
Accounts receivable	626	458
Inventories	620	539
Other current assets	125	65
Total current assets	1,543	1,219
Property and equipment, net	3,035	2,972
Total assets	4,578	4,191
Total current liabilities	1,495	1,395
Long-term debt	644	604
Total liabilities	2,139	1,999
Common stock and paid in capital	1,652	1,652
Retained earnings	787	540
Total shareholders' equity	2,439	2,192
Total liabilities and shareholders' equity	4,578	4,191

Exhibit 2: Income Statement Information (US\$ Millions)

For the Year Ended 31 December	2018	2017
Sales	4,346	4,161
Cost of goods sold	2,211	2,147
Depreciation and amortisation expense	139	119
Selling, general, and administrative expense	1,656	1,637
Interest expense	31	18
Income tax expense	62	48
Net income	247	192

Martinson finds the following information in the notes to the financial statements:

- The LIFO reserves as of 31 December 2018 and 2017 are \$155 million and \$117 million respectively, and
- The effective income tax rate applicable to Karp for 2018 and earlier periods is 20 percent.

43. If Karp had used FIFO instead of LIFO, the amount of inventory reported as of 31 December 2018 would have been *closest* to:

- A. \$465 million.
- B. \$658 million.
- C. \$775 million.

44. If Karp had used FIFO instead of LIFO, the amount of cost of goods sold reported by Karp for the year ended 31 December 2018 would have been *closest to*:
- A. \$2,056 million.
 - B. \$2,173 million.
 - C. \$2,249 million.
45. If Karp had used FIFO instead of LIFO, its reported net income for the year ended 31 December 2018 would have been higher by an amount *closest to*:
- A. \$30 million.
 - B. \$38 million.
 - C. \$155 million.
46. If Karp had used FIFO instead of LIFO, Karp's retained earnings as of 31 December 2018 would have been higher by an amount *closest to*:
- A. \$117 million.
 - B. \$124 million.
 - C. \$155 million.
47. If Karp had used FIFO instead of LIFO, which of the following ratios computed as of 31 December 2018 would *most likely* have been lower?
- A. Cash ratio.
 - B. Current ratio.
 - C. Gross profit margin.
48. If Karp had used FIFO instead of LIFO, its debt to equity ratio computed as of 31 December 2018 would have:
- A. increased.
 - B. decreased.
 - C. remained unchanged.
49. If inventory unit costs are increasing from period-to-period, a LIFO liquidation is *most likely* to result in an increase in:
- A. gross profit.
 - B. LIFO reserve.
 - C. inventory carrying amounts.
50. Carrying inventory at a value above its historical cost would *most likely* be permitted if:
- A. the inventory was held by a producer of agricultural products.
 - B. financial statements were prepared using US GAAP.
 - C. the change resulted from a reversal of a previous write-down.

51. Eric's Used Book Store prepares its financial statements in accordance with IFRS. Inventory was purchased for £1 million and later marked down to £550,000. One of the books, however, was later discovered to be a rare collectible item, and the inventory is now worth an estimated £3 million. The inventory is *most likely* reported on the balance sheet at:
- A. £550,000.
 - B. £1,000,000.
 - C. £3,000,000.
52. Fernando's Pasta purchased inventory and later wrote it down. The current net realisable value is higher than the value when written down. Fernando's inventory balance will *most likely* be:
- A. higher if it complies with IFRS.
 - B. higher if it complies with US GAAP.
 - C. the same under US GAAP and IFRS.
53. A write down of the value of inventory to its net realizable value will have a positive effect on the:
- A. balance sheet.
 - B. income statement.
 - C. inventory turnover ratio.
54. Company A adheres to US GAAP and Company B adheres to IFRS. Which of the following is *most likely* to be disclosed on the financial statements of both companies?
- A. Any material income resulting from the liquidation of LIFO inventory
 - B. The amount of inventories recognized as an expense during the period
 - C. The circumstances that led to the reversal of a write down of inventories
55. Which of the following *most likely* signals that a manufacturing company expects demand for its product to increase?
- A. Finished goods inventory growth rate higher than the sales growth rate
 - B. Higher unit volumes of work in progress and raw material inventories
 - C. Substantially higher finished goods, with lower raw materials and work-in-process

PRACTICE PROBLEMS

1. JOOVI Inc. has recently purchased and installed a new machine for its manufacturing plant. The company incurred the following costs:

Purchase price	\$12,980
Freight and insurance	\$1,200
Installation	\$700
Testing	\$100
Maintenance staff training costs	\$500

The total cost of the machine to be shown on JOOVI's balance sheet is *closest* to:

- A. \$14,180.
 - B. \$14,980.
 - C. \$15,480.
2. Which costs incurred with the purchase of property and equipment are expensed?
- A. Delivery charges
 - B. Installation and testing
 - C. Training required to use the property and equipment
3. When constructing an asset for sale, directly related borrowing costs are *most likely*:
- A. expensed as incurred.
 - B. capitalized as part of inventory.
 - C. capitalized as part of property, plant, and equipment.
4. BAURU, S.A., a Brazilian corporation, borrows capital from a local bank to finance the construction of its manufacturing plant. The loan has the following conditions:

Borrowing date	1 January 2009
Amount borrowed	500 million Brazilian real (BRL)
Annual interest rate	14 percent
Term of the loan	3 years
Payment method	Annual payment of interest only. Principal amortization is due at the end of the loan term.

The construction of the plant takes two years, during which time BAURU earned BRL 10 million by temporarily investing the loan proceeds. Which of the following is the amount of interest related to the plant construction (in BRL million) that can be capitalized in BAURU's balance sheet?

- A. 130.
- B. 140.

C. 210.

5. After reading the financial statements and footnotes of a company that follows IFRS, an analyst identified the following intangible assets:

- product patent expiring in 40 years;
- copyright with no expiration date; and
- goodwill acquired 2 years ago in a business combination.

Which of these assets is an intangible asset with a finite useful life?

	Product Patent	Copyright	Goodwill
A	Yes	Yes	No
B	Yes	No	No
C	No	Yes	Yes

6. Intangible assets with finite useful lives *mostly* differ from intangible assets with infinite useful lives with respect to accounting treatment of:

- A. revaluation.
- B. impairment.
- C. amortization.

7. Costs incurred for intangible assets are generally expensed when they are:

- A. internally developed.
- B. individually acquired.
- C. acquired in a business combination.

8. Under US GAAP, when assets are acquired in a business combination, goodwill *most likely* arises from:

- A. contractual or legal rights.
- B. assets that can be separated from the acquired company.
- C. assets that are neither tangible nor identifiable intangible assets.

9. All else equal, in the fiscal year when long-lived equipment is purchased:

- A. depreciation expense increases.
- B. cash from operations decreases.
- C. net income is reduced by the amount of the purchase.

10. Companies X and Z have the same beginning-of-the-year book value of equity and the same tax rate. The companies have identical transactions throughout the year and report all transactions similarly except for one. Both companies acquire a £300,000 printer with a three-year useful life and a salvage value of £0 on 1 January of the new year. Company X capitalizes the printer and depreciates it on a straight-line basis, and Company Z expenses the printer. The following year-end

information is gathered for Company X.

	Company X As of 31 December
Ending shareholders' equity	£10,000,000
Tax rate	25%
Dividends	£0.00
Net income	£750,000

Based on the information given, Company Z's return on equity using year-end equity will be *closest* to:

- A. 5.4%.
- B. 6.1%.
- C. 7.5%.

The following information relates to questions 11-14

Melanie Hart, CFA, is a transportation analyst. Hart has been asked to write a research report on Altai Mountain Rail Company (AMRC). Like other companies in the railroad industry, AMRC's operations are capital intensive, with significant investments in such long-lived tangible assets as property, plant, and equipment. In November of 2008, AMRC's board of directors hired a new team to manage the company. In reviewing the company's 2009 annual report, Hart is concerned about some of the accounting choices that the new management has made. These choices differ from those of the previous management and from common industry practice. Hart has highlighted the following statements from the company's annual report:

- Statement 1 "In 2009, AMRC spent significant amounts on track replacement and similar improvements. AMRC expensed rather than capitalised a significant proportion of these expenditures."
- Statement 2 "AMRC uses the straight-line method of depreciation for both financial and tax reporting purposes to account for plant and equipment."
- Statement 3 "In 2009, AMRC recognized an impairment loss of €50 million on a fleet of locomotives. The impairment loss was reported as 'other income' in the income statement and reduced the carrying amount of the assets on the balance sheet."

Exhibit 1 and Exhibit 2 contain AMRC's 2009 consolidated income statement and balance sheet. AMRC prepares its financial statements in accordance with International Financial Reporting Standards.

Exhibit 1: Consolidated Statement of Income

	2009		2008	
For the Years Ended 31 December	€ Millions	% Revenues	€ Millions	% Revenues
Operating revenues	2,600	100.0	2,300	100.0
Operating expenses				
Depreciation	(200)	(7.7)	(190)	(8.3)
Other operating expense	(1,590)	(61.1)	(1,515)	(65.9)
Total operating expenses	(1,790)	(68.8)	(1,705)	(74.2)
Operating income	810	31.2	595	25.8
Other income	(50)	(1.9)	—	0.0
Interest expense	(73)	(2.8)	(69)	(3.0)
Income before taxes	687	26.5	526	22.8
Income taxes	(272)	(10.5)	(198)	(8.6)
Net income	415	16	328	14.2

Exhibit 2: Consolidated Balance Sheet

As of 31 December	2009		2008	
Assets	€ Millions	% Assets	€ Millions	% Assets
Current assets	500	9.4	450	8.5
Property & equipment:				
Land	700	13.1	700	13.2
Plant & equipment	6,000	112.1	5,800	109.4
Total property & equipment	6,700	125.2	6,500	122.6
Accumulated depreciation	(1,850)	(34.6)	(1,650)	(31.1)
Net property & equipment	4,850	90.6	4,850	91.5
Total assets	5,350	100.0	5,300	100.0
Liabilities and Shareholders' Equity				
Current liabilities	480	9.0	430	8.1
Long-term debt	1,030	19.3	1,080	20.4
Other long-term provisions and liabilities	1,240	23.1	1,440	27.2
Total liabilities	2,750	51.4	2,950	55.7
Shareholders' equity				
Common stock and paid-in-surplus	760	14.2	760	14.3
Retained earnings	1,888	35.5	1,600	30.2
Other comprehensive losses	(48)	(0.9)	(10)	(0.2)
Total shareholders' equity	2,600	48.6	2,350	44.3
Total liabilities & shareholders' equity	5,350	100.0	5,300	100.0

11. With respect to Statement 1, which of the following is the *most likely* effect of

management's decision to expense rather than capitalise these expenditures?

- A. 2009 net profit margin is higher than if the expenditures had been capitalised.
 - B. 2009 total asset turnover is lower than if the expenditures had been capitalised.
 - C. Future profit growth will be higher than if the expenditures had been capitalised.
12. With respect to Statement 2, what would be the *most likely* effect in 2010 if AMRC were to switch to an accelerated depreciation method for both financial and tax reporting?
- A. Net profit margin would increase.
 - B. Total asset turnover would decrease.
 - C. Cash flow from operating activities would increase.
13. With respect to Statement 3, what is the *most likely* effect of the impairment loss?
- A. Net income in years prior to 2009 was likely understated.
 - B. Net profit margins in years after 2009 will likely exceed the 2009 net profit margin.
 - C. Cash flow from operating activities in 2009 was likely lower due to the impairment loss.
14. Based on Exhibits 1 and 2, the *best estimate* of the average remaining useful life of the company's plant and equipment at the end of 2009 is:
- A. 20.75 years.
 - B. 24.25 years.
 - C. 30.00 years.

The following information relates to questions 15-20

Brian Jordan is interviewing for a junior equity analyst position at Orion Investment Advisors. As part of the interview process, Mary Benn, Orion's Director of Research, provides Jordan with information about two hypothetical companies, Alpha and Beta, and asks him to comment on the information on their financial statements and ratios. Both companies prepare their financial statements in accordance with International Financial Reporting Standards (IFRS) and are identical in all respects except for their accounting choices.

Jordan is told that at the beginning of the current fiscal year, both companies purchased a major new computer system and began building new manufacturing plants for their own use. Alpha capitalised and Beta expensed the cost of the computer system; Alpha capitalised and Beta expensed the interest costs associated with the construction of the manufacturing plants.

Benn asks Jordan, "What was the impact of these decisions on each company's

current fiscal year financial statements and ratios?”

Jordan responds, “Alpha’s decision to capitalise the cost of its new computer system instead of expensing it results in lower net income, lower total assets, and higher cash flow from operating activities in the current fiscal year. Alpha’s decision to capitalise its interest costs instead of expensing them results in a lower fixed asset turnover ratio and a higher interest coverage ratio.”

Jordan is told that Alpha uses the straight-line depreciation method and Beta uses an accelerated depreciation method; both companies estimate the same useful lives for long-lived assets. Many companies in their industry use the units-of-production method.

Benn asks Jordan, “What are the financial statement implications of each depreciation method, and how do you determine a company’s need to reinvest in its productive capacity?”

Jordan replies, “All other things being equal, the straight-line depreciation method results in the least variability of net profit margin over time, while an accelerated depreciation method results in a declining trend in net profit margin over time. The units-of-production can result in a net profit margin trend that is quite variable. I use a three-step approach to estimate a company’s need to reinvest in its productive capacity. First, I estimate the average age of the assets by dividing net property, plant, and equipment by annual depreciation expense. Second, I estimate the average remaining useful life of the assets by dividing accumulated depreciation by depreciation expense. Third, I add the estimates of the average remaining useful life and the average age of the assets in order to determine the total useful life.”

Jordan is told that at the end of the current fiscal year, Alpha revalued a manufacturing plant; this increased its reported carrying amount by 15 percent. There was no previous downward revaluation of the plant. Beta recorded an impairment loss on a manufacturing plant; this reduced its carrying by 10 percent.

Benn asks Jordan “What was the impact of these decisions on each company’s current fiscal year financial ratios?”

Jordan responds, “Beta’s impairment loss increases its debt to total assets and fixed asset turnover ratios, and lowers its cash flow from operating activities. Alpha’s revaluation increases its debt to capital and return on assets ratios, and reduces its return on equity.”

At the end of the interview, Benn thanks Jordan for his time and states that a hiring decision will be made shortly.

15. Jordan’s response about the financial statement impact of Alpha’s decision to capitalise the cost of its new computer system is most likely *correct* with respect to:
 - A. lower net income.
 - B. lower total assets.
 - C. higher cash flow from operating activities.
16. Jordan’s response about the ratio impact of Alpha’s decision to capitalise interest costs is most likely *correct* with respect to the:
 - A. interest coverage ratio.
 - B. fixed asset turnover ratio.
 - C. interest coverage and fixed asset turnover ratios.

17. Jordan's response about the impact of the different depreciation methods on net profit margin is most likely *incorrect* with respect to:
- accelerated depreciation.
 - straight-line depreciation.
 - units-of-production depreciation.
18. Jordan's response about his approach to estimating a company's need to reinvest in its productive capacity is most likely *correct* regarding:
- estimating the average age of the asset base.
 - estimating the total useful life of the asset base.
 - estimating the average remaining useful life of the asset base.
19. Jordan's response about the effect of Beta's impairment loss is most likely *incorrect* with respect to the impact on its:
- debt to total assets.
 - fixed asset turnover.
 - cash flow from operating activities.
20. Jordan's response about the effect of Alpha's revaluation is most likely *correct* with respect to the impact on its:
- return on equity.
 - return on assets.
 - debt to capital ratio.
21. A financial analyst is studying the income statement effect of two alternative depreciation methods for a recently acquired piece of equipment. She gathers the following information about the equipment's expected production life and use:

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Units of production	2,000	2,000	2,000	2,000	2,500	10,500

Compared with the units-of-production method of depreciation, if the company uses the straight-line method to depreciate the equipment, its net income in Year 1 will *most likely* be:

- lower.
 - higher.
 - the same.
22. A company purchases a piece of equipment for €1,500. The equipment is expected to have a useful life of five years and no residual value. In the first year of use, the units of production are expected to be 15% of the equipment's lifetime production capacity and the equipment is expected to generate €1,500 of revenue and incur €500 of cash expenses.
- The depreciation method yielding the lowest operating profit on the equipment in the first year of use is:

- A. straight line.
 - B. units of production.
 - C. double-declining balance.
23. Juan Martinez, CFO of VIRMING, S.A., is selecting the depreciation method to use for a new machine. The machine has an expected useful life of six years. Production is expected to be relatively low initially but to increase over time. The method chosen for tax reporting must be the same as the method used for financial reporting. If Martinez wants to minimize tax payments in the first year of the machine's life, which of the following depreciation methods is Martinez *most likely* to use?
- A. Straight-line method.
 - B. Units-of-production method.
 - C. Double-declining balance method.

The following information relates to questions 24-25

Miguel Rodriguez of MARIO S.A., an Uruguayan corporation, is computing the depreciation expense of a piece of manufacturing equipment for the fiscal year ended 31 December 2009. The equipment was acquired on 1 January 2009. Rodriguez gathers the following information (currency in Uruguayan pesos, UYP):

Cost of the equipment	UYP 1,200,000
Estimated residual value	UYP 200,000
Expected useful life	8 years
Total productive capacity	800,000 units
Production in FY 2009	135,000 units
Expected production for the next 7 years	95,000 units each year

24. If MARIO uses the straight-line method, the amount of depreciation expense on MARIO's income statement related to the manufacturing equipment is *closest* to:
- A. 125,000.
 - B. 150,000.
 - C. 168,750.
25. If MARIO uses the units-of-production method, the amount of depreciation expense (in UYP) on MARIO's income statement related to the manufacturing equipment is *closest* to:
- A. 118,750.
 - B. 168,750.
 - C. 202,500.

26. A company purchases equipment for \$200,000 with a five-year useful life and salvage value of zero. It uses the double-declining balance method of depreciation for two years, then shifts to straight-line depreciation at the beginning of Year 3. Compared with annual depreciation expense under the double-declining balance method, the resulting annual depreciation expense in Year 4 is:
- smaller.
 - the same.
 - greater.
27. Which of the following amortization methods is *most likely* to evenly distribute the cost of an intangible asset over its useful life?
- Straight-line method.
 - Units-of-production method.
 - Double-declining balance method.
28. Which of the following will cause a company to show a lower amount of amortization of intangible assets in the first year after acquisition?
- A higher residual value.
 - A higher amortization rate.
 - A shorter useful life.
29. An analyst in the finance department of BOOLD0 S.A., a French corporation, is computing the amortization of a customer list, an intangible asset, for the fiscal year ended 31 December 2009. She gathers the following information about the asset:

Acquisition cost	€2,300,000
Acquisition date	1 January 2008
Expected residual value at time of acquisition	€500,000

The customer list is expected to result in extra sales for three years after acquisition. The present value of these expected extra sales exceeds the cost of the list.

If the analyst uses the straight-line method, the amount of accumulated amortization related to the customer list as of 31 December 2009 is *closest* to:

- €600,000.
 - €1,200,000.
 - €1,533,333.
30. A financial analyst is analyzing the amortization of a product patent acquired by MAKETTI S.p.A., an Italian corporation. He gathers the following information about the patent:

Acquisition cost	€5,800,000
Acquisition date	1 January 2009
Patent expiration date	31 December 2015
Total plant capacity of patented product	40,000 units per year

Production of patented product in fiscal year ended 31 December 2009	20,000 units
Expected production of patented product during life of the patent	175,000 units

If the analyst uses the units-of-production method, the amortization expense on the patent for fiscal year 2009 is *closest* to:

- A. €414,286.
 - B. €662,857.
 - C. €828,571.
31. A company acquires a patent with an expiration date in six years for ¥100 million. The company assumes that the patent will generate economic benefits that will decline over time and decides to amortize the patent using the double-declining balance method. The annual amortization expense in Year 4 is closest to:
- A. ¥6.6 million.
 - B. ¥9.9 million.
 - C. ¥19.8 million.
32. A company is comparing straight-line and double-declining balance amortization methods for a non-renewable six-year license, acquired for €600,000. The difference between the Year 4 ending net book values using the two methods is *closest* to:
- A. €81,400.
 - B. €118,600.
 - C. €200,000.
33. MARU S.A. de C.V., a Mexican corporation that follows IFRS, has elected to use the revaluation model for its property, plant, and equipment. One of MARU's machines was purchased for 2,500,000 Mexican pesos (MXN) at the beginning of the fiscal year ended 31 March 2010. As of 31 March 2010, the machine has a fair value of MXN 3,000,000. Should MARU show a profit for the revaluation of the machine?
- A. Yes.
 - B. No, because this revaluation is recorded directly in equity.
 - C. No, because value increases resulting from revaluation can never be recognized as a profit.
34. An analyst is studying the impairment of the manufacturing equipment of WLP Corp., a UK-based corporation that follows IFRS. He gathers the following information about the equipment:

Fair value	£16,800,000
Costs to sell	£800,000
Value in use	£14,500,000
Net carrying amount	£19,100,000

The amount of the impairment loss on WLP Corp's income statement related to its manufacturing equipment is *closest* to:

- A. £2,300,000.
- B. £3,100,000.
- C. £4,600,000.

35. Under IFRS, an impairment loss on a property, plant, and equipment asset is measured as the excess of the carrying amount over the asset's:

- A. fair value.
- B. recoverable amount.
- C. undiscounted expected future cash flows.

36. The impairment of intangible assets with finite lives affects:

- A. the balance sheet but not the income statement.
- B. the income statement but not the balance sheet.
- C. both the balance sheet and the income statement.

37. A financial analyst at BETTO S.A. is analyzing the result of the sale of a vehicle for 85,000 Argentine pesos (ARP) on 31 December 2009. The analyst compiles the following information about the vehicle:

Acquisition cost of the vehicle	ARP 100,000
Acquisition date	1 January 2007
Estimated residual value at acquisition date	ARP 10,000
Expected useful life	9 years
Depreciation method	Straight-line

The result of the sale of the vehicle is *most likely*:

- A. a loss of ARP 15,000.
- B. a gain of ARP 15,000.
- C. a gain of ARP 18,333.

38. CROCO S.p.A sells an intangible asset with a historical acquisition cost of €12 million and an accumulated amortization of €2 million and reports a loss on the sale of €3.2 million. Which of the following amounts is *most likely* the sale price of the asset?

- A. €6.8 million
- B. €8.8 million
- C. €13.2 million

39. The gain or loss on a sale of a long-lived asset to which the revaluation model has been applied is *most likely* calculated using sales proceeds less:

- A. carrying amount.

- B. carrying amount adjusted for impairment.
 - C. historical cost net of accumulated depreciation.
40. According to IFRS, all of the following pieces of information about property, plant, and equipment must be disclosed in a company's financial statements and footnotes *except for*:
- A. useful lives.
 - B. acquisition dates.
 - C. amount of disposals.
41. According to IFRS, all of the following pieces of information about intangible assets must be disclosed in a company's financial statements and footnotes *except for*:
- A. fair value.
 - B. impairment loss.
 - C. amortization rate.
42. Which of the following is a required financial statement disclosure for long-lived intangible assets under US GAAP?
- A. The useful lives of assets
 - B. The reversal of impairment losses
 - C. Estimated amortization expense for the next five fiscal years
43. Which of the following characteristics is *most likely* to differentiate investment property from property, plant, and equipment?
- A. It is tangible.
 - B. It earns rent.
 - C. It is long-lived.
44. If a company uses the fair value model to value investment property, changes in the fair value of the asset are *least likely* to affect:
- A. net income.
 - B. net operating income.
 - C. other comprehensive income.
45. Investment property is *most likely* to:
- A. earn rent.
 - B. be held for resale.
 - C. be used in the production of goods and services.

46. A company is *most likely* to:
- A. use a fair value model for some investment property and a cost model for other investment property.
 - B. change from the fair value model when transactions on comparable properties become less frequent.
 - C. change from the fair value model when the company transfers investment property to property, plant, and equipment.
47. Under the revaluation model for property, plant, and equipment and the fair model for investment property:
- A. fair value of the asset must be able to be measured reliably.
 - B. net income is affected by all changes in the fair value of the asset.
 - C. net income is never affected if the asset increases in value from its carrying amount.
48. Under IFRS, what must be disclosed under the cost model of valuation for investment properties?
- A. Useful lives
 - B. The method for determining fair value
 - C. Reconciliation between beginning and ending carrying amounts of investment property

PRACTICE PROBLEMS

1. In early 2018 Sanborn Company must pay the tax authority €37,000 on the income it earned in 2017. This amount was recorded on the company's 31 December 2017 financial statements as:
 - A. taxes payable.
 - B. income tax expense.
 - C. a deferred tax liability.
2. Using the straight-line method of depreciation for reporting purposes and accelerated depreciation for tax purposes would *most likely* result in a:
 - A. valuation allowance.
 - B. deferred tax asset.
 - C. temporary difference.
3. Income tax expense reported on a company's income statement equals taxes payable, plus the net increase in:
 - A. deferred tax assets and deferred tax liabilities.
 - B. deferred tax assets, less the net increase in deferred tax liabilities.
 - C. deferred tax liabilities, less the net increase in deferred tax assets.
4. Analysts should treat deferred tax liabilities that are expected to reverse as:
 - A. equity.
 - B. liabilities.
 - C. neither liabilities nor equity.
5. When accounting standards require an asset to be expensed immediately but tax rules require the item to be capitalized and amortized, the company will *most likely* record:
 - A. a deferred tax asset.
 - B. a deferred tax liability.
 - C. no deferred tax asset or liability.
6. A company incurs a capital expenditure that may be amortized over five years for accounting purposes, but over four years for tax purposes. The company will *most likely* record:
 - A. a deferred tax asset.
 - B. a deferred tax liability.
 - C. no deferred tax asset or liability.
7. A company receives advance payments from customers that are immediately tax-

able but will not be recognized for accounting purposes until the company fulfills its obligation. The company will *most likely* record:

- A. a deferred tax asset.
- B. a deferred tax liability.
- C. no deferred tax asset or liability.

The following information relates to questions 8-10

The tax effects of temporary differences that give rise to deferred tax assets and liabilities are as follows (\$ thousands):

	Year 3	Year 2
Deferred tax assets:		
Accrued expenses	\$8,613	\$7,927
Tax credit and net operating loss carryforwards	2,288	2,554
LIFO and inventory reserves	5,286	4,327
Other	2,664	2,109
Deferred tax assets	18,851	16,917
Valuation allowance	(1,245)	(1,360)
Net deferred tax assets	\$17,606	\$15,557
Deferred tax liabilities:		
Depreciation and amortization	\$(27,338)	\$(29,313)
Compensation and retirement plans	(3,831)	(8,963)
Other	(1,470)	(764)
Deferred tax liabilities	(32,639)	(39,040)
Net deferred tax liability	(\$15,033)	(\$23,483)

8. A reduction in the statutory tax rate would *most likely* benefit the company's:
 - A. income statement and balance sheet.
 - B. income statement but not the balance sheet.
 - C. balance sheet but not the income statement.
9. If the valuation allowance had been the same in Year 3 as it was in Year 2, the company would have reported \$115 *higher*:
 - A. net income.
 - B. deferred tax assets.
 - C. income tax expense.
10. Compared to the provision for income taxes in Year 3, the company's cash tax payments were:
 - A. lower.

- B. higher.
 - C. the same.
11. When accounting standards require recognition of an expense that is not permitted under tax laws, the result is a:
- A. deferred tax liability.
 - B. temporary difference.
 - C. permanent difference.
12. When certain expenditures result in tax credits that directly reduce taxes, the company will *most likely* record:
- A. a deferred tax asset.
 - B. a deferred tax liability.
 - C. no deferred tax asset or liability.
13. Zimt AG presents its financial statements in accordance with US GAAP. In Year 3, Zimt discloses a valuation allowance of \$1,101 against total deferred tax assets of \$19,201. In Year 2, Zimt disclosed a valuation allowance of \$1,325 against total deferred tax assets of \$17,325. The change in the valuation allowance *most likely* indicates that Zimt's:
- A. deferred tax liabilities were reduced in Year 3.
 - B. expectations of future earning power has increased.
 - C. expectations of future earning power has decreased.
14. Cinnamon, Inc. recorded a total deferred tax asset in Year 3 of \$12,301, offset by a \$12,301 valuation allowance. Cinnamon *most likely*:
- A. fully utilized the deferred tax asset in Year 3.
 - B. has an equal amount of deferred tax assets and deferred tax liabilities.
 - C. expects not to earn any taxable income before the deferred tax asset expires.
15. Deferred tax liabilities should be treated as equity when:
- A. they are not expected to reverse.
 - B. the timing of tax payments is uncertain.
 - C. the amount of tax payments is uncertain.
16. When both the timing and amount of tax payments are uncertain, analysts should treat deferred tax liabilities as:
- A. equity.
 - B. liabilities.
 - C. neither liabilities nor equity.

The following information relates to questions 17-19

Note I: Income Taxes

The components of earnings before income taxes are as follows (\$ thousands):

	Year 3	Year 2	Year 1
Earnings before income taxes:			
United States	\$88,157	\$75,658	\$59,973
Foreign	116,704	113,509	94,760
Total	\$204,861	\$189,167	\$154,733

The components of the provision for income taxes are as follows (\$ thousands):

	Year 3	Year 2	Year 1
Income taxes			
Current:			
Federal	\$30,632	\$22,031	\$18,959
Foreign	28,140	27,961	22,263
	\$58,772	\$49,992	\$41,222
Deferred:			
Federal	(\$4,752)	\$5,138	\$2,336
Foreign	124	1,730	621
	(4,628)	6,868	2,957
Total	\$54,144	\$56,860	\$44,179

17. In Year 3, the company's US GAAP income statement recorded a provision for income taxes *closest* to:
- \$30,632.
 - \$54,144.
 - \$58,772.
18. The company's effective tax rate was *highest* in:
- Year 1.
 - Year 2.
 - Year 3.
19. Compared to the company's effective tax rate on US income, its effective tax rate on foreign income was:
- lower in each year presented.
 - higher in each year presented.
 - higher in some periods and lower in others.

The following information relates to questions 20-22

A company's provision for income taxes resulted in effective tax rates attributable to loss from continuing operations before cumulative effect of change in accounting principles that varied from the statutory federal income tax rate of 34 percent, as summarized in the table below.

Year Ended 30 June	Year 3	Year 2	Year 1
Expected federal income tax expense (benefit) from continuing operations at 34 percent	(\$112,000)	\$768,000	\$685,000
Expenses not deductible for income tax purposes	357,000	32,000	51,000
State income taxes, net of federal benefit	132,000	22,000	100,000
Change in valuation allowance for deferred tax assets	(150,000)	(766,000)	(754,000)
Income tax expense	\$227,000	\$56,000	\$82,000

20. In Year 3, the company's net income (loss) was *closest* to:

- A. (\$217,000).
- B. (\$329,000).
- C. (\$556,000).

21. The \$357,000 adjustment in Year 3 *most likely* resulted in:

- A. an increase in deferred tax assets.
- B. an increase in deferred tax liabilities.
- C. no change to deferred tax assets and liabilities.

22. Over the three years presented, changes in the valuation allowance for deferred tax assets were *most likely* indicative of:

- A. decreased prospect for future profitability.
- B. increased prospects for future profitability.
- C. assets being carried at a higher value than their tax base.

PRACTICE PROBLEMS

1. A company issues €1 million of bonds at face value. When the bonds are issued, the company will record a:
 - A. cash inflow from investing activities.
 - B. cash inflow from financing activities.
 - C. cash inflow from operating activities.
2. At the time of issue of 4.50% coupon bonds, the effective interest rate was 5.00%. The bonds were *most likely* issued at:
 - A. par.
 - B. a discount.
 - C. a premium.
3. Oil Exploration LLC paid \$45,000 in printing, legal fees, commissions, and other costs associated with its recent bond issue. It is *most likely* to record these costs on its financial statements as:
 - A. an asset under US GAAP and reduction of the carrying value of the debt under IFRS.
 - B. a liability under US GAAP and reduction of the carrying value of the debt under IFRS.
 - C. a cash outflow from investing activities under both US GAAP and IFRS.
4. A company issues \$1,000,000 face value of 10-year bonds on 1 January 2015 when the market interest rate on bonds of comparable risk and terms is 5%. The bonds pay 6% interest annually on 31 December. At the time of issue, the bonds payable reflected on the balance sheet is *closest* to:
 - A. \$926,399.
 - B. \$1,000,000.
 - C. \$1,077,217.
5. Midland Brands issues three-year bonds dated 1 January 2015 with a face value of \$5,000,000. The market interest rate on bonds of comparable risk and term is 3%. If the bonds pay 2.5% annually on 31 December, bonds payable when issued are most likely reported as *closest* to:
 - A. \$4,929,285.
 - B. \$5,000,000.
 - C. \$5,071,401.
6. A firm issues a bond with a coupon rate of 5.00% when the market interest rate is 5.50% on bonds of comparable risk and terms. One year later, the market interest rate increases to 6.00%. Based on this information, the effective interest rate is:
 - A. 5.00%.

- B. 5.50%.
 - C. 6.00%.
7. On 1 January 2010, Elegant Fragrances Company issues £1,000,000 face value, five-year bonds with annual interest payments of £55,000 to be paid each 31 December. The market interest rate is 6.0 percent. Using the effective interest rate method of amortisation, Elegant Fragrances is *most likely* to record:
- A. an interest expense of £55,000 on its 2010 income statement.
 - B. a liability of £982,674 on the 31 December 2010 balance sheet.
 - C. a £58,736 cash outflow from operating activity on the 2010 statement of cash flows.
8. Consolidated Enterprises issues €10 million face value, five-year bonds with a coupon rate of 6.5 percent. At the time of issuance, the market interest rate is 6.0 percent. Using the effective interest rate method of amortisation, the carrying value after one year will be *closest* to:
- A. €10.17 million.
 - B. €10.21 million.
 - C. €10.28 million.
9. A company issues €10,000,000 face value of 10-year bonds dated 1 January 2015 when the market interest rate on bonds of comparable risk and terms is 6%. The bonds pay 7% interest annually on 31 December. Based on the effective interest rate method, the interest expense on 31 December 2015 is *closest* to:
- A. €644,161.
 - B. €700,000.
 - C. €751,521.
10. A company issues \$30,000,000 face value of five-year bonds dated 1 January 2015 when the market interest rate on bonds of comparable risk and terms is 5%. The bonds pay 4% interest annually on 31 December. Based on the effective interest rate method, the carrying amount of the bonds on 31 December 2015 is *closest* to:
- A. \$28,466,099.
 - B. \$28,800,000.
 - C. \$28,936,215.
11. Lesp Industries issues five-year bonds dated 1 January 2015 with a face value of \$2,000,000 and 3% coupon rate paid annually on 31 December. The market interest rate on bonds of comparable risk and term is 4%. The sales proceeds of the bonds are \$1,910,964. Under the effective interest rate method, the interest expense in 2017 is *closest* to:
- A. \$77,096.
 - B. \$77,780.

