

## Chapter 03

1. Projected future financial statements are called:
  - A. plug statements.
  - B. pro forma statements.
  - C. reconciled statements.
  - D. aggregated statements.
  - E. comparative statements.
  
2. The extended version of the percentage of sales method:
  - A. assumes that all net income will be paid out in dividends to stockholders.
  - B. assumes that all net income will be retained by the firm and offset by a reduction in debt.
  - C. is based on a capital intensity ratio of 1.0.
  - D. requires that all financial statement accounts change at the same rate.
  - E. separates accounts that vary with sales from those that do not vary with sales.
  
3. Which statement expresses all accounts as a percentage of total assets?
  - A. pro forma balance sheet
  - B. common-size income statement
  - C. statement of cash flows
  - D. pro forma income statement
  - E. common-size balance sheet
  
4. Ratios that measure a firm's ability to pay its bills over the short run without undue stress are known as:
  - A. asset management ratios.
  - B. long-term solvency measures.
  - C. liquidity measures.
  - D. profitability ratios.
  - E. market value ratios.

5. The current ratio is measured as:
- A. current assets minus current liabilities.
  - B. current assets divided by current liabilities.
  - C. current liabilities minus inventory, divided by current assets.
  - D. cash on hand divided by current liabilities.
  - E. current liabilities divided by current assets.
6. The quick ratio is measured as:
- A. current assets divided by current liabilities.
  - B. cash on hand plus current liabilities, divided by current assets.
  - C. current liabilities divided by current assets, plus inventory.
  - D. current assets minus inventory, divided by current liabilities.
  - E. current assets minus inventory minus current liabilities.
7. Ratios that measure a firm's financial leverage are known as \_\_\_\_\_ ratios.
- A. asset management
  - B. long-term solvency
  - C. short-term solvency
  - D. profitability
  - E. market value
8. The debt-equity ratio is measured as:
- A. total equity divided by long-term debt.
  - B. total equity divided by total debt.
  - C. total debt divided by total equity.
  - D. long-term debt divided by total equity.
  - E. total assets minus total debt, divided by total equity.
9. The equity multiplier is measured as total:
- A. equity divided by total assets.
  - B. equity plus total debt.
  - C. assets minus total equity, divided by total assets.
  - D. assets plus total equity, divided by total debt.
  - E. assets divided by total equity.

10. Ratios that measure how efficiently a firm uses its assets to generate sales are known as \_\_\_\_\_ ratios.
- A. asset management
  - B. long-term solvency
  - C. short-term solvency
  - D. profitability
  - E. market value
11. The inventory turnover ratio is measured as:
- A. total sales minus inventory.
  - B. inventory times total sales.
  - C. cost of goods sold divided by inventory.
  - D. inventory divided by cost of goods sold.
  - E. inventory divided by sales.
12. The financial ratio days' sales in inventory is measured as:
- A. inventory turnover plus 365 days.
  - B. inventory times 365 days.
  - C. inventory plus cost of goods sold, divided by 365 days.
  - D. 365 days divided by the inventory.
  - E. 365 days divided by the inventory turnover.
13. The receivables turnover ratio is measured as:
- A. sales plus accounts receivable.
  - B. sales divided by accounts receivable.
  - C. sales minus accounts receivable, divided by sales.
  - D. accounts receivable times sales.
  - E. accounts receivable divided by sales.
14. The total asset turnover ratio measures the amount of:
- A. total assets needed for every \$1 of sales.
  - B. sales generated by every \$1 in total assets.
  - C. fixed assets required for every \$1 of sales.
  - D. net income generated by every \$1 in total assets.
  - E. net income than can be generated by every \$1 of fixed assets.

15. Ratios that measure how efficiently a firm's management uses its assets and equity to generate bottom line net income are known as \_\_\_\_\_ ratios.
- A. asset management
  - B. long-term solvency
  - C. short-term solvency
  - D. profitability
  - E. market value
16. The financial ratio measured as net income divided by sales is known as the firm's:
- A. profit margin.
  - B. return on assets.
  - C. return on equity.
  - D. asset turnover.
  - E. earnings before interest and taxes.
17. The measure of net income returned from every dollar invested in total assets is the:
- A. profit margin.
  - B. return on assets.
  - C. return on equity.
  - D. asset turnover.
  - E. earnings before interest and taxes.
18. The financial ratio that measures the accounting profit per dollar of book equity is referred to as the:
- A. profit margin.
  - B. price-earnings ratio.
  - C. return on equity.
  - D. equity turnover.
  - E. market profit-to-book ratio.
19. The amount that investors are willing to pay for each dollar of annual earnings is reflected in the:
- A. return on assets.
  - B. return on equity.
  - C. debt-equity ratio.
  - D. price-earnings ratio.
  - E. DuPont identity.

20. The market-to-book ratio is measured as the:
- A. market price per share divided by the par value per share.
  - B. net income per share divided by the market price per share.
  - C. market price per share divided by the net income per share.
  - D. market price per share divided by the dividends per share.
  - E. market value per share divided by the book value per share.
21. The external funds needed (EFN) equation projects the addition to retained earnings as:
- A.  $PM \times \text{Sales}$ .
  - B.  $PM \times \text{Sales} \times (1 - d)$ .
  - C.  $PM \times \text{Projected sales} \times (1 - d)$ .
  - D.  $\text{Projected sales} \times (1 - d)$ .
  - E.  $PM \times \text{Projected sales}$ .
22. Which one of the following statements is correct concerning ratio analysis?
- A. A single ratio is often computed differently by different individuals.
  - B. Ratios do not address the problem of size differences among firms.
  - C. Only a very limited number of ratios can be used for analytical purposes.
  - D. Each ratio has a specific formula that is used consistently by all analysts.
  - E. Ratios cannot be used for comparison purposes over periods of time.
23. Which one of the following is a liquidity ratio?
- A. quick ratio
  - B. cash coverage ratio
  - C. total debt ratio
  - D. EV multiple
  - E. times interest earned ratio
24. An increase in which one of the following accounts increases a firm's current ratio without affecting its quick ratio?
- A. accounts payable
  - B. cash
  - C. inventory
  - D. accounts receivable
  - E. fixed assets

25. A supplier, who requires payment within ten days, should be most concerned with which one of the following ratios when granting credit?
- A. current
  - B. cash
  - C. debt-equity
  - D. quick
  - E. total debt
26. A firm has a total debt ratio of .47. This means the firm has 47 cents in debt for every:
- A. \$1 in total equity.
  - B. \$.53 in total assets.
  - C. \$1 in current assets.
  - D. \$.53 in total equity.
  - E. \$1 in fixed assets.
27. The long-term debt ratio is probably of most interest to a firm's:
- A. credit customers.
  - B. employees.
  - C. suppliers.
  - D. mortgage holder.
  - E. stockholders.
28. A banker considering loaning money to a firm for ten years would most likely prefer the firm have a debt ratio of \_\_\_\_\_ and a times interest earned ratio of \_\_\_\_\_.
- A. .50; .75
  - B. .50; 1.00
  - C. .45; 1.75
  - D. .40; .75
  - E. .40; 1.75
29. From a cash flow position, which one of the following ratios best measures a firm's ability to pay the interest on its debts?
- A. times interest earned ratio
  - B. cash coverage ratio
  - C. cash ratio
  - D. quick ratio
  - E. interval measure

30. The higher the inventory turnover, the:
- A. less time inventory items remain on the shelf.
  - B. higher the inventory as a percentage of total assets.
  - C. longer it takes a firm to sell its inventory.
  - D. greater the amount of inventory held by a firm.
  - E. lesser the amount of inventory held by a firm.
31. Which one of the following statements is correct if a firm has a receivables turnover of 10?
- A. It takes the firm 10 days to collect payment from its customers.
  - B. It takes the firm 36.5 days to sell its inventory and collect the payment from the sale.
  - C. It takes the firm an average of 36.5 days to sell its items.
  - D. The firm collects on its sales in an average of 36.5 days.
  - E. The firm has ten times more in accounts receivable than it does in cash.
32. A capital intensity ratio of 1.03 means a firm has \$1.03 in:
- A. total debt for every \$1 in equity.
  - B. equity for every \$1 in total debt.
  - C. sales for every \$1 in total assets.
  - D. total assets for every \$1 in sales.
  - E. long-term assets for every \$1 in short-term assets.
33. Puffy's Pastries generates five cents of net income for every \$1 in equity. Thus, Puffy's has \_\_\_\_\_ of 5 percent.
- A. a return on assets
  - B. a profit margin
  - C. a return on equity
  - D. an EV multiple
  - E. a price-earnings ratio
34. If a firm produces a return on assets of 15 percent and also a return on equity of 15 percent, then the firm:
- A. has no debt of any kind.
  - B. is using its assets as efficiently as possible.
  - C. has no net working capital.
  - D. also has a current ratio of 15.
  - E. has an equity multiplier of 2.

35. If stockholders want to know how much profit the firm is making on their entire investment in that firm, the stockholders should refer to the:
- A. profit margin.
  - B. return on assets.
  - C. return on equity.
  - D. equity multiplier.
  - E. earnings per share.
36. Assume BGL Enterprises increases its operating efficiency by lowering its costs while holding its sales constant. As a result, given all else constant, the:
- A. return on equity will increase.
  - B. return on assets will decrease.
  - C. profit margin will decline.
  - D. equity multiplier will decrease.
  - E. price-earnings ratio will increase.
37. Joe's has old, fully depreciated equipment. Moe's just purchased all new equipment which will be depreciated over eight years. If Joe's and Moe's have the same sales, costs, tax rate, and enterprise value, then:
- A. Joe's will have a lower profit margin.
  - B. Joe's will have a lower return on equity.
  - C. Moe's will have a higher net income.
  - D. Moe's and Joe's will have the same EV multiple.
  - E. Moe's will have a lower EV multiple.
38. Last year, Alfred's Automotive had a price-earnings ratio of 15 and earnings per share of \$1.20. This year, the price earnings ratio is 18 and the earnings per share is \$1.20. Based on this information, it can be stated with certainty that:
- A. the price per share decreased.
  - B. the earnings per share decreased.
  - C. investors are paying a lower price per share this year as compared to last year.
  - D. investors are receiving a higher rate of return this year.
  - E. the investors' outlook for the firm has improved.

39. Turner's Inc. has a price-earnings ratio of 16. Alfred's Co. has a price-earnings ratio of 19. Thus, you can state with certainty that one share of stock in Alfred's:
- A. has a higher market price than one share of stock in Turner's.
  - B. has a higher market price per dollar of earnings than does one share of Turner's.
  - C. sells at a lower price per share than one share of Turner's.
  - D. represents a larger percentage of firm ownership than does one share of Turner's stock.
  - E. earns a greater profit per share than does one share of Turner's stock.
40. Which one of the following is most apt to cause a firm to have a higher price-earnings ratio?
- A. slow industry outlook
  - B. very low current earnings
  - C. low market share
  - D. low prospect of firm growth
  - E. low investor opinion of firm
41. Vinnie's Motors has a market-to-book ratio of 3.4. The book value per share is \$34 and earnings per share are \$1.36. Holding the market-to-book ratio and earnings per share constant, a \$1 increase in the book value per share will:
- A. decrease the price-earnings ratio.
  - B. decrease the EV multiple.
  - C. decrease the market price per share.
  - D. increase the price-earnings ratio.
  - E. increase the return on equity.
42. Which one of the following sets of ratios would generally be of the most interest to stockholders?
- A. return on assets and profit margin
  - B. quick ratio and times interest earned
  - C. price-earnings ratio and debt-equity ratio
  - D. return on equity and price-earnings ratio
  - E. cash coverage ratio and equity multiplier
43. The DuPont identity can be computed as:
- A.  $\text{Net income} \times \text{Profit margin} \times (1 + \text{Debt-equity ratio})$ .
  - B.  $\text{Profit margin} \times (1 / \text{Capital intensity}) \times (1 + \text{Debt-equity ratio})$ .
  - C.  $\text{Net income} \times \text{Total asset turnover} \times \text{Equity multiplier}$ .
  - D.  $\text{Profit margin} \times \text{Total asset turnover} \times \text{Debt-equity ratio}$ .
  - E.  $\text{Return on equity} \times \text{Profit margin} \times \text{Total asset turnover}$ .

44. If a firm decreases its operating costs, all else constant, then the:
- A. profit margin will decrease.
  - B. return on assets will decrease.
  - C. total asset turnover rate will increase.
  - D. cash coverage ratio will decrease.
  - E. price-earnings ratio will decrease.
45. It is easier to evaluate a firm using its financial statements when the firm:
- A. is a conglomerate.
  - B. is global in nature.
  - C. uses the same accounting procedures as other firms in its industry.
  - D. has a different fiscal year than other firms in its industry.
  - E. tends to have one-time events such as asset sales and property acquisitions.
46. The most effective method of directly evaluating the financial performance of a firm is to compare the financial ratios of the firm to:
- A. the firm's ratios from prior time periods and to the ratios of firms with similar operations.
  - B. the average ratios of all firms within the same country over a period of time.
  - C. those of other firms located in the same geographic area that are similarly sized.
  - D. the average ratios of the firm's international peer group.
  - E. those of the largest conglomerate that has operations in the same industry as the firm.
47. In the financial planning model, the external financing needed (EFN) as shown on a pro forma balance sheet is equal to the changes in assets:
- A. plus the changes in liabilities minus the changes in equity.
  - B. minus the changes in both liabilities and equity.
  - C. minus the changes in liabilities.
  - D. plus the changes in both liabilities and equity.
  - E. minus the change in retained earnings.
48. The least problem encountered when comparing the financial statements of one firm with those of another firm occurs when the firms:
- A. are in different lines of business.
  - B. have geographically diverse operations.
  - C. use different methods of depreciation.
  - D. are both classified as conglomerates.
  - E. have the same fiscal year-end.

49. The maximum rate at which a firm can grow while maintaining a constant debt-equity ratio is best defined by its:
- A. rate of return on assets.
  - B. internal rate of growth.
  - C. average historical rate of growth.
  - D. rate of return on equity.
  - E. sustainable rate of growth.
50. The sustainable growth rate will be equivalent to the internal growth rate when, and only when,:
- A. a firm has no debt.
  - B. the growth rate is positive.
  - C. the plowback ratio is positive but less than 1.
  - D. a firm has a debt-equity ratio equal to 1.
  - E. the retention ratio is equal to 1.
51. The sustainable growth rate:
- A. assumes there is no external financing of any kind.
  - B. is normally higher than the internal growth rate.
  - C. assumes the debt-equity ratio is variable.
  - D. is based on receiving additional external debt and equity financing.
  - E. assumes the dividend payout ratio is equal to zero.
52. If a firm bases its growth projection on the rate of sustainable growth, shows positive net income, and has a dividend payout ratio of 30 percent, then the:
- A. fixed assets will have to increase at the same rate, even if the firm is currently operating at only 78 percent of capacity.
  - B. number of common shares outstanding will increase at the same rate of growth.
  - C. debt-equity ratio will have to increase.
  - D. debt-equity ratio will remain constant while retained earnings increase.
  - E. fixed assets, the debt-equity ratio, and number of common shares outstanding will all increase.

53. Marcie's Mercantile wants to maintain its current dividend policy, which is a payout ratio of 35 percent. The firm does not want to increase its equity financing but is willing to maintain its current debt-equity ratio. Given these requirements, the maximum rate at which Marcie's can grow is equal to:
- A. 35 percent of the internal rate of growth.
  - B. 65 percent of the internal rate of growth.
  - C. the internal rate of growth.
  - D. the sustainable rate of growth.
  - E. 65 percent of the sustainable rate of growth.
54. One of the primary weaknesses of many financial planning models is that they:
- A. rely too much on financial relationships and too little on accounting relationships.
  - B. are iterative in nature.
  - C. ignore the goals and objectives of senior management.
  - D. ignore cash payouts to stockholders.
  - E. ignore the size, risk, and timing of cash flows.
55. Financial planning, when properly executed:
- A. ignores the normal restraints encountered by a firm.
  - B. is based on the internal rate of growth.
  - C. reduces the necessity of daily management oversight of the business operations.
  - D. ensures internal consistency among the firm's various goals.
  - E. eliminates the need to plan more than one year in advance.
56. A public firm's market capitalization is equal to the:
- A. total book value of assets less book value of debt.
  - B. par value of common equity.
  - C. price per share multiplied by number of shares outstanding.
  - D. firm's stock price multiplied by the number of shares authorized.
  - E. the maximum value an acquirer would pay for the firm in an acquisition.
57. Enterprise value is based on the:
- A. market value of interest bearing debt plus the market value of equity minus cash.
  - B. book values of debt and assets, other than cash.
  - C. market value of equity plus the book value of total debt minus cash.
  - D. book value of debt plus the market value of equity.
  - E. book values of debt and equity less cash.

58. The equity multiplier measures:

- A. financial leverage.
- B. returns to stockholders.
- C. operating efficiency.
- D. management efficiency.
- E. asset use efficiency.

59. The return on equity can be calculated as:

- A.  $\text{ROA} \times \text{Equity multiplier}$ .
- B.  $\text{Profit margin} \times \text{ROA}$ .
- C.  $\text{Profit margin} \times \text{ROA} \times \text{Total asset turnover}$ .
- D.  $\text{ROA} \times (\text{Net income} / \text{Total assets})$ .
- E.  $\text{ROA} \times \text{Debt-equity ratio}$ .

60.

Which one of the following depicts a correct relationship?

- A.  
 $\text{Dividend payout ratio} = 1 - \text{Retention ratio}$
- B.  
 $\text{Total asset turnover} = 1 + \text{Capital intensity ratio}$
- C.  
 $\text{ROA} = \text{ROE} \times (1 + \text{Debt-equity ratio})$
- D.  
 $\text{ROE} = 1 - \text{ROA}$
- E.  
 $\text{Equity multiplier} = 1 - \text{Debt-equity ratio}$

61. Which account is least apt to vary directly with sales?
- A. notes payable
  - B. inventory
  - C. cost of goods sold
  - D. accounts payable
  - E. accounts receivable
62. A firm has sales of \$22,400, net income of \$3,600, net fixed assets of \$18,700, inventory of \$2,800, and total current assets of \$6,300. What is the common-size statement value of inventory?
- A. 10.07%
  - B. 13.67%
  - C. 11.20%
  - D. 12.50%
  - E. 9.84%
63. A firm has sales of \$38,900, net income of \$2,400, total assets of \$43,100, and total equity of \$24,700. Interest expense is \$830. What is the common-size statement value of the interest expense?
- A. 2.13%
  - B. 3.08%
  - C. 1.93%
  - D. 2.49%
  - E. 3.46%

64. Jessica's Boutique has cash of \$218, accounts receivable of \$457, accounts payable of \$398, and inventory of \$647. What is the value of the quick ratio?
- A. .55
  - B. 1.05
  - C. 1.70
  - D. 1.32
  - E. 1.52
65. Browning's has a debt-equity ratio of .47. What is the equity multiplier?
- A. 1.47
  - B. .53
  - C. 2.13
  - D. 1.13
  - E. 1.53
66. Cado Industries has total debt of \$6,800 and a debt-equity ratio of .36. What is the value of the total assets?
- A. \$18,889
  - B. \$24,480
  - C. \$23,520
  - D. \$25,689
  - E. \$25,360
67. Wybro's Markets has sales of \$684,000, costs of \$437,000, interest paid of \$13,800, total assets of \$712,000, and depreciation of \$109,400. The tax rate is 35 percent and the equity multiplier is 1.6. What is the return on equity?
- A. 11.30%
  - B. 13.92%
  - C. 7.06%
  - D. 15.48%
  - E. 18.08%

68. Rosita's Resources paid \$11,310 in interest and \$16,500 in dividends last year. The times interest earned ratio is 2.9, the depreciation expense is \$7,900, and the tax rate is 35 percent. What is the value of the cash coverage ratio?
- A. 3.71
  - B. 2.58
  - C. 3.60
  - D. 2.78
  - E. 3.10
69. Home Systems has sales of \$312,800, cost of goods sold of \$218,400, inventory of \$46,300, and accounts receivable of \$62,700. How many days, on average, does it take the firm to both sell its inventory and collect payment on the sale?
- A. 142.10
  - B. 96.37
  - C. 178.21
  - D. 150.54
  - E. 124.03
70. Northern Industries has accounts receivable of \$42,300, inventory of \$61,200, sales of \$544,200, and cost of goods sold of \$393,500. How many days, on average, does it take the firm to sell its inventory?
- A. 93.08
  - B. 74.92
  - C. 85.14
  - D. 56.77
  - E. 80.46

71. Two Sisters Dresses has net working capital of \$43,800, net fixed assets of \$232,400, net income of \$43,900, and current liabilities of \$51,300. The tax rate is 35 percent and the profit margin is 9.3 percent. How many dollars worth of sales are generated from every \$1 in total assets?
- A. \$1.44
  - B. \$1.32
  - C. \$1.73
  - D. \$.97
  - E. \$1.06
72. Uptowne Restaurant has sales of \$418,000, total equity of \$224,400, a tax rate of 34 percent, a debt-equity ratio of .37, and a profit margin of 5.1 percent. What is the return on assets?
- A. 6.93%
  - B. 9.50%
  - C. 11.08%
  - D. 7.13%
  - E. 13.13%
73. Sun Shade's has sales of \$363,000, total assets of \$323,500, and a profit margin of 14.6 percent. The firm has a total debt ratio of 54 percent. What is the return on equity?
- A. 28.45%
  - B. 35.61%
  - C. 23.29%
  - D. 31.74%
  - E. 7.88%
74. Discount Mart has \$876,400 in sales. The profit margin is 3.8 percent. There are 32,500 shares of stock outstanding. The market price per share is \$21.60. What is the price-earnings ratio?
- A. 23.40
  - B. 22.60
  - C. 19.21
  - D. 21.08
  - E. 18.47

75. New Metals has depreciation of \$28,300, interest expense of \$11,400, EBIT of \$62,700, a price-earnings ratio of 8.6, a profit margin of 7.2 percent, a tax rate of 34 percent, and 37,500 shares of stock outstanding. What is the market price per share?
- A. \$3.48
  - B. \$5.09
  - C. \$7.76
  - D. \$12.48
  - E. \$9.92
76. A firm has 12,000 shares of stock outstanding, sales of \$638,100, a profit margin of 8.2 percent, a tax rate of 35 percent, a price-earnings ratio of 11.3, and a book value per share of \$7.98. What is the market-to-book ratio?
- A. 6.08
  - B. 5.42
  - C. 5.16
  - D. 6.17
  - E. 6.90
77. Preston Woods has 17,500 shares of stock outstanding along with \$408,000 of interest bearing debt. The market and book values of the debt are the same. The firm has sales of \$697,000 and a profit margin of 6.8 percent. The tax rate is 35 percent, the debt-equity ratio is 40 percent, and the price-earnings ratio is 11.8. The firm has \$130,000 of current assets of which \$41,200 is cash. What is the enterprise value multiple?
- A. \$1,106,308
  - B. \$994,520
  - C. \$830,479
  - D. \$1,018,097
  - E. \$926,073
78. Frederico's has a net income of \$29,600, a total asset turnover of 1.4, total assets of \$318,600, and a debt-equity ratio of .35. What is the return on equity?
- A. 16.72%
  - B. 8.40%
  - C. 12.54%
  - D. 14.67%
  - E. 17.56%

79. Samuelson's has sales of \$317,000, a profit margin of 8.6 percent, an equity multiplier of 1.8, and total debt of \$144,400. What is the return on equity?
- A. 15.48%
  - B. 14.46%
  - C. 7.05%
  - D. 15.10%
  - E. 11.25%
80. A firm has a return on equity of 16.2 percent, a debt-equity ratio of 44 percent, a capital intensity ratio of 1.08, a current ratio of 1.25, and current assets of \$138,000. What is the profit margin?
- A. 12.15%
  - B. 9.72%
  - C. 7.48%
  - D. 15.19%
  - E. 13.69%

81.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
Accounts receivable	50,700	58,300	Notes payable	20,000	30,000
Inventory	70,500	75,800	Long-term debt	134,700	164,500
Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What is the current ratio for 2015?

- A. 1.95
- B. .95
- C. 2.06
- D. 1.98
- E. .98

82.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
Accounts receivable	50,700	58,300	Notes payable	20,000	30,000
Inventory	70,500	75,800	Long-term debt	134,700	164,500
Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What are the days' sales in inventory for 2015? (Use ending inventory)

A.  
61.84 days

B.  
62.79 days

C. 67.51 days

D. 42.97 days

E. 40.08 days

83.

What is the equity multiplier for 2015?

A. 1.48

B. 1.28

C. 1.66

D. 2.13

E. 2.99

84.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
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			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What is the cash coverage ratio for 2015?

- A. 11.06
- B. 6.02

C.  
13.79

D.  
14.89

E.  
8.78

85.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
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Deep Falls Timber					
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Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What are the values of the three components of the DuPont identity for 2015?

- A. 7.91%; 1.0248; 1.4806
- B. 8.57%; 1.0248; .6754
- C. 7.91%; .9758; 1.4806
- D. 11.43%; .9758; .6754
- E. 11.43%; 1.0248; 1.4806

86.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
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			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

Deep Falls Timber stock sold for \$6.50 a share as of 2015. What was the price-earnings ratio at that time?

- A. 17.12
- B. 29.94
- C. 12.82
- D. 28.15

E. 19.64

87.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
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Inventory	70,500	75,800	Long-term debt	134,700	164,500
Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

Deep Falls Timber stock sold for \$6.50 a share as of 2015. What was the market-to-book ratio at that time?

- A. 1.78
- B. 2.22
- C. 2.78
- D. 3.03
- E. 3.22

88.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
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Accounts receivable	50,700	58,300	Notes payable	20,000	30,000
Inventory	70,500	75,800	Long-term debt	134,700	164,500
Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What is the internal growth rate for 2015?

- A. 5.83%
- B. 6.24%
- C. 6.15%
- D. 5.18%
- E. 7.70%

89.

Narrow Falls Lumber	
2015 Income Statement	
Net sales	\$848,600
Cost of goods sold	542,800
Depreciation	<u>147,400</u>
EBIT	\$158,400
Interest	<u>12,600</u>
Taxable income	\$145,800
Taxes	<u>51,800</u>
Net income	<u>\$ 94,000</u>
Dividends	\$28,200

Narrow Falls Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 26,900	Accounts payable	\$ 78,900	\$ 79,200
Accounts receivable	74,700	72,300	Notes payable	50,000	40,000
Inventory	99,500	97,800	Long-term debt	295,600	354,500
Net fixed assets	<u>707,100</u>	<u>705,000</u>	Common stock and paid-in surplus (\$1 par value)	170,000	175,000
			Retained earnings	<u>319,100</u>	<u>253,300</u>
Total assets	<u>\$913,600</u>	<u>\$902,000</u>	Total liabilities & owners' equity	<u>\$913,600</u>	<u>\$902,000</u>

What is the sustainable growth rate for 2015?

- A. 13.97%
- B. 14.46%
- C. 15.54%
- D. 12.63%
- E. 10.91%

90.

Narrow Falls Lumber	
2015 Income Statement	
Net sales	\$848,600
Cost of goods sold	542,800
Depreciation	<u>147,400</u>
EBIT	\$158,400
Interest	<u>12,600</u>
Taxable income	\$145,800
Taxes	<u>51,800</u>
Net income	<u>\$ 94,000</u>
Dividends	\$28,200

Narrow Falls Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 26,900	Accounts payable	\$ 78,900	\$ 79,200
Accounts receivable	74,700	72,300	Notes payable	50,000	40,000
Inventory	99,500	97,800	Long-term debt	295,600	354,500
Net fixed assets	<u>707,100</u>	<u>705,000</u>	Common stock and paid-in surplus (\$1 par value)	170,000	175,000
			Retained earnings	<u>319,100</u>	<u>253,300</u>
Total assets	<u>\$913,600</u>	<u>\$902,000</u>	Total liabilities & owners' equity	<u>\$913,600</u>	<u>\$902,000</u>

What is the equity multiplier for 2015?

- A. 1.71
- B. 1.87
- C. 1.44
- D. 1.82
- E. 1.92

91.

Narrow Falls Lumber	
2015 Income Statement	
Net sales	\$848,600
Cost of goods sold	542,800
Depreciation	<u>147,400</u>
EBIT	\$158,400
Interest	<u>12,600</u>
Taxable income	\$145,800
Taxes	<u>51,800</u>
Net income	<u>\$ 94,000</u>
Dividends	\$28,200

Narrow Falls Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 26,900	Accounts payable	\$ 78,900	\$ 79,200
Accounts receivable	74,700	72,300	Notes payable	50,000	40,000
Inventory	99,500	97,800	Long-term debt	295,600	354,500
Net fixed assets	<u>707,100</u>	<u>705,000</u>	Common stock and paid-in surplus (\$1 par value)	170,000	175,000
			Retained earnings	<u>319,100</u>	<u>253,300</u>
Total assets	<u>\$913,600</u>	<u>\$902,000</u>	Total liabilities & owners' equity	<u>\$913,600</u>	<u>\$902,000</u>

What are the values for the three components of the DuPont identity for 2015?

- A. 11.08%; .9289; 1.8679
- B. 11.08%; 1.0765; 1.8679
- C. 11.08%; .9289; .5354
- D. 7.75%; 1.0765; .5354
- E. 7.75%; 1.0765; 1.8679

92. The Blue Giant has a profit margin of 6.2 percent and a dividend payout ratio of 40 percent. The capital intensity is 1.08 and the debt-equity ratio is .54. What is the sustainable rate of growth?
- A. 6.30%
  - B. 5.53%
  - C. 5.60%
  - D. 6.41%
  - E. 5.89%
93. Catherine's Consulting has net income of \$4,400 and total equity of \$39,450. The debt-equity ratio is 1 and the plowback ratio is 40 percent. What is the return on assets?
- A. 6.24%
  - B. 6.09%
  - C. 5.23%
  - D. 5.58%
  - E. 5.72%

94.

Narrow Falls Lumber	
2015 Income Statement	
Net sales	\$848,600
Cost of goods sold	542,800
Depreciation	<u>147,400</u>
EBIT	\$158,400
Interest	<u>12,600</u>
Taxable income	\$145,800
Taxes	<u>51,800</u>
Net income	<u>\$ 94,000</u>
Dividends	\$28,200

Narrow Falls Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 26,900	Accounts payable	\$ 78,900	\$ 79,200
Accounts receivable	74,700	72,300	Notes payable	50,000	40,000
Inventory	99,500	97,800	Long-term debt	295,600	354,500
Net fixed assets	<u>707,100</u>	<u>705,000</u>	Common stock and paid-in surplus (\$1 par value)	170,000	175,000
			Retained earnings	<u>319,100</u>	<u>253,300</u>
Total assets	<u>\$913,600</u>	<u>\$902,000</u>	Total liabilities & owners' equity	<u>\$913,600</u>	<u>\$902,000</u>

Assume that all costs, assets, and accounts payable change spontaneously with sales. For simplicity's sake, assume interest expense also changes spontaneously with sales (even though you know if may not). The tax rate and dividend payout ratios remain constant. If the firm's managers project a firm growth rate of 15 percent for next year, what will be the amount of external financing needed to support this level of growth?

- A. \$49,535
- B. \$68,211
- C. -\$10,406

D. \$13,909

E. \$32,408

95.

The Lumber Mill	
2015 Income Statement	
Net sales	\$608,400
Cost of goods sold	427,800
Depreciation	<u>79,100</u>
EBIT	\$101,500
Interest	<u>17,600</u>
Taxable income	\$ 83,900
Taxes	<u>28,500</u>
Net income	<u>\$ 55,400</u>
Dividends	\$12,000

The Lumber Mill					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 33,600	\$ 33,900	Accounts payable	\$ 49,700	\$ 59,200
Accounts receivable	54,200	53,300	Notes payable	20,000	25,000
Inventory	96,700	85,800	Long-term debt	155,000	175,000
Net fixed assets	<u>407,100</u>	<u>409,700</u>	Common stock and paid-in surplus (\$1 par value)	150,000	150,000
			Retained earnings	<u>216,900</u>	<u>173,500</u>
Total assets	<u>\$591,600</u>	<u>\$582,700</u>	Total liabilities & owners' equity	<u>\$591,600</u>	<u>\$582,700</u>

Assume that all costs, assets, and accounts payable change spontaneously with sales. For simplicity's sake, assume interest expense also changes spontaneously with sales (even though you know if may not). The tax rate and dividend payout ratios remain constant. If the firm's managers project a firm growth rate of 22 percent for next year, what will be the amount of external financing needed to support this level of growth?

- A. \$63,200
- B. \$66,270

C. \$47,520

D. \$63,200

E. \$53,640

F. \$47,520

G. \$56,400

H. \$53,640

I. \$56,400

96.

Green Lumber	
2015 Income Statement	
Net sales	\$387,200
Cost of goods sold	242,800
Depreciation	<u>48,400</u>
EBIT	\$ 96,000
Interest	<u>8,600</u>
Taxable income	\$ 87,400
Taxes	<u>29,700</u>
Net income	<u>\$ 57,700</u>
Dividends	\$24,000

Green Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 11,300	\$ 8,300	Accounts payable	\$ 45,000	\$ 49,200
Accounts receivable	44,700	41,300	Notes payable	10,000	10,000
Inventory	51,500	53,800	Long-term debt	145,600	160,500
Net fixed assets	<u>322,100</u>	<u>311,600</u>	Common stock and paid-in surplus (\$1 par value)	140,000	140,000
			Retained earnings	<u>89,000</u>	<u>55,300</u>
Total assets	<u>\$429,600</u>	<u>\$415,000</u>	Total liabilities & owners' equity	<u>\$429,600</u>	<u>\$415,000</u>

Assume that all costs, assets, and accounts payable change spontaneously with sales. For simplicity's sake, assume interest expense also changes spontaneously with sales (even though you know if may not). The tax rate and dividend payout ratios remain constant. If the firm's managers project a firm growth rate of 16 percent for next year, what will be the amount of external financing needed to support this level of growth? ANS\$ANSA. \$22,444

- A. \$18,700
- B. \$24,350

- C. \$23,911
- D. \$25,667

97. New Tek has a sustainable growth rate of 11.2 percent. However, the firm's managers are determined that the firm should grow by at least 20 percent next year. What must the firm do if the managers are to reach their desired level of growth for the firm?
98. State the assumptions that underlie the sustainable growth rate and interpret what the sustainable growth rate means.
99. Suppose a firm calculates its external financial need for a growth rate of 10 percent and finds that the need is a negative value. What are the firm's options in this case?

100. A retail store has days' sales in inventory of 68 days and an average collection period of 32 days. The firm pays its suppliers in an average of 42 days, on average. Taken together, what do these average values imply about the firm's operations and its cash flows?

101. Which is a more meaningful measure of profitability for a firm, return on assets or return on equity? Why?

102. You are comparing the common-size financial statements for two firms in the same industry that have very similar operations. You note that their sales revenues are similar in dollar value but yet the common-size EBIT for one firm is 30 percent compared to only 26 percent for the other firm. What are some possible explanations for this difference given the strong similarities of the two firms?

## Chapter 03 Key

1. Projected future financial statements are called:

- A. plug statements.
- B.** pro forma statements.
- C. reconciled statements.
- D. aggregated statements.
- E. comparative statements.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #1  
Section: 3.4  
Topic: Pro forma statements*

2. The extended version of the percentage of sales method:

- A. assumes that all net income will be paid out in dividends to stockholders.
- B. assumes that all net income will be retained by the firm and offset by a reduction in debt.
- C. is based on a capital intensity ratio of 1.0.
- D. requires that all financial statement accounts change at the same rate.
- E.** separates accounts that vary with sales from those that do not vary with sales.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #2  
Section: 3.4  
Topic: Financial planning models*

3. Which statement expresses all accounts as a percentage of total assets?

- A. pro forma balance sheet
- B. common-size income statement
- C. statement of cash flows
- D. pro forma income statement
- E.** common-size balance sheet

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #3  
Section: 3.1  
Topic: Standardized financial statements*

4. Ratios that measure a firm's ability to pay its bills over the short run without undue stress are known as:
- A. asset management ratios.
  - B. long-term solvency measures.
  - C.** liquidity measures.
  - D. profitability ratios.
  - E. market value ratios.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #4  
Section: 3.2  
Topic: Short-term solvency ratios*

5. The current ratio is measured as:
- A. current assets minus current liabilities.
  - B.** current assets divided by current liabilities.
  - C. current liabilities minus inventory, divided by current assets.
  - D. cash on hand divided by current liabilities.
  - E. current liabilities divided by current assets.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #5  
Section: 3.2  
Topic: Short-term solvency ratios*

6. The quick ratio is measured as:
- A. current assets divided by current liabilities.
  - B. cash on hand plus current liabilities, divided by current assets.
  - C. current liabilities divided by current assets, plus inventory.
  - D.** current assets minus inventory, divided by current liabilities.
  - E. current assets minus inventory minus current liabilities.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #6  
Section: 3.2  
Topic: Short-term solvency ratios*

7. Ratios that measure a firm's financial leverage are known as \_\_\_\_\_ ratios.

- A. asset management
- B. long-term solvency**
- C. short-term solvency
- D. profitability
- E. market value

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Difficulty: 1 Basic*  
*Ross - Chapter 03 #7*  
*Section: 3.2*  
*Topic: Long-term solvency ratios*

8. The debt-equity ratio is measured as:

- A. total equity divided by long-term debt.
- B. total equity divided by total debt.
- C. total debt divided by total equity.**
- D. long-term debt divided by total equity.
- E. total assets minus total debt, divided by total equity.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Difficulty: 1 Basic*  
*Ross - Chapter 03 #8*  
*Section: 3.2*  
*Topic: Long-term solvency ratios*

9. The equity multiplier is measured as total:

- A. equity divided by total assets.
- B. equity plus total debt.
- C. assets minus total equity, divided by total assets.
- D. assets plus total equity, divided by total debt.
- E. assets divided by total equity.**

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Difficulty: 1 Basic*  
*Ross - Chapter 03 #9*  
*Section: 3.2*  
*Topic: Long-term solvency ratios*

10. Ratios that measure how efficiently a firm uses its assets to generate sales are known as \_\_\_\_\_ ratios.

- A.** asset management
- B. long-term solvency
- C. short-term solvency
- D. profitability
- E. market value

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #10  
Section: 3.2  
Topic: Asset management ratios*

11. The inventory turnover ratio is measured as:

- A. total sales minus inventory.
- B. inventory times total sales.
- C.** cost of goods sold divided by inventory.
- D. inventory divided by cost of goods sold.
- E. inventory divided by sales.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #11  
Section: 3.2  
Topic: Asset management ratios*

12. The financial ratio days' sales in inventory is measured as:

- A. inventory turnover plus 365 days.
- B. inventory times 365 days.
- C. inventory plus cost of goods sold, divided by 365 days.
- D. 365 days divided by the inventory.
- E.** 365 days divided by the inventory turnover.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #12  
Section: 3.2  
Topic: Asset management ratios*

13. The receivables turnover ratio is measured as:

- A. sales plus accounts receivable.
- B.** sales divided by accounts receivable.
- C. sales minus accounts receivable, divided by sales.
- D. accounts receivable times sales.
- E. accounts receivable divided by sales.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Difficulty: 1 Basic*  
*Ross - Chapter 03 #13*  
*Section: 3.2*  
*Topic: Asset management ratios*

14. The total asset turnover ratio measures the amount of:

- A. total assets needed for every \$1 of sales.
- B.** sales generated by every \$1 in total assets.
- C. fixed assets required for every \$1 of sales.
- D. net income generated by every \$1 in total assets.
- E. net income than can be generated by every \$1 of fixed assets.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Difficulty: 1 Basic*  
*Ross - Chapter 03 #14*  
*Section: 3.2*  
*Topic: Asset management ratios*

15. Ratios that measure how efficiently a firm's management uses its assets and equity to generate bottom line net income are known as \_\_\_\_\_ ratios.

- A. asset management
- B. long-term solvency
- C. short-term solvency
- D.** profitability
- E. market value

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Difficulty: 1 Basic*  
*Ross - Chapter 03 #15*  
*Section: 3.2*  
*Topic: Profitability ratios*

16. The financial ratio measured as net income divided by sales is known as the firm's:

- A. profit margin.
- B. return on assets.
- C. return on equity.
- D. asset turnover.
- E. earnings before interest and taxes.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Difficulty: 1 Basic*  
*Ross - Chapter 03 #16*  
*Section: 3.2*  
*Topic: Profitability ratios*

17. The measure of net income returned from every dollar invested in total assets is the:

- A. profit margin.
- B. return on assets.
- C. return on equity.
- D. asset turnover.
- E. earnings before interest and taxes.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Difficulty: 1 Basic*  
*Ross - Chapter 03 #17*  
*Section: 3.2*  
*Topic: Profitability ratios*

18. The financial ratio that measures the accounting profit per dollar of book equity is referred to as the:

- A. profit margin.
- B. price-earnings ratio.
- C. return on equity.
- D. equity turnover.
- E. market profit-to-book ratio.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Remember*  
*Difficulty: 1 Basic*  
*Ross - Chapter 03 #18*  
*Section: 3.2*  
*Topic: Profitability ratios*

19. The amount that investors are willing to pay for each dollar of annual earnings is reflected in the:
- A. return on assets.
  - B. return on equity.
  - C. debt-equity ratio.
  - D.** price-earnings ratio.
  - E. DuPont identity.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #19  
Section: 3.2  
Topic: Market value ratios*

20. The market-to-book ratio is measured as the:
- A. market price per share divided by the par value per share.
  - B. net income per share divided by the market price per share.
  - C. market price per share divided by the net income per share.
  - D. market price per share divided by the dividends per share.
  - E.** market value per share divided by the book value per share.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 1 Basic  
Ross - Chapter 03 #20  
Section: 3.2  
Topic: Market value ratios*

21. The external funds needed (EFN) equation projects the addition to retained earnings as:
- A.  $PM \times \text{Sales}$ .
  - B.  $PM \times \text{Sales} \times (1 - d)$ .
  - C.**  $PM \times \text{Projected sales} \times (1 - d)$ .
  - D.  $\text{Projected sales} \times (1 - d)$ .
  - E.  $PM \times \text{Projected sales}$ .

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #21  
Section: 3.4  
Topic: External financing need*

22. Which one of the following statements is correct concerning ratio analysis?

- A.** A single ratio is often computed differently by different individuals.
- B. Ratios do not address the problem of size differences among firms.
- C. Only a very limited number of ratios can be used for analytical purposes.
- D. Each ratio has a specific formula that is used consistently by all analysts.
- E. Ratios cannot be used for comparison purposes over periods of time.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Understand  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #22  
Section: 3.2  
Topic: Ratio analysis*

23. Which one of the following is a liquidity ratio?

- A.** quick ratio
- B. cash coverage ratio
- C. total debt ratio
- D. EV multiple
- E. times interest earned ratio

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #23  
Section: 3.2  
Topic: Short-term solvency ratios*

24. An increase in which one of the following accounts increases a firm's current ratio without affecting its quick ratio?

- A. accounts payable
- B. cash
- C.** inventory
- D. accounts receivable
- E. fixed assets

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Apply  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #24  
Section: 3.2  
Topic: Short-term solvency ratios*

25. A supplier, who requires payment within ten days, should be most concerned with which one of the following ratios when granting credit?

- A. current
- B. cash**
- C. debt-equity
- D. quick
- E. total debt

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Understand  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #25  
Section: 3.2  
Topic: Short-term solvency ratios*

26. A firm has a total debt ratio of .47. This means the firm has 47 cents in debt for every:

- A. \$1 in total equity.
- B. \$.53 in total assets.
- C. \$1 in current assets.
- D. \$.53 in total equity.**
- E. \$1 in fixed assets.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Apply  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #26  
Section: 3.2  
Topic: Long-term solvency ratios*

27. The long-term debt ratio is probably of most interest to a firm's:

- A. credit customers.
- B. employees.
- C. suppliers.
- D. mortgage holder.**
- E. stockholders.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Apply  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #27  
Section: 3.2  
Topic: Long-term solvency ratios*

28. A banker considering loaning money to a firm for ten years would most likely prefer the firm have a debt ratio of \_\_\_\_\_ and a times interest earned ratio of \_\_\_\_\_.

- A. .50; .75
- B. .50; 1.00
- C. .45; 1.75
- D. .40; .75
- E. .40; 1.75**

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #28*  
*Section: 3.2*  
*Topic: Long-term solvency ratios*

29. From a cash flow position, which one of the following ratios best measures a firm's ability to pay the interest on its debts?

- A. times interest earned ratio
- B. cash coverage ratio**
- C. cash ratio
- D. quick ratio
- E. interval measure

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Understand*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #29*  
*Section: 3.2*  
*Topic: Long-term solvency ratios*

30. The higher the inventory turnover, the:

- A. less time inventory items remain on the shelf.**
- B. higher the inventory as a percentage of total assets.
- C. longer it takes a firm to sell its inventory.
- D. greater the amount of inventory held by a firm.
- E. lesser the amount of inventory held by a firm.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #30*  
*Section: 3.2*  
*Topic: Asset management ratios*

31. Which one of the following statements is correct if a firm has a receivables turnover of 10?

- A. It takes the firm 10 days to collect payment from its customers.
- B. It takes the firm 36.5 days to sell its inventory and collect the payment from the sale.
- C. It takes the firm an average of 36.5 days to sell its items.
- D.** The firm collects on its sales in an average of 36.5 days.
- E. The firm has ten times more in accounts receivable than it does in cash.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #31*  
*Section: 3.2*  
*Topic: Asset management ratios*

32. A capital intensity ratio of 1.03 means a firm has \$1.03 in:

- A. total debt for every \$1 in equity.
- B. equity for every \$1 in total debt.
- C. sales for every \$1 in total assets.
- D.** total assets for every \$1 in sales.
- E. long-term assets for every \$1 in short-term assets.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Understand*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #32*  
*Section: 3.2*  
*Topic: Asset management ratios*

33. Puffy's Pastries generates five cents of net income for every \$1 in equity. Thus, Puffy's has \_\_\_\_\_ of 5 percent.

- A. a return on assets
- B. a profit margin
- C.** a return on equity
- D. an EV multiple
- E. a price-earnings ratio

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Understand*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #33*  
*Section: 3.2*  
*Topic: Profitability ratios*

34. If a firm produces a return on assets of 15 percent and also a return on equity of 15 percent, then the firm:

- A.** has no debt of any kind.
- B. is using its assets as efficiently as possible.
- C. has no net working capital.
- D. also has a current ratio of 15.
- E. has an equity multiplier of 2.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #34*  
*Section: 3.2*  
*Topic: Profitability ratios*

35. If stockholders want to know how much profit the firm is making on their entire investment in that firm, the stockholders should refer to the:

- A. profit margin.
- B. return on assets.
- C.** return on equity.
- D. equity multiplier.
- E. earnings per share.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Understand*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #35*  
*Section: 3.2*  
*Topic: Profitability ratios*

36. Assume BGL Enterprises increases its operating efficiency by lowering its costs while holding its sales constant. As a result, given all else constant, the:

- A.** return on equity will increase.
- B. return on assets will decrease.
- C. profit margin will decline.
- D. equity multiplier will decrease.
- E. price-earnings ratio will increase.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #36*  
*Section: 3.2*  
*Topic: Profitability ratios*

37. Joe's has old, fully depreciated equipment. Moe's just purchased all new equipment which will be depreciated over eight years. If Joe's and Moe's have the same sales, costs, tax rate, and enterprise value, then:
- A. Joe's will have a lower profit margin.
  - B. Joe's will have a lower return on equity.
  - C. Moe's will have a higher net income.
  - D.** Moe's and Joe's will have the same EV multiple.
  - E. Moe's will have a lower EV multiple.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #37*  
*Section: 3.2*  
*Topic: Market value ratios*

38. Last year, Alfred's Automotive had a price-earnings ratio of 15 and earnings per share of \$1.20. This year, the price earnings ratio is 18 and the earnings per share is \$1.20. Based on this information, it can be stated with certainty that:
- A. the price per share decreased.
  - B. the earnings per share decreased.
  - C. investors are paying a lower price per share this year as compared to last year.
  - D. investors are receiving a higher rate of return this year.
  - E.** the investors' outlook for the firm has improved.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #38*  
*Section: 3.2*  
*Topic: Market value ratios*

39. Turner's Inc. has a price-earnings ratio of 16. Alfred's Co. has a price-earnings ratio of 19. Thus, you can state with certainty that one share of stock in Alfred's:
- A. has a higher market price than one share of stock in Turner's.
  - B.** has a higher market price per dollar of earnings than does one share of Turner's.
  - C. sells at a lower price per share than one share of Turner's.
  - D. represents a larger percentage of firm ownership than does one share of Turner's stock.
  - E. earns a greater profit per share than does one share of Turner's stock.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #39*  
*Section: 3.2*  
*Topic: Market value ratios*

40. Which one of the following is most apt to cause a firm to have a higher price-earnings ratio?
- A. slow industry outlook
  - B. very low current earnings**
  - C. low market share
  - D. low prospect of firm growth
  - E. low investor opinion of firm

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Apply  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #40  
Section: 3.2  
Topic: Market value ratios*

41. Vinnie's Motors has a market-to-book ratio of 3.4. The book value per share is \$34 and earnings per share are \$1.36. Holding the market-to-book ratio and earnings per share constant, a \$1 increase in the book value per share will:
- A. decrease the price-earnings ratio.
  - B. decrease the EV multiple.
  - C. decrease the market price per share.
  - D. increase the price-earnings ratio.**
  - E. increase the return on equity.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Apply  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #41  
Section: 3.2  
Topic: Market value ratios*

42. Which one of the following sets of ratios would generally be of the most interest to stockholders?
- A. return on assets and profit margin
  - B. quick ratio and times interest earned
  - C. price-earnings ratio and debt-equity ratio
  - D. return on equity and price-earnings ratio**
  - E. cash coverage ratio and equity multiplier

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Apply  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #42  
Section: 3.2  
Topic: Market value ratios*

43. The DuPont identity can be computed as:

- A. Net income  $\times$  Profit margin  $\times$  (1 + Debt-equity ratio).
- B.** Profit margin  $\times$  (1 / Capital intensity)  $\times$  (1 + Debt-equity ratio).
- C. Net income  $\times$  Total asset turnover  $\times$  Equity multiplier.
- D. Profit margin  $\times$  Total asset turnover  $\times$  Debt-equity ratio.
- E. Return on equity  $\times$  Profit margin  $\times$  Total asset turnover.

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Apply  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #43  
Section: 3.3  
Topic: DuPont identity

44. If a firm decreases its operating costs, all else constant, then the:

- A. profit margin will decrease.
- B. return on assets will decrease.
- C. total asset turnover rate will increase.
- D. cash coverage ratio will decrease.
- E.** price-earnings ratio will decrease.

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Apply  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #44  
Section: 3.2  
Topic: Market value ratios

45. It is easier to evaluate a firm using its financial statements when the firm:

- A. is a conglomerate.
- B. is global in nature.
- C.** uses the same accounting procedures as other firms in its industry.
- D. has a different fiscal year than other firms in its industry.
- E. tends to have one-time events such as asset sales and property acquisitions.

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #45  
Section: 3.3  
Topic: Financial statement analysis and issues

46. The most effective method of directly evaluating the financial performance of a firm is to compare the financial ratios of the firm to:

- A.** the firm's ratios from prior time periods and to the ratios of firms with similar operations.
- B. the average ratios of all firms within the same country over a period of time.
- C. those of other firms located in the same geographic area that are similarly sized.
- D. the average ratios of the firm's international peer group.
- E. those of the largest conglomerate that has operations in the same industry as the firm.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Understand  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #46  
Section: 3.3  
Topic: Financial statement analysis and issues*

47. In the financial planning model, the external financing needed (EFN) as shown on a pro forma balance sheet is equal to the changes in assets:

- A. plus the changes in liabilities minus the changes in equity.
- B.** minus the changes in both liabilities and equity.
- C. minus the changes in liabilities.
- D. plus the changes in both liabilities and equity.
- E. minus the change in retained earnings.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Understand  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #47  
Section: 3.4  
Topic: Financial planning models*

48. The least problem encountered when comparing the financial statements of one firm with those of another firm occurs when the firms:

- A. are in different lines of business.
- B. have geographically diverse operations.
- C. use different methods of depreciation.
- D. are both classified as conglomerates.
- E.** have the same fiscal year-end.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Understand  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #48  
Section: 3.3  
Topic: Financial statement analysis and issues*

49. The maximum rate at which a firm can grow while maintaining a constant debt-equity ratio is best defined by its:
- A. rate of return on assets.
  - B. internal rate of growth.
  - C. average historical rate of growth.
  - D. rate of return on equity.
  - E.** sustainable rate of growth.

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Understand  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #49  
Section: 3.5  
Topic: Internal and sustainable growth rates

50. The sustainable growth rate will be equivalent to the internal growth rate when, and only when,:
- A.** a firm has no debt.
  - B. the growth rate is positive.
  - C. the plowback ratio is positive but less than 1.
  - D. a firm has a debt-equity ratio equal to 1.
  - E. the retention ratio is equal to 1.

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Understand  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #50  
Section: 3.5  
Topic: Internal and sustainable growth rates

51. The sustainable growth rate:
- A. assumes there is no external financing of any kind.
  - B.** is normally higher than the internal growth rate.
  - C. assumes the debt-equity ratio is variable.
  - D. is based on receiving additional external debt and equity financing.
  - E. assumes the dividend payout ratio is equal to zero.

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Apply  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #51  
Section: 3.5  
Topic: Internal and sustainable growth rates

52. If a firm bases its growth projection on the rate of sustainable growth, shows positive net income, and has a dividend payout ratio of 30 percent, then the:
- A. fixed assets will have to increase at the same rate, even if the firm is currently operating at only 78 percent of capacity.
  - B. number of common shares outstanding will increase at the same rate of growth.
  - C. debt-equity ratio will have to increase.
  - D.** debt-equity ratio will remain constant while retained earnings increase.
  - E. fixed assets, the debt-equity ratio, and number of common shares outstanding will all increase.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #52  
Section: 3.3*

*Topic: Internal and sustainable growth rates*

53. Marcie's Mercantile wants to maintain its current dividend policy, which is a payout ratio of 35 percent. The firm does not want to increase its equity financing but is willing to maintain its current debt-equity ratio. Given these requirements, the maximum rate at which Marcie's can grow is equal to:
- A. 35 percent of the internal rate of growth.
  - B. 65 percent of the internal rate of growth.
  - C. the internal rate of growth.
  - D.** the sustainable rate of growth.
  - E. 65 percent of the sustainable rate of growth.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Understand  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #53  
Section: 3.5*

*Topic: Internal and sustainable growth rates*

54. One of the primary weaknesses of many financial planning models is that they:
- A. rely too much on financial relationships and too little on accounting relationships.
  - B. are iterative in nature.
  - C. ignore the goals and objectives of senior management.
  - D. ignore cash payouts to stockholders.
  - E.** ignore the size, risk, and timing of cash flows.

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #54  
Section: 3.6*

55. Financial planning, when properly executed:
- A. ignores the normal restraints encountered by a firm.
  - B. is based on the internal rate of growth.
  - C. reduces the necessity of daily management oversight of the business operations.
  - D.** ensures internal consistency among the firm's various goals.
  - E. eliminates the need to plan more than one year in advance.

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #55  
Section: 3.5  
Topic: Financial planning and forecasting

56. A public firm's market capitalization is equal to the:
- A. total book value of assets less book value of debt.
  - B. par value of common equity.
  - C.** price per share multiplied by number of shares outstanding.
  - D. firm's stock price multiplied by the number of shares authorized.
  - E. the maximum value an acquirer would pay for the firm in an acquisition.

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #56  
Section: 3.2  
Topic: Ratio analysis

57. Enterprise value is based on the:
- A.** market value of interest bearing debt plus the market value of equity minus cash.
  - B. book values of debt and assets, other than cash.
  - C. market value of equity plus the book value of total debt minus cash.
  - D. book value of debt plus the market value of equity.
  - E. book values of debt and equity less cash.

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Remember  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #57  
Section: 3.2  
Topic: Ratio analysis

58. The equity multiplier measures:

- A.** financial leverage.
- B. returns to stockholders.
- C. operating efficiency.
- D. management efficiency.
- E. asset use efficiency.

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Understand*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #58*  
*Section: 3.3*  
*Topic: DuPont identity*

59. The return on equity can be calculated as:

- A.**  $\text{ROA} \times \text{Equity multiplier}$ .
- B. Profit margin  $\times$  ROA.
- C. Profit margin  $\times$  ROA  $\times$  Total asset turnover.
- D.  $\text{ROA} \times (\text{Net income} / \text{Total assets})$ .
- E.  $\text{ROA} \times \text{Debt-equity ratio}$ .

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Blooms: Understand*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #59*  
*Section: 3.3*  
*Section: 3.4*  
*Section: 3.5*  
*Topic: DuPont identity*  
*Topic: Financial planning models*

60.

Which one of the following depicts a correct relationship?

A.

Dividend payout ratio = 1 – Retention ratio

B.

Total asset turnover = 1 + Capital intensity ratio

C.

ROA = ROE × (1 + Debt-equity ratio)

D.

ROE = 1 – ROA

E.

Equity multiplier = 1 – Debt-equity ratio

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Blooms: Understand*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #60*  
*Section: 3.3*  
*Section: 3.4*  
*Section: 3.5*  
*Topic: DuPont identity*  
*Topic: Financial planning models*

61.

Which account is least apt to vary directly with sales?

- A.**  
notes payable
- B.  
inventory
- C.  
cost of goods sold
- D.  
accounts payable
- E.  
accounts receivable

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Apply*  
*Blooms: Understand*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #61*  
*Section: 3.3*  
*Section: 3.4*  
*Section: 3.5*  
*Topic: Financial planning models*

62. A firm has sales of \$22,400, net income of \$3,600, net fixed assets of \$18,700, inventory of \$2,800, and total current assets of \$6,300. What is the common-size statement value of inventory?

- A. 10.07%
- B. 13.67%
- C.** 11.20%
- D. 12.50%
- E. 9.84%

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #62*  
*Section: 3.1*  
*Topic: Standardized financial statements*

63. A firm has sales of \$38,900, net income of \$2,400, total assets of \$43,100, and total equity of \$24,700. Interest expense is \$830. What is the common-size statement value of the interest expense?

- A.** 2.13%
- B. 3.08%
- C. 1.93%
- D. 2.49%
- E. 3.46%

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #63*  
*Section: 3.1*  
*Topic: Standardized financial statements*

64. Jessica's Boutique has cash of \$218, accounts receivable of \$457, accounts payable of \$398, and inventory of \$647. What is the value of the quick ratio?

- A. .55
- B. 1.05
- C.** 1.70
- D. 1.32
- E. 1.52

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #64*  
*Section: 3.2*  
*Topic: Ratio analysis*

65. Browning's has a debt-equity ratio of .47. What is the equity multiplier?

- A.** 1.47
- B. .53
- C. 2.13
- D. 1.13
- E. 1.53

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #65*  
*Section: 3.2*  
*Topic: Ratio analysis*

66. Cado Industries has total debt of \$6,800 and a debt-equity ratio of .36. What is the value of the total assets?

- A. \$18,889
- B. \$24,480
- C. \$23,520
- D. \$25,689**
- E. \$25,360

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #66*  
*Section: 3.2*  
*Topic: Ratio analysis*

67. Wybro's Markets has sales of \$684,000, costs of \$437,000, interest paid of \$13,800, total assets of \$712,000, and depreciation of \$109,400. The tax rate is 35 percent and the equity multiplier is 1.6. What is the return on equity?

- A. 11.30%
- B. 13.92%
- C. 7.06%
- D. 15.48%
- E. 18.08%**

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #67*  
*Section: 3.2*  
*Topic: Ratio analysis*

68. Rosita's Resources paid \$11,310 in interest and \$16,500 in dividends last year. The times interest earned ratio is 2.9, the depreciation expense is \$7,900, and the tax rate is 35 percent. What is the value of the cash coverage ratio?

A.  
3.71

B.  
2.58

**C.**  
3.60

D.  
2.78

E.  
3.10

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #68  
Section: 3.2  
Topic: Ratio analysis*

69. Home Systems has sales of \$312,800, cost of goods sold of \$218,400, inventory of \$46,300, and accounts receivable of \$62,700. How many days, on average, does it take the firm to both sell its inventory and collect payment on the sale?

A. 142.10

B. 96.37

C. 178.21

**D.** 150.54

E. 124.03

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #69  
Section: 3.2  
Topic: Ratio analysis*

70. Northern Industries has accounts receivable of \$42,300, inventory of \$61,200, sales of \$544,200, and cost of goods sold of \$393,500. How many days, on average, does it take the firm to sell its inventory?

- A. 93.08
- B. 74.92
- C. 85.14
- D. 56.77**
- E. 80.46

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #70  
Section: 3.2  
Topic: Ratio analysis

71. Two Sisters Dresses has net working capital of \$43,800, net fixed assets of \$232,400, net income of \$43,900, and current liabilities of \$51,300. The tax rate is 35 percent and the profit margin is 9.3 percent. How many dollars worth of sales are generated from every \$1 in total assets?

- A. \$1.44**
- B. \$1.32
- C. \$1.73
- D. \$.97
- E. \$1.06

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #71  
Section: 3.2  
Topic: Ratio analysis

72. Uptowne Restaurant has sales of \$418,000, total equity of \$224,400, a tax rate of 34 percent, a debt-equity ratio of .37, and a profit margin of 5.1 percent. What is the return on assets?

- A. 6.93%**
- B. 9.50%
- C. 11.08%
- D. 7.13%
- E. 13.13%

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #72  
Section: 3.2

73. Sun Shade's has sales of \$363,000, total assets of \$323,500, and a profit margin of 14.6 percent. The firm has a total debt ratio of 54 percent. What is the return on equity?

- A. 28.45%
- B. 35.61%**
- C. 23.29%
- D. 31.74%
- E. 7.88%

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #73  
Section: 3.2  
Topic: Ratio analysis

74. Discount Mart has \$876,400 in sales. The profit margin is 3.8 percent. There are 32,500 shares of stock outstanding. The market price per share is \$21.60. What is the price-earnings ratio?

- A. 23.40
- B. 22.60
- C. 19.21
- D. 21.08**
- E. 18.47

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #74  
Section: 3.2  
Topic: Ratio analysis

75. New Metals has depreciation of \$28,300, interest expense of \$11,400, EBIT of \$62,700, a price-earnings ratio of 8.6, a profit margin of 7.2 percent, a tax rate of 34 percent, and 37,500 shares of stock outstanding. What is the market price per share?

- A. \$3.48
- B. \$5.09
- C. \$7.76**
- D. \$12.48
- E. \$9.92

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #75

76. A firm has 12,000 shares of stock outstanding, sales of \$638,100, a profit margin of 8.2 percent, a tax rate of 35 percent, a price-earnings ratio of 11.3, and a book value per share of \$7.98. What is the market-to-book ratio?

- A. 6.08
- B. 5.42
- C. 5.16
- D.** 6.17
- E. 6.90

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #76  
Section: 3.2  
Topic: Ratio analysis

77. Preston Woods has 17,500 shares of stock outstanding along with \$408,000 of interest bearing debt. The market and book values of the debt are the same. The firm has sales of \$697,000 and a profit margin of 6.8 percent. The tax rate is 35 percent, the debt-equity ratio is 40 percent, and the price-earnings ratio is 11.8. The firm has \$130,000 of current assets of which \$41,200 is cash. What is the enterprise value multiple?

- A. \$1,106,308
- B. \$994,520
- C. \$830,479
- D. \$1,018,097
- E.** \$926,073

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 3 Challenge  
Ross - Chapter 03 #77  
Section: 3.2  
Topic: Ratio analysis

78. Frederico's has a net income of \$29,600, a total asset turnover of 1.4, total assets of \$318,600, and a debt-equity ratio of .35. What is the return on equity?

- A. 16.72%
- B. 8.40%
- C.** 12.54%
- D. 14.67%
- E. 17.56%

*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #78*  
*Section: 3.3*  
*Topic: DuPont identity*

79. Samuelson's has sales of \$317,000, a profit margin of 8.6 percent, an equity multiplier of 1.8, and total debt of \$144,400. What is the return on equity?

- A. 15.48%
- B. 14.46%
- C. 7.05%
- D.** 15.10%
- E. 11.25%

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 3 Challenge*  
*Ross - Chapter 03 #79*  
*Section: 3.2*  
*Topic: Ratio analysis*

80. A firm has a return on equity of 16.2 percent, a debt-equity ratio of 44 percent, a capital intensity ratio of 1.08, a current ratio of 1.25, and current assets of \$138,000. What is the profit margin?

- A.** 12.15%
- B. 9.72%
- C. 7.48%
- D. 15.19%
- E. 13.69%

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #80*  
*Section: 3.3*  
*Topic: DuPont identity*

81.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
Accounts receivable	50,700	58,300	Notes payable	20,000	30,000
Inventory	70,500	75,800	Long-term debt	134,700	164,500
Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What is the current ratio for 2015?

- A. 1.95
- B. .95
- C. 2.06
- D. 1.98
- E. .98

*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #81*  
*Section: 3.2*  
*Topic: Ratio analysis*

82.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
Accounts receivable	50,700	58,300	Notes payable	20,000	30,000
Inventory	70,500	75,800	Long-term debt	134,700	164,500
Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What are the days' sales in inventory for 2015? (Use ending inventory)

A.

61.84 days

**B.**

62.79 days

C. 67.51 days

D. 42.97 days

E. 40.08 days

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #82  
Section: 3.2  
Topic: Ratio analysis*

83.

What is the equity multiplier for 2015?

**A.** 1.48

B. 1.28

C. 1.66

D. 2.13

E. 2.99

*AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #83  
Section: 3.2  
Topic: Ratio analysis*

84.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
Accounts receivable	50,700	58,300	Notes payable	20,000	30,000
Inventory	70,500	75,800	Long-term debt	134,700	164,500
Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What is the cash coverage ratio for 2015?

- A. 11.06
- B. 6.02

C.

13.79

D.

14.89

E.

8.78

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #84*  
*Section: 3.2*  
*Topic: Ratio analysis*

85.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
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			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What are the values of the three components of the DuPont identity for 2015?

- A. 7.91%; 1.0248; 1.4806
- B. 8.57%; 1.0248; .6754
- C. 7.91%; .9758; 1.4806**
- D. 11.43%; .9758; .6754
- E. 11.43%; 1.0248; 1.4806

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #85  
Section: 3.3  
Topic: DuPont identity

86.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
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Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
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Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

Deep Falls Timber stock sold for \$6.50 a share as of 2015. What was the price-earnings ratio at that time?

- A. 17.12
- B. 29.94
- C. 12.82
- D. 28.15**

E. 19.64

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #86*  
*Section: 3.2*  
*Topic: Ratio analysis*

87.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
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Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

Deep Falls Timber stock sold for \$6.50 a share as of 2015. What was the market-to-book ratio at that time?

- A. 1.78
- B. 2.22
- C. 2.78
- D. 3.03
- E. 3.22**

AACSB: Analytical Thinking  
Accessibility: Keyboard Navigation  
Blooms: Analyze  
Difficulty: 2 Intermediate  
Ross - Chapter 03 #87  
Section: 3.2  
Topic: Ratio analysis

88.

Deep Falls Timber	
2015 Income Statement	
Net sales	\$642,100
Cost of goods sold	409,800
Depreciation	<u>138,400</u>
EBIT	\$ 93,900
Interest	<u>15,600</u>
Taxable income	\$ 78,300
Taxes	<u>27,500</u>
Net income	<u>\$ 50,800</u>
Dividends	\$12,700

Deep Falls Timber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 46,900	Accounts payable	\$ 58,900	\$ 61,200
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Net fixed assets	<u>504,500</u>	<u>461,000</u>	Common stock and paid-in surplus (\$1 par value)	220,000	200,000
			Retained earnings	<u>224,400</u>	<u>186,300</u>
Total assets	<u>\$658,000</u>	<u>\$642,000</u>	Total liabilities & owners' equity	<u>\$658,000</u>	<u>\$642,000</u>

What is the internal growth rate for 2015?

- A. 5.83%
- B. 6.24%
- C. 6.15%**
- D. 5.18%
- E. 7.70%

*AACSB: Analytical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Difficulty: 3 Challenge*

*Ross - Chapter 03 #88*

*Section: 3.5*

*Topic: Internal and sustainable growth rates*

89.

Narrow Falls Lumber	
2015 Income Statement	
Net sales	\$848,600
Cost of goods sold	542,800
Depreciation	<u>147,400</u>
EBIT	\$158,400
Interest	<u>12,600</u>
Taxable income	\$145,800
Taxes	<u>51,800</u>
Net income	<u>\$ 94,000</u>
Dividends	\$28,200

Narrow Falls Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 26,900	Accounts payable	\$ 78,900	\$ 79,200
Accounts receivable	74,700	72,300	Notes payable	50,000	40,000
Inventory	99,500	97,800	Long-term debt	295,600	354,500
Net fixed assets	<u>707,100</u>	<u>705,000</u>	Common stock and paid-in surplus (\$1 par value)	170,000	175,000
			Retained earnings	<u>319,100</u>	<u>253,300</u>
Total assets	<u>\$913,600</u>	<u>\$902,000</u>	Total liabilities & owners' equity	<u>\$913,600</u>	<u>\$902,000</u>

What is the sustainable growth rate for 2015?

- A. 13.97%
- B. 14.46%
- C. 15.54%**
- D. 12.63%
- E. 10.91%

*AACSB: Analytical Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Difficulty: 3 Challenge*

*Ross - Chapter 03 #89*

*Section: 3.5*

*Topic: Internal and sustainable growth rates*

90.

Narrow Falls Lumber	
2015 Income Statement	
Net sales	\$848,600
Cost of goods sold	542,800
Depreciation	<u>147,400</u>
EBIT	\$158,400
Interest	<u>12,600</u>
Taxable income	\$145,800
Taxes	<u>51,800</u>
Net income	<u>\$ 94,000</u>
Dividends	\$28,200

Narrow Falls Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 26,900	Accounts payable	\$ 78,900	\$ 79,200
Accounts receivable	74,700	72,300	Notes payable	50,000	40,000
Inventory	99,500	97,800	Long-term debt	295,600	354,500
Net fixed assets	<u>707,100</u>	<u>705,000</u>	Common stock and paid-in surplus (\$1 par value)	170,000	175,000
			Retained earnings	<u>319,100</u>	<u>253,300</u>
Total assets	<u>\$913,600</u>	<u>\$902,000</u>	Total liabilities & owners' equity	<u>\$913,600</u>	<u>\$902,000</u>

What is the equity multiplier for 2015?

- A. 1.71
- B. 1.87**
- C. 1.44
- D. 1.82
- E. 1.92

*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #90*  
*Section: 3.2*  
*Topic: Ratio analysis*

91.

Narrow Falls Lumber	
2015 Income Statement	
Net sales	\$848,600
Cost of goods sold	542,800
Depreciation	<u>147,400</u>
EBIT	\$158,400
Interest	<u>12,600</u>
Taxable income	\$145,800
Taxes	<u>51,800</u>
Net income	<u>\$ 94,000</u>
Dividends	\$28,200

Narrow Falls Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 26,900	Accounts payable	\$ 78,900	\$ 79,200
Accounts receivable	74,700	72,300	Notes payable	50,000	40,000
Inventory	99,500	97,800	Long-term debt	295,600	354,500
Net fixed assets	<u>707,100</u>	<u>705,000</u>	Common stock and paid-in surplus (\$1 par value)	170,000	175,000
			Retained earnings	<u>319,100</u>	<u>253,300</u>
Total assets	<u>\$913,600</u>	<u>\$902,000</u>	Total liabilities & owners' equity	<u>\$913,600</u>	<u>\$902,000</u>

What are the values for the three components of the DuPont identity for 2015?

- A. 11.08%; .9289; 1.8679
- B. 11.08%; 1.0765; 1.8679
- C. 11.08%; .9289; .5354
- D. 7.75%; 1.0765; .5354
- E. 7.75%; 1.0765; 1.8679

92. The Blue Giant has a profit margin of 6.2 percent and a dividend payout ratio of 40 percent. The capital intensity is 1.08 and the debt-equity ratio is .54. What is the sustainable rate of growth?

- A. 6.30%
- B. 5.53%
- C. 5.60%**
- D. 6.41%
- E. 5.89%

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 3 Challenge*  
*Ross - Chapter 03 #92*  
*Section: 3.5*  
*Topic: Internal and sustainable growth rates*

93. Catherine's Consulting has net income of \$4,400 and total equity of \$39,450. The debt-equity ratio is 1 and the plowback ratio is 40 percent. What is the return on assets?

- A. 6.24%
- B. 6.09%
- C. 5.23%
- D. 5.58%**
- E. 5.72%

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #93*  
*Section: 3.2*  
*Topic: Ratio analysis*

94.

Narrow Falls Lumber	
2015 Income Statement	
Net sales	\$848,600
Cost of goods sold	542,800
Depreciation	<u>147,400</u>
EBIT	\$158,400
Interest	<u>12,600</u>
Taxable income	\$145,800
Taxes	<u>51,800</u>
Net income	<u>\$ 94,000</u>
Dividends	\$28,200

Narrow Falls Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 32,300	\$ 26,900	Accounts payable	\$ 78,900	\$ 79,200
Accounts receivable	74,700	72,300	Notes payable	50,000	40,000
Inventory	99,500	97,800	Long-term debt	295,600	354,500
Net fixed assets	<u>707,100</u>	<u>705,000</u>	Common stock and paid-in surplus (\$1 par value)	170,000	175,000
			Retained earnings	<u>319,100</u>	<u>253,300</u>
Total assets	<u>\$913,600</u>	<u>\$902,000</u>	Total liabilities & owners' equity	<u>\$913,600</u>	<u>\$902,000</u>

Assume that all costs, assets, and accounts payable change spontaneously with sales. For simplicity's sake, assume interest expense also changes spontaneously with sales (even though you know if may not). The tax rate and dividend payout ratios remain constant. If the firm's managers project a firm growth rate of 15 percent for next year, what will be the amount of external financing needed to support this level of growth?

- A. \$49,535
- B. \$68,211
- C. -\$10,406

D. \$13,909

E. \$32,408

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 3 Challenge*  
*Ross - Chapter 03 #94*  
*Section: 3.4*  
*Topic: External financing need*

95.

The Lumber Mill	
2015 Income Statement	
Net sales	\$608,400
Cost of goods sold	427,800
Depreciation	<u>79,100</u>
EBIT	\$101,500
Interest	<u>17,600</u>
Taxable income	\$ 83,900
Taxes	<u>28,500</u>
Net income	<u>\$ 55,400</u>
Dividends	\$12,000

The Lumber Mill					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 33,600	\$ 33,900	Accounts payable	\$ 49,700	\$ 59,200
Accounts receivable	54,200	53,300	Notes payable	20,000	25,000
Inventory	96,700	85,800	Long-term debt	155,000	175,000
Net fixed assets	<u>407,100</u>	<u>409,700</u>	Common stock and paid-in surplus (\$1 par value)	150,000	150,000
			Retained earnings	<u>216,900</u>	<u>173,500</u>
Total assets	<u>\$591,600</u>	<u>\$582,700</u>	Total liabilities & owners' equity	<u>\$591,600</u>	<u>\$582,700</u>

Assume that all costs, assets, and accounts payable change spontaneously with sales. For simplicity's sake, assume interest expense also changes spontaneously with sales (even though you know it may not). The tax rate and dividend payout ratios remain constant. If the firm's managers project a firm growth rate of 22 percent for next year, what will be the amount of external financing needed to support this level of growth?

- A. \$63,200
- B. \$66,270**

- C. \$47,520
- D. \$63,200
- E. \$53,640
- F. \$47,520
- G. \$56,400
- H. \$53,640
- I. \$56,400

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 3 Challenge*  
*Ross - Chapter 03 #95*  
*Section: 3.4*  
*Topic: External financing need*

96.

Green Lumber	
2015 Income Statement	
Net sales	\$387,200
Cost of goods sold	242,800
Depreciation	<u>48,400</u>
EBIT	\$ 96,000
Interest	<u>8,600</u>
Taxable income	\$ 87,400
Taxes	<u>29,700</u>
Net income	<u>\$ 57,700</u>
Dividends	\$24,000

Green Lumber					
Balance Sheets as of December 31, 2014 and 2015					
	<u>2015</u>	<u>2014</u>		<u>2015</u>	<u>2014</u>
Cash	\$ 11,300	\$ 8,300	Accounts payable	\$ 45,000	\$ 49,200
Accounts receivable	44,700	41,300	Notes payable	10,000	10,000
Inventory	51,500	53,800	Long-term debt	145,600	160,500
Net fixed assets	<u>322,100</u>	<u>311,600</u>	Common stock and paid-in surplus (\$1 par value)	140,000	140,000
			Retained earnings	<u>89,000</u>	<u>55,300</u>
Total assets	<u>\$429,600</u>	<u>\$415,000</u>	Total liabilities & owners' equity	<u>\$429,600</u>	<u>\$415,000</u>

Assume that all costs, assets, and accounts payable change spontaneously with sales. For simplicity's sake, assume interest expense also changes spontaneously with sales (even though you know if may not). The tax rate and dividend payout ratios remain constant. If the firm's managers project a firm growth rate of 16 percent for next year, what will be the amount of external financing needed to support this level of growth? ANS\$ANS\$ANS\$. \$22,444

A. \$18,700

- B. \$24,350
- C. \$23,911
- D. \$25,667

*AACSB: Analytical Thinking*  
*Accessibility: Keyboard Navigation*  
*Blooms: Analyze*  
*Difficulty: 3 Challenge*  
*Ross - Chapter 03 #96*  
*Section: 3.4*  
*Topic: External financing need*

97. New Tek has a sustainable growth rate of 11.2 percent. However, the firm's managers are determined that the firm should grow by at least 20 percent next year. What must the firm do if the managers are to reach their desired level of growth for the firm?

One reason that causes firms to go out of business is the lack of external funding to support the growth of the firm. Understanding the implications of both the internal and sustainable growth rates can help management know when to limit firm growth such that the growth does not exceed the availability of the necessary financing to fund that growth. For the firm to achieve growth beyond the sustainable rate, the firm must increase its debt-equity ratio, obtain additional external equity financing, reduce its dividends, improve its profitability, or some combination of these actions.

*AACSB: Reflective Thinking*  
*Blooms: Evaluate*  
*Difficulty: 3 Challenge*  
*Ross - Chapter 03 #97*  
*Section: 3.5*  
*Topic: Internal and sustainable growth rates*

98. State the assumptions that underlie the sustainable growth rate and interpret what the sustainable growth rate means.

The usual assumptions are: Costs, assets, and current accounts (excluding notes payable) increase proportionately with sales, the dividend payout ratio is fixed (or is given), the current debt-equity ratio is optimal and fixed, and no new equity sales will occur. The sustainable growth rate is the maximum rate at which sales can increase given the stated assumptions while maintaining the funding required by that growth.

*AACSB: Reflective Thinking*  
*Blooms: Understand*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #98*  
*Section: 3.5*  
*Topic: Internal and sustainable growth rates*

99. Suppose a firm calculates its external financial need for a growth rate of 10 percent and finds that the need is a negative value. What are the firm's options in this case?

With a negative external financing need, the firm can expect to have a surplus of funds given the projected rate of growth. The firm can use those funds to reduce current liabilities, reduce long-term debt, buy back common stock, increase dividends, or invest in assets and resources, as needed, to increase its growth rate.

*AACSB: Reflective Thinking*  
*Blooms: Evaluate*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #99*  
*Section: 3.4*  
*Topic: External financing need*

100. A retail store has days' sales in inventory of 68 days and an average collection period of 32 days. The firm pays its suppliers in an average of 42 days, on average. Taken together, what do these average values imply about the firm's operations and its cash flows?

It takes a total of 100 days ( $= 68 + 32$ ) to sell inventory and collect payment on the sale of that inventory. Meanwhile, 42 days after acquiring the inventory and prior to the inventory even being sold, the retailer must pay its suppliers. Thus, the firm must pay out cash 58 ( $= 100 - 42$ ) days prior to receiving payment. This creates a negative cash flow which the firm must be able to finance.

*AACSB: Reflective Thinking*  
*Blooms: Evaluate*  
*Difficulty: 3 Challenge*  
*Ross - Chapter 03 #100*  
*Section: 3.2*  
*Topic: Ratio analysis*

101. Which is a more meaningful measure of profitability for a firm, return on assets or return on equity? Why?

Most would argue ROE since it measures returns relative to the amount shareholders have invested in the firm. In addition, since shareholder wealth maximization is a firm's primary goal, it makes more sense to look at this measure.

*AACSB: Reflective Thinking*  
*Blooms: Analyze*  
*Difficulty: 2 Intermediate*  
*Ross - Chapter 03 #101*  
*Section: 3.2*  
*Topic: Ratio analysis*

102. You are comparing the common-size financial statements for two firms in the same industry that have very similar operations. You note that their sales revenues are similar in dollar value but yet the common-size EBIT for one firm is 30 percent compared to only 26 percent for the other firm. What are some possible explanations for this difference given the strong similarities of the two firms?

Some possible explanations are: (1) difference in the age of the fixed assets leading to differences in the depreciation expense, (2) different depreciation methods, (3) different inventory methods which affects the cost of goods sold, (4) different sales markets that allows the one firm to have a higher markup per item and thus a higher selling price per unit, (5) different markets that causes higher costs per unit produced for one firm (if the firms are in manufacturing), (6) differing fiscal years.

*AACSB: Reflective Thinking*

*Blooms: Evaluate*

*Difficulty: 3 Challenge*

*Ross - Chapter 03 #102*

*Section: 3.1*

*Topic: Standardized financial statements*

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