

## Chapter 02

### Reviewing Financial Statements

#### Multiple Choice Questions

1. Which financial statement reports a firm's assets, liabilities, and equity at a particular point in time?
  - A. Balance sheet
  - B. Income statement
  - C. Statement of retained earnings
  - D. Statement of cash flows
  
2. Which financial statement shows the total revenues that a firm earns and the total expenses the firm incurs to generate those revenues over a specific period of time—generally one year?
  - A. Balance sheet
  - B. Income statement
  - C. Statement of retained earnings
  - D. Statement of cash flows

3. Which financial statement reports the amounts of cash that the firm generated and distributed during a particular time period?

- A. Balance sheet
- B. Income statement
- C. Statement of retained Earnings
- D. Statement of cash Flows

4. Which financial statement reconciles net income earned during a given period and any cash dividends paid within that period using the change in retained earnings between the beginning and end of the period?

- A. Balance sheet
- B. Income statement
- C. Statement of retained earnings
- D. Statement of cash flows

5. On which of the four major financial statements would you find the common stock and paid-in surplus?

- A. Balance sheet
- B. Income statement
- C. Statement of cash flows
- D. Statement of retained earnings

6. On which of the four major financial statements would you find the increase in inventory?
- A. Balance sheet
  - B. Income statement
  - C. Statement of cash flows
  - D. Statement of retained earnings
7. On which of the four major financial statements would you find net plant and equipment?
- A. Balance sheet
  - B. Income statement
  - C. Statement of cash flows
  - D. Statement of retained earnings
8. Financial statements of publicly traded firms can be found in a number of places. Which of the following is NOT an option for finding publicly traded firms' financial statements?
- A. Facebook
  - B. A firm's website
  - C. Securities and Exchange Commission's (SEC) website
  - D. Websites such as finance.yahoo.com

9. For which of the following would one expect the book value of the asset to differ widely from its market value?
- A. Cash
  - B. Accounts receivable
  - C. Inventory
  - D. Fixed assets
10. Common stockholders' equity divided by number of shares of common stock outstanding is the formula for calculating
- A. Earnings per share (EPS).
  - B. Dividends per share (DPS).
  - C. Book value per share (BVPS).
  - D. Market value per share (MVPS).
11. When a firm alters its capital structure to include more or less debt (and, in turn, less or more equity), it impacts which of the following?
- A. The residual cash flows available for stock holders
  - B. The number of shares of stock outstanding
  - C. The earnings per share (EPS)
  - D. All of the choices

12. This is the amount of additional taxes a firm must pay out for every additional dollar of taxable income it earns.

- A. Average tax rate
- B. Marginal tax rate
- C. Progressive tax system
- D. Earnings before tax

13. An equity-financed firm will:

- A. pay more in income taxes than a debt-financed firm.
- B. pay less in income taxes than a debt-financed firm.
- C. pay the same in income taxes as a debt-finance firm.
- D. not pay any income taxes.

14. Deferred taxes occur when a company postpones taxes on profits pertaining to:

- A. tax years they are under an audit by the Internal Revenue Service.
- B. funds they have not collected because they use the accrual method of accounting.
- C. a loss they intend to carry back or carry forward on their income tax returns.
- D. a particular period as they end up postponing part of their tax liability on this year's profits to future years.

15. Net operating profit after taxes (NOPAT) is defined as which of the following?
- A. Net profit a firm earns before taxes, but after any financing costs
  - B. Net profit a firm earns after taxes, and after any financing costs
  - C. Net profit a firm earns after taxes, but before any financing costs
  - D. Net profit a firm earns before taxes, and before any financing cost
16. This is cash flow available for payments to stockholders and debt holders of a firm after the firm has made investments in assets necessary to sustain the ongoing operations of the firm.
- A. Net income available to common stockholders
  - B. Cash flow from operations
  - C. Net cash flow
  - D. Free cash flow
17. Which of the following activities result in an increase in a firm's cash?
- A. Decrease fixed assets
  - B. Decrease accounts payable
  - C. Pay dividends
  - D. Repurchase of common stock