- C. \$77,807.
12. For a bond issued at a premium, using the effective interest rate method, the:
- A. carrying amount increases each year.
 - B. amortization of the premium increases each year.
 - C. premium is evenly amortized over the life of the bond.
13. Comte Industries issues \$3,000,000 worth of three-year bonds dated 1 January 2015. The bonds pay interest of 5.5% annually on 31 December. The market interest rate on bonds of comparable risk and term is 5%. The sales proceeds of the bonds are \$3,040,849. Under the straight-line method, the interest expense in the first year is *closest* to:
- A. \$150,000.
 - B. \$151,384.
 - C. \$152,042.
14. Innovative Inventions, Inc. needs to raise €10 million. If the company chooses to issue zero-coupon bonds, its debt-to-equity ratio will *most likely*:
- A. rise as the maturity date approaches.
 - B. decline as the maturity date approaches.
 - C. remain constant throughout the life of the bond.
15. Fairmont Golf issued fixed rate debt when interest rates were 6 percent. Rates have since risen to 7 percent. Using only the carrying amount (based on historical cost) reported on the balance sheet to analyze the company's financial position would *most likely* cause an analyst to:
- A. overestimate Fairmont's economic liabilities.
 - B. underestimate Fairmont's economic liabilities.
 - C. underestimate Fairmont's interest coverage ratio.
16. The management of Bank EZ repurchases its own bonds in the open market. They pay €6.5 million for bonds with a face value of €10.0 million and a carrying value of €9.8 million. The bank will *most likely* report:
- A. other comprehensive income of €3.3 million.
 - B. other comprehensive income of €3.5 million.
 - C. a gain of €3.3 million on the income statement.
17. A company redeems \$1,000,000 face value bonds with a carrying value of \$990,000. If the call price is 104 the company will:
- A. reduce bonds payable by \$1,000,000.
 - B. recognize a loss on the extinguishment of debt of \$50,000.
 - C. recognize a gain on the extinguishment of debt of \$10,000.

18. Which of the following is an example of an affirmative debt covenant? The borrower is:
- A. prohibited from entering into mergers.
 - B. prevented from issuing excessive additional debt.
 - C. required to perform regular maintenance on equipment pledged as collateral.
19. Debt covenants are *least likely* to place restrictions on the issuer's ability to:
- A. pay dividends.
 - B. issue additional debt.
 - C. issue additional equity.
20. Regarding a company's debt obligations, which of the following is *most likely* presented on the balance sheet?
- A. Effective interest rate
 - B. Maturity dates for debt obligations
 - C. The portion of long-term debt due in the next 12 months
21. Beginning with fiscal year 2019, for leases with a term longer than one year, lessees report a right-to-use asset and a lease liability on the balance sheet:
- A. only for finance leases.
 - B. only for operating leases.
 - C. for both finance and operating leases.
22. For a lessor, the leased asset appears on the balance sheet and continues to be depreciated when the lease is classified as:
- A. a finance lease.
 - B. a sales-type lease.
 - C. an operating lease.
23. Under US GAAP, a lessor's reported revenues at lease inception will be *highest* if the lease is classified as:
- A. a sales-type lease.
 - B. an operating lease.
 - C. a direct financing lease.
24. Under both IFRS and US GAAP, a lessor in an operating lease recognizes:
- A. selling profit at lease inception.
 - B. a lease asset comprising the lease receivable and relevant residual value at lease inception.

- C. lease receipts as income and related costs, including depreciation, as expenses over the lease term.
25. Compared with a finance lease, an operating lease:
- A. is similar to renting an asset.
 - B. is equivalent to the purchase of an asset.
 - C. term is for the majority of the economic life of the leased asset.
26. Under US GAAP, a lessee's accounting for a long-term finance lease after inception will include:
- A. recognizing a single lease expense.
 - B. recording depreciation expense on the right-of-use asset.
 - C. increasing the balance of the lease liability by a portion of the lease payment.
27. A company enters into a finance lease agreement to acquire the use of an asset for three years with lease payments of €19,000,000 starting next year. The leased asset has a fair market value of €49,000,000 and the present value of the lease payments is €47,250,188. Based on this information, the value of the lease liability reported on the company's balance sheet at lease inception is *closest* to:
- A. €47,250,188.
 - B. €49,000,000.
 - C. €57,000,000.
28. Penben Corporation has a defined benefit pension plan. At 31 December, its pension obligation is €10 million and pension assets are €9 million. Under either IFRS or US GAAP, the reporting on the balance sheet would be *closest* to which of the following?
- A. €10 million is shown as a liability, and €9 million appears as an asset.
 - B. €1 million is shown as a net pension obligation.
 - C. Pension assets and obligations are not required to be shown on the balance sheet but only disclosed in footnotes.
29. The following information is associated with a company that offers its employees a defined benefit plan:
- | | |
|--|-----------------|
| Fair value of fund's assets | \$1,500,000,000 |
| Estimated pension obligations | \$2,600,000,000 |
| Present value of estimated pension obligations | \$1,200,000,000 |
- Based on this information, the company's balance sheet will present a net pension:
- A. asset of \$300,000,000.
 - B. asset of \$1,400,000,000.
 - C. liability of \$1,100,000,000.

30. The following presents selected financial information for a company:

	\$ Millions
Short-term borrowing	4,231
Current portion of long-term interest-bearing debt	29
Long-term interest-bearing debt	925
Average shareholders' equity	18,752
Average total assets	45,981

The financial leverage ratio is *closest* to:

- A. 0.113
- B. 0.277
- C. 2.452

31. An analyst evaluating three industrial companies calculates the following ratios:

	Company A	Company B	Company C
Debt-to-Equity	23.5%	22.5%	52.5%
Interest Coverage	15.6	49.5	45.5

The company with both the lowest financial leverage and the greatest ability to meet interest payments is:

- A. Company A.
- B. Company B.
- C. Company C.

32. An analyst evaluating a company's solvency gathers the following information:

	\$ Millions
Short-term interest-bearing debt	1,258
Long-term interest-bearing debt	321
Total shareholder's equity	4,285
Total assets	8,750
EBIT	2,504
Interest payments	52

The company's debt-to-assets ratio is *closest* to:

- A. 0.18.
- B. 0.27.
- C. 0.37.

PRACTICE PROBLEMS

1. In contrast to earnings quality, financial reporting quality *most likely* pertains to:
 - A. sustainable earnings.
 - B. relevant information.
 - C. adequate return on investment.
2. The information provided by a low-quality financial report will *most likely*:
 - A. decrease company value.
 - B. indicate earnings are not sustainable.
 - C. impede the assessment of earnings quality.
3. To properly assess a company's past performance, an analyst requires:
 - A. high earnings quality.
 - B. high financial reporting quality.
 - C. both high earnings quality and high financial reporting quality.
4. Low quality earnings *most likely* reflect:
 - A. low-quality financial reporting.
 - B. company activities which are unsustainable.
 - C. information that does not faithfully represent company activities.
5. Earnings that result from non-recurring activities *most likely* indicate:
 - A. lower-quality earnings.
 - B. biased accounting choices.
 - C. lower-quality financial reporting.
6. Which attribute of financial reports would *most likely* be evaluated as optimal in the financial reporting spectrum?
 - A. Conservative accounting choices
 - B. Sustainable and adequate returns
 - C. Emphasized pro forma earnings measures
7. Financial reports of the lowest level of quality reflect:
 - A. fictitious events.
 - B. biased accounting choices.
 - C. accounting that is non-compliant with GAAP.
8. When earnings are increased by deferring research and development (R&D)

investments until the next reporting period, this choice is considered:

- A. non-compliant accounting.
 - B. earnings management as a result of a real action.
 - C. earnings management as a result of an accounting choice.
9. A high-quality financial report may reflect:
- A. earnings smoothing.
 - B. low earnings quality.
 - C. understatement of asset impairment.
10. If a particular accounting choice is considered aggressive in nature, then the financial performance for the reporting period would *most likely*:
- A. be neutral.
 - B. exhibit an upward bias.
 - C. exhibit a downward bias.
11. Which of the following is *most likely* to reflect conservative accounting choices?
- A. Decreased reported earnings in later periods
 - B. Increased reported earnings in the period under review
 - C. Increased debt reported on the balance sheet at the end of the current period
12. Which of the following is *most likely* to be considered a potential benefit of accounting conservatism?
- A. A reduction in litigation costs
 - B. Less biased financial reporting
 - C. An increase in current period reported performance
13. Which of the following statements *most likely* describes a situation that would motivate a manager to issue low-quality financial reports?
- A. The manager's compensation is tied to stock price performance.
 - B. The manager has increased the market share of products significantly.
 - C. The manager has brought the company's profitability to a level higher than competitors.
14. Which of the following concerns would *most likely* motivate a manager to make conservative accounting choices?
- A. Attention to future career opportunities
 - B. Expected weakening in the business environment
 - C. Debt covenant violation risk in the current period

15. Which of the following conditions *best* explains why a company's manager would obtain legal, accounting, and board level approval prior to issuing low-quality financial reports?
- A. Motivation
 - B. Opportunity
 - C. Rationalization
16. A company is experiencing a period of strong financial performance. In order to increase the likelihood of exceeding analysts' earnings forecasts in the next reporting period, the company would *most likely* undertake accounting choices for the period under review that:
- A. inflate reported revenue.
 - B. delay expense recognition.
 - C. accelerate expense recognition.
17. Which of the following situations represents a motivation, rather than an opportunity, to issue low-quality financial reports?
- A. Poor internal controls
 - B. Search for a personal bonus
 - C. Inattentive board of directors
18. Which of the following situations will *most likely* motivate managers to inflate reported earnings?
- A. Possibility of bond covenant violation
 - B. Earnings in excess of analysts' forecasts
 - C. Earnings that are greater than the previous year
19. Which of the following *best* describes an opportunity for management to issue low-quality financial reports?
- A. Ineffective board of directors
 - B. Pressure to achieve some performance level
 - C. Corporate concerns about financing in the future
20. An audit opinion of a company's financial reports is *most likely* intended to:
- A. detect fraud.
 - B. reveal misstatements.
 - C. assure that financial information is presented fairly.
21. If a company uses a non-GAAP financial measure in an SEC filing, then the company must:
- A. give more prominence to the non-GAAP measure if it is used in earnings releases.

- B. provide a reconciliation of the non-GAAP measure and equivalent GAAP measure.
 - C. exclude charges requiring cash settlement from any non-GAAP liquidity measures.
22. A company wishing to increase earnings in the reporting period may choose to:
- A. decrease the useful life of depreciable assets.
 - B. lower estimates of uncollectible accounts receivables.
 - C. classify a purchase as an expense rather than a capital expenditure.
23. Which technique *most likely* increases the cash flow provided by operations?
- A. Stretching the accounts payable credit period
 - B. Applying all non-cash discount amortization against interest capitalized
 - C. Shifting classification of interest paid from financing to operating cash flows
24. Bias in revenue recognition would *least likely* be suspected if:
- A. the firm engages in barter transactions.
 - B. reported revenue is higher than the previous quarter.
 - C. revenue is recognized before goods are shipped to customers.
25. Which of the following is an indication that a company may be recognizing revenue prematurely? Relative to its competitors, the company's:
- A. asset turnover is decreasing.
 - B. receivables turnover is increasing.
 - C. days sales outstanding is increasing.
26. Which of the following would *most likely* signal that a company may be using aggressive accrual accounting policies to shift current expenses to later periods? Over the last five-year period, the ratio of cash flow to net income has:
- A. increased each year.
 - B. decreased each year.
 - C. fluctuated from year to year.
27. An analyst reviewing a firm with a large reported restructuring charge to earnings should:
- A. view expenses reported in prior years as overstated.
 - B. disregard it because it is solely related to past events.
 - C. consider making pro forma adjustments to prior years' earnings.

PRACTICE PROBLEMS

1. Projecting profit margins into the future on the basis of past results would be *most* reliable when the company:
 - A. is in the commodities business.
 - B. operates in a single business segment.
 - C. is a large, diversified company operating in mature industries.
2. Galambos Corporation had an average receivables collection period of 19 days in 2003. Galambos has stated that it wants to decrease its collection period in 2004 to match the industry average of 15 days. Credit sales in 2003 were \$300 million, and analysts expect credit sales to increase to \$400 million in 2004. To achieve the company's goal of decreasing the collection period, the change in the average accounts receivable balance from 2003 to 2004 that must occur is *closest* to:
 - A. -\$420,000.
 - B. \$420,000.
 - C. \$836,000.
3. Credit analysts are likely to consider which of the following in making a rating recommendation?
 - A. Business risk but not financial risk
 - B. Financial risk but not business risk
 - C. Both business risk and financial risk
4. When screening for potential equity investments based on return on equity, to control risk, an analyst would be *most likely* to include a criterion that requires:
 - A. positive net income.
 - B. negative net income.
 - C. negative shareholders' equity.
5. One concern when screening for stocks with low price-to-earnings ratios is that companies with low P/E's may be financially weak. What criterion might an analyst include to avoid inadvertently selecting weak companies?
 - A. Net income less than zero
 - B. Debt-to-total assets ratio below a certain cutoff point
 - C. Current-year sales growth lower than prior-year sales growth
6. When a database eliminates companies that cease to exist because of a merger or bankruptcy, this can result in:
 - A. look-ahead bias.
 - B. back-testing bias.

- C. survivorship bias.
7. In a comprehensive financial analysis, financial statements should be:
- used as reported without adjustment.
 - adjusted after completing ratio analysis.
 - adjusted for differences in accounting standards, such as international financial reporting standards and US generally accepted accounting principles.
8. When comparing a US company that uses the last in, first out (LIFO) method of inventory with companies that prepare their financial statements under international financial reporting standards (IFRS), analysts should be aware that according to IFRS, the LIFO method of inventory:
- is never acceptable.
 - is always acceptable.
 - is acceptable when applied to finished goods inventory only.
9. An analyst is evaluating the balance sheet of a US company that uses last in, first out (LIFO) accounting for inventory. The analyst collects the following data:

	31 Dec 05	31 Dec 06
Inventory reported on balance sheet	\$500,000	\$600,000
LIFO reserve	\$ 50,000	\$70,000
Average tax rate	30%	30%

After adjusting the amounts to convert to the first in, first out (FIFO) method, inventory at 31 December 2006 would be closest to:

- \$600,000.
 - \$620,000.
 - \$670,000.
10. An analyst gathered the following data for a company (\$ millions):

	31 Dec 2000	31 Dec 2001
Gross investment in fixed assets	\$2.8	\$2.8
Accumulated depreciation	\$1.2	\$1.6

The average age and average depreciable life of the company's fixed assets at the end of 2001 are *closest* to:

	Average Age	Average Depreciable Life
A	1.75 years	7 years
B	1.75 years	14 years
C	4.00 years	7 years

11. To compute tangible book value, an analyst would:
- A. add goodwill to stockholders' equity.
 - B. add all intangible assets to stockholders' equity.
 - C. subtract all intangible assets from stockholders' equity.

Corporate Issuers

PRACTICE PROBLEMS

1. Describe the process of going public by a private company.
2. Describe the process of going private by a public company.
3. Identify the true statement(s) about corporation types from among the following:
 - A. Nonprofit corporations by definition cannot generate profits.
 - B. Transferring ownership from seller to buyer is more difficult for a private company than for a public company.
 - C. Companies are categorized as public when they have greater than a minimum number of shareholders.
4. From the corporate issuer's perspective, the risk level of bonds compared to stocks is _____.
 - A. lower.
 - B. higher.
 - C. the same.
5. True or false: Bondholders can become shareholders through non-market-based means. Justify your answer.
 - A. True.
 - B. False.
6. Explain potential conflicts of interest between debtholders and equityholders.
7. State a reason for the declining number of public companies in developed markets.

PRACTICE PROBLEMS

1. Which group of company stakeholders would be *least* affected if the firm's financial position weakens?
 - A. Suppliers
 - B. Customers
 - C. Managers and employees
2. Which of the following represents a principal-agent conflict between shareholders and management?
 - A. Risk tolerance
 - B. Multiple share classes
 - C. Accounting and reporting practices
3. Which of the following statements regarding stakeholder management is *most* accurate?
 - A. Company management ensures compliance with all applicable laws and regulations.
 - B. Directors are excluded from voting on transactions in which they hold material interest.
 - C. The use of variable incentive plans in executive remuneration is decreasing.
4. Which of the following issues discussed at a shareholders' general meeting would *most likely* require only a simple majority vote for approval?
 - A. Voting on a merger
 - B. Election of directors
 - C. Amendments to bylaws
5. Which of the following statements about environmental, social, and governance (ESG) in investment analysis is correct?
 - A. ESG factors are strictly intangible in nature.
 - B. ESG terminology is easily distinguishable among investors.
 - C. Environmental and social factors have been adopted in investment analysis more slowly than governance factors.
6. The existence of "stranded assets" is a specific concern among investors of:
 - A. energy companies.
 - B. health care companies.
 - C. property companies.
7. An investor concerned about clean-up costs resulting from breaches in a publicly

traded company's safety standards would *most likely* consider which factors in her investment analysis?

- A. Social factors
 - B. Governance factors
 - C. Environmental factors
8. _____ investing is the umbrella term used to describe investment strategies that incorporate environmental, social, and governance (ESG) factors into their approaches.
- A. ESG
 - B. Sustainable
 - C. Responsible
9. An investor concerned about a publicly traded company's data privacy and security practices would *most likely* incorporate which type of ESG factors in an investment analysis?
- A. Social
 - B. Governance
 - C. Environmental
10. Which of the following statements regarding ESG investment approaches is *most accurate*?
- A. Negative screening excludes industries and companies that do not meet the investor's ESG criteria.
 - B. Thematic investing considers multiple factors.
 - C. Positive screening excludes industries with unfavorable ESG aspects.
11. Which of the following stakeholders are *least likely* to be positively affected by increasing the proportion of debt in the capital structure?
- A. Senior management
 - B. Non-management employees
 - C. Shareholders
12. Which statement correctly describes corporate governance?
- A. Corporate governance complies with a set of global standards.
 - B. Corporate governance is independent of both shareholder theory and stakeholder theory.
 - C. Corporate governance seeks to minimize and manage conflicting interests between insiders and external shareholders.
13. Which of the following represents a responsibility of a company's board of direc-

tors?

- A. Implementation of strategy
- B. Enterprise risk management
- C. Considering the interests of shareholders only

14. Which of the following statements concerning the legal environment and shareholder protection is *most* accurate?

- A. A civil law system offers better protection of shareholder interests than does a common law system.
- B. A common law system offers better protection of shareholder interests than does a civil law system.
- C. Neither system offers an advantage over the other in the protection of shareholder interests.

PRACTICE PROBLEMS

1. Which of the following is *least* likely to be a key feature of a business model?
 - A. Unit economics
 - B. Channel strategy
 - C. Financial forecasts
 - D. Customer cost of ownership
 - E. Target customer identification
2. When should an analyst expect a business model to employ premium pricing?
When:
 - A. the company is a price taker.
 - B. the firm is small and returns are highly scale sensitive.
 - C. significant differentiation is possible in the product category.
 - D. the firm is a market leader and demand is very price sensitive.
3. Which is the *most* accurate statement about a platform business?
 - A. A platform business is based on network effects.
 - B. A platform business can be a non-technology business.
 - C. Value creation for customers for a platform business occurs externally.
 - D. It can be difficult to attract users in the beginning to a platform business.
 - E. All of the above
4. Which of the following businesses is *least* likely to have network effects?
 - A. A stock exchange
 - B. A telephone company
 - C. A classified advertising website
 - D. A price comparison website for travel airfares
 - E. A resume preparation service for online job seekers
5. A flower shop has preferred supplier arrangements with an answering service, to take orders after hours, and a bicycle delivery service, to ensure that it can make deliveries quickly, reliably, and at a reasonable cost. Which of the following statements is *most* accurate for the flower shop?
 - A. The answering service is part of its supply chain.
 - B. The bicycle delivery service is part of its value chain.
 - C. The bicycle delivery service is part of its supply chain.

- D. The bicycle delivery service is not a part of the value proposition for the flower shop.
6. Which of the following is the *closest* example of a one-sided network?
- An online employment website
 - A dating website for men and women
 - A social network for model train collectors
 - A website for home improvement contractors
7. Which of the following statements is not representative of unit costs?
- Unit costs generally exclude labor costs.
 - Business models generally consider unit costs.
 - Unit costs are used to calculate break-even points.
 - If a lemonade stand uses 5 cents worth of lemons, 2 cents worth of sugar, and a cup costing 3 cents for each glass of lemonade, it has a unit cost of 10 cents.
8. Which of the following companies would *most* likely have a high level of macro risk?
- A coffee plantation in Brazil
 - A Swedish mining equipment manufacturer
 - A call center outsourcing business based in India
9. Which of the following is *most* likely to have a high level of industry risk?
- Toll road
 - Pest control services company
 - Oil well drilling service company
10. For a newly launched clothing company in Japan that uses offshore production in Malaysia, classify each of the following impacts:
-
- | | |
|---|--------------------------|
| 1. Demand falls gradually due to a declining population | A. Company-specific risk |
| 2. Consumer tastes shift to favor locally manufactured apparel | B. Macro risk |
| 3. The company faces uncertainty about future demand as it hires a new chief designer and makes changes to its top-selling products | C. Industry risk |
-
11. Which of the following is an example of significant execution risk?
- A manufacturer replaces aging factory machinery with similar but more efficient equipment.

- B. A marketer of high-fashion pet accessories tests the market to see if there is demand for glamorous dog harnesses made with faux fur.
 - C. A company with consistent operating margins of about 5% with stable market share of 5% for swimming pool chemicals plans to double its margins and triple its market share over the next five years.
12. Which of the following is *most* likely to increase a business's operating leverage?
- A. Reducing prices
 - B. Borrowing rather than issuing equity
 - C. Using casual labor rather than a salaried work force
13. Which of the following is *most* likely to increase financial leverage?
- A. Cutting prices
 - B. Replacing short-term debt with long-term debt
 - C. Entering a sale-leaseback transaction for the company's head office building

PRACTICE PROBLEMS

1. With regard to capital allocation, an appropriate estimate of the incremental cash flows from an investment is *least likely* to include:
 - A. externalities.
 - B. interest costs.
 - C. opportunity costs.
2. The NPV of an investment is equal to the sum of the expected cash flows discounted at the:
 - A. internal rate of return.
 - B. risk-free rate.
 - C. opportunity COC.

3. A USD2.2 million investment will result in the following year-end cash flows:

Year	1	2	3	4
Cash flow (millions)	USD1.3	USD1.6	USD1.9	USD0.8

Using an 8% opportunity COC, the investment's NPV is *closest* to:

- A. USD2.47 million.
 - B. USD3.40 million.
 - C. USD4.67 million.
4. The IRR is *best* described as the:
 - A. opportunity COC.
 - B. time-weighted rate of return.
 - C. discount rate that makes the NPV equal to zero.
 5. A three-year investment requires an initial outlay of GBP1,000. It is expected to provide three year-end cash flows of GBP200 plus a net salvage value of GBP700 at the end of three years. Its IRR is *closest* to:
 - A. 10%.
 - B. 11%.
 - C. 20%.
 6. Given the following cash flows for a capital investment, calculate the NPV and IRR. The required rate of return is 8%.

Year	0	1	2	3	4	5
Cash flow	-50,000	15,000	15,000	20,000	10,000	5,000

	NPV	IRR
A	USD1,905	10.9%
B	USD1,905	26.0%
C	USD3,379	10.9%

7. An investment of USD100 generates after-tax cash flows of USD40 in Year 1, USD80 in Year 2, and USD120 in Year 3. The required rate of return is 20%. The NPV is *closest* to:
- A. USD42.22.
- B. USD58.33.
- C. USD68.52.
8. An investment of USD150,000 is expected to generate an after-tax cash flow of USD100,000 in one year and another USD120,000 in two years. The COC is 10%. What is the IRR?
- A. 28.39%
- B. 28.59%
- C. 28.79%
9. Kim Corporation is considering an investment of KRW750 million with expected after-tax cash inflows of KRW175 million per year for seven years. The required rate of return is 10%. What is the investment's:

	NPV?	IRR?
A.	KRW102 million	14.0%
B.	KRW157 million	23.3%
C.	KRW193 million	10.0%

10. Erin Chou is reviewing a profitable investment that has a conventional cash flow pattern. If the cash flows for the initial outlay and future after-tax cash flows all double, Chou would predict that the IRR would:
- A. increase and the NPV would increase.
- B. stay the same and the NPV would increase.
- C. stay the same and the NPV would stay the same.
11. Catherine Ndereba is an energy analyst tasked with evaluating a crude oil exploration and production company. The company previously announced that it plans to embark on a new project to drill for oil offshore. As a result of this announcement, the stock price increased by 10%. After conducting her analysis, Ms. Ndereba concludes that the project does indeed have a positive NPV. Which statement is true?

- A. The stock price should remain where it is because Ms. Ndereba's analysis confirms that the recent run-up was justified.
 - B. The stock price should go even higher now that an independent source has confirmed that the NPV is positive.
 - C. The stock price could remain steady, move higher, or move lower.
12. The Bearing Corp. invests only in positive-NPV projects. Which of the following statements is true?
- A. Bearing's ROIC is greater than its COC.
 - B. Bearing's COC is greater than its ROIC.
 - C. We cannot reach any conclusions about the relationship between the company's ROIC and COC.
13. Investments 1 and 2 have similar outlays, although the patterns of future cash flows are different. The cash flows, as well as the NPV and IRR, for the two investments are shown below. For both investments, the required rate of return is 10%.

Cash Flows							
Year	0	1	2	3	4	NPV	IRR (%)
Investment 1	-50	20	20	20	20	13.40	21.86
Investment 2	-50	0	0	0	100	18.30	18.92

The two projects are mutually exclusive. What is the appropriate investment decision?

- A. Invest in both investments.
 - B. Invest in Investment 1 because it has the higher IRR.
 - C. Invest in Investment 2 because it has the higher NPV.
14. Consider the two investments below. The cash flows, as well as the NPV and IRR, for the two investments are given. For both investments, the required rate of return is 10%.

Cash Flows							
Year	0	1	2	3	4	NPV	IRR (%)
Investment 1	-100	36	36	36	36	14.12	16.37
Investment 2	-100	0	0	0	175	19.53	15.02

What discount rate would result in the same NPV for both investments?

- A. A rate between 0.00% and 10.00%
- B. A rate between 10.00% and 15.02%
- C. A rate between 15.02% and 16.37%

15. Wilson Flannery is concerned that the following investment has multiple IRRs.

Year	0	1	2	3w
Cash flows	-50	100	0	-50

How many discount rates produce a zero NPV for this investment?

- A. One, a discount rate of 0%
 - B. Two, discount rates of 0% and 32%
 - C. Two, discount rates of 0% and 62%
16. What type of project is *most* likely to yield new revenues for a company?
- A. Regulatory/compliance
 - B. Going concern
 - C. Expansion

The following information relates to questions 17-19

Bouchard Industries is a Canadian company that manufactures gutters for residential houses. Its management believes it has developed a new process that produces a superior product. The company must make an initial investment of CAD190 million to begin production. If demand is high, cash flows are expected to be CAD40 million per year. If demand is low, cash flows will be only CAD20 million per year. Management believes there is an equal chance that demand will be high or low. The investment, which has an investment horizon of ten years, also gives the company a production-flexibility option allowing the company to add shifts at the end of the first year if demand turns out to be high. If the company exercises this option, net cash flows would increase by an additional CAD5 million in Years 2–10. Bouchard's opportunity cost of funds is 10%.

The internal auditor for Bouchard Industries has made two suggestions for improving capital allocation processes at the company. The internal auditor's suggestions are as follows:

Suggestion 1: "In order to treat all capital allocation proposals in a fair manner, the investments should all use the risk-free rate for the required rate of return."

Suggestion 2: "When rationing capital, it is better to choose the portfolio of investments that maximizes the company NPV than the portfolio that maximizes the company IRR."

17. What is the NPV (CAD millions) of the original project for Bouchard Industries without considering the production-flexibility option?
- A. -CAD6.11 million
 - B. -CAD5.66 million
 - C. CAD2.33 million
18. What is the NPV (CAD millions) of the optimal set of investment decisions for Bouchard Industries including the production-flexibility option?

- A. –CAD6.34 million
- B. CAD7.43 million
- C. CAD31.03 million

19. Should the capital allocation committee accept the internal auditor's suggestions?

- A. No for Suggestions 1 and 2
- B. No for Suggestion 1 and yes for Suggestion 2
- C. Yes for Suggestion 1 and no for Suggestion 2

PRACTICE PROBLEMS

1. Two analysts are discussing the costs of external financing sources. The first states that the company's bonds have a known interest rate but that the interest rate on accounts payable and the interest rate on equity financing are not specified. They are implicitly zero. Upon hearing this, the second analyst advocates financing the firm with greater amounts of accounts payable and common shareholders equity. Is the second analyst correct in his analysis?
 - A. He is correct in his analysis of accounts payable only.
 - B. He is correct in his analysis of common equity financing only.
 - C. He is not correct in his analysis of either accounts payable or equity financing.
2. A company has arranged a \$20 million line of credit with a bank, allowing the company the flexibility to borrow and repay any amount of funds as long as the balance does not exceed the line of credit. These arrangements are called:
 - A. convertibles.
 - B. factoring.
 - C. revolvers.
3. The SOA Company needs to raise 75 million, in local currency, for substantial new investments next year. Specific details, all in local currency, are as follows:
 - Investments of 10 million in receivables and 15 million in inventory will be made. Fixed capital investments of 50 million, including 10 million to replace depreciated equipment and 40 million of net new investments, will also be made.
 - Net income is expected to be 30 million, and dividend payments will be 12 million. Depreciation charges will be 10 million.
 - Short-term financing from accounts payable of 6 million is expected. The firm will use receivables as collateral for an 8 million loan. The firm will also issue a 14 million short-term note to a commercial bank.
 - Any additional external financing needed can be raised from an increase in long-term bonds. If additional financing is not needed, any excess funds will be used to repurchase common shares.

What additional financing does SOA require?

 - A. SOA will need to issue 19 million of bonds.
 - B. SOA will need to issue 26 million of bonds.
 - C. SOA can repurchase 2 million of common shares.
4. XY1 Corporation's CFO has decided to pursue a moderate approach to funding the firm's working capital. Which of the following methods would best fit that particular approach?
 - A. Finance permanent and variable current assets with long-term financing.
 - B. Finance permanent and variable current assets with short-term financing.

- C. Finance permanent current assets with long-term financing and variable current assets with short-term financing.
5. Kwam Solutions must raise €120 million. Kwam has two primary sources of liquidity: €60 million of marketable securities (which can be sold with minimal liquidation/brokerage costs) and €30 million of bonds (which can be sold with 3% liquidation costs). Kwam can sell some or all of either of these portfolios. Kwam has a secondary source of liquidity, which would be to sell a large piece of real estate valued at €70 million (which would incur 10% liquidation costs). If Kwam sells the real estate, it must be sold entirely. (A fractional sale is not possible.) What is the lowest cost strategy for raising the needed €120 million?
- A. Sell €60 million of the marketable securities, €30 million of the bonds, and €34.3 million of the real estate property.
- B. Sell the real estate property and €50 million of the marketable securities.
- C. Sell the real estate property and €57 million of the marketable securities.
6. A company increasing its credit terms for customers from 1/10, net 30 to 1/10, net 60 will *most likely* experience:
- A. an increase in cash on hand.
- B. a lower level of uncollectible accounts.
- C. an increase in the average collection period.
7. Paloma Villarreal has received three suggestions from her staff about how to address her firm's liquidity problems.
- Suggestion 1. Reduce the firm's inventory turnover rate.
- Suggestion 2. Reduce the average collection period on accounts receivable.
- Suggestion 3. Accelerate the payments on accounts payable by paying invoices before their due dates.
- Which suggestion should Villarreal employ to improve the firm's liquidity position?
- A. Suggestion 1
- B. Suggestion 2
- C. Suggestion 3
8. Selected liquidity ratios for three firms in the leisure products industry are given in the table below. The most recent fiscal year ratio is shown along with the average of the previous five years.

	Company H		Company J		Company S	
	Most recent	Five-year average	Most recent	Five-year average	Most recent	Five-year average
Current ratio	5.37	2.51	3.67	3.04	3.05	2.53
Quick ratio	5.01	2.19	2.60	2.01	1.78	1.44
Cash ratio	3.66	0.97	1.96	1.28	0.96	0.67

Relative to its peers and relative to its own prior performance, which company is in the most liquid position?

- A. Company H
- B. Company J
- C. Company S

9. An analyst is examining the cash conversion cycles and their components for three companies that she covers in the leisure products industry. She believes that changes in the investments in these working capital accounts can reveal liquidity stresses on a company.

	2021	2020	2019	2018	2017	2016
Company H						
Days of inventory on hand	68.4	70.5	60	57.8	59.8	59.8
+ Days of receivables	101.8	103.4	95.6	92.4	94.7	93.3
– Days of payables outstanding	52.1	54.6	48	41.9	36.8	35.9
= Cash conversion cycle	118.1	119.3	107.6	108.3	117.7	117.2
Company J						
Days of inventory on hand	105.6	101.4	96.3	105.2	103.2	101.4
+ Days of receivables	27.7	29.4	32.9	36.3	37.8	38
– Days of payables outstanding	36.6	38.5	35.3	39.3	37.8	40.2
= Cash conversion cycle	96.7	92.3	93.9	102.2	103.2	99.2
Company S						
Days of inventory on hand	135.8	131	118.9	69.2	63.4	81.7
+ Days of receivables	49.1	42.5	54.2	36.2	29.1	38.3
– Days of payables outstanding	30.9	27.9	34.6	29.8	31.8	35.9
= Cash conversion cycle	154.0	145.6	138.5	75.6	60.7	84.1

Which company's operating cycle appears to have caused the most liquidity stress?

- A. Company H's
 - B. Company J's
 - C. Company S's
10. Which of the following are considered internal sources of financing for a company's working capital management?
- A. Committed and uncommitted lines of credit
 - B. Accounts receivable and inventory
 - C. Accounts payable and accruals