18. These are cash inflows and outflows associated with buying and selling of fixed or other long-term assets.
- A. Cash flows from operations
  - B. Cash flows from investing activities
  - C. Cash flows from financing activities
  - D. Net change in cash and cash equivalents
19. If a company reports a large amount of net income on its income statement during a year, the firm will have:
- A. positive cash flow.
  - B. negative cash flow.
  - C. zero cash flow.
  - D. Any of these scenarios are possible.
20. Free cash flow is defined as:
- A. cash flows available for payments to stockholders of a firm after the firm has made payments to all others will claims against it.
  - B. cash flows available for payments to stockholders and debt holders of a firm after the firm has made payments necessary to vendors.
  - C. cash flows available for payments to stockholders and debt holders of a firm after the firm has made investments in assets necessary to sustain the ongoing operations of the firm.
  - D. cash flows available for payments to stockholders and debt holders of a firm that would be tax-free to the recipients.

21. The Sarbanes-Oxley Act requires public companies to ensure which of the following individuals have considerable experience applying generally accepted accounting principles (GAAP) for financial statements.
- A. External auditors
  - B. Internal auditors
  - C. Chief financial officers
  - D. Corporate boards' audit committees
22. **Balance Sheet** You are evaluating the balance sheet for Campus Corporation. From the balance sheet you find the following balances: cash and marketable securities = \$400,000, accounts receivable = \$200,000, inventory = \$100,000, accrued wages and taxes = \$10,000, accounts payable = \$300,000, and notes payable = \$600,000. What is Campus's net working capital?
- A. -\$210,000
  - B. \$700,000
  - C. \$910,000
  - D. \$1,610,000
23. **Balance Sheet** Jack and Jill Corporation's year-end 2013 balance sheet lists current assets of \$250,000, fixed assets of \$800,000, current liabilities of \$195,000, and long-term debt of \$300,000. What is Jack and Jill's total stockholders' equity?
- A. \$495,000
  - B. \$555,000
  - C. \$1,050,000
  - D. There is not enough information to calculate total stockholder's equity.



24. **Income Statement** Bullseye, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$900,000, interest expense = \$85,000, and net income = \$570,000. What are the 2013 taxes reported on the income statement?
- A. \$245,000
  - B. \$330,000
  - C. \$815,000
  - D. There is not enough information to calculate 2013 taxes.
25. **Income Statement** Consider a firm with an EBIT of \$500,000. The firm finances its assets with \$2,000,000 debt (costing 6 percent) and 50,000 shares of stock selling at \$20.00 per share. To reduce the firm's risk associated with this financial leverage, the firm is considering reducing its debt by \$1,000,000 by selling an additional 50,000 shares of stock. The firm is in the 40 percent tax bracket. The change in capital structure will have no effect on the operations of the firm. Thus, EBIT will remain \$500,000. What is the change in the firm's EPS from this change in capital structure?
- A. Decrease EPS by \$1.68
  - B. Decrease EPS by \$1.92
  - C. Decrease EPS by \$3.20
  - D. Increase EPS by \$0.72

26. **Income Statement** Consider a firm with an EBIT of \$5,000,000. The firm finances its assets with \$20,000,000 debt (costing 5 percent) and 70,000 shares of stock selling at \$50.00 per share. To reduce the firm's risk associated with this financial leverage, the firm is considering reducing its debt by \$5,000,000 by selling an additional 100,000 shares of stock. The firm is in the 40 percent tax bracket. The change in capital structure will have no effect on the operations of the firm. Thus, EBIT will remain \$5,000,000. What is the change in the firm's EPS from this change in capital structure?

- A. Decrease EPS by \$9.29
- B. Decrease EPS by \$18.70
- C. Decrease EPS by \$19.29
- D. Increase EPS by \$2.14

27. **Income Statement** Barnyard, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$500,000, interest expense = \$45,000, and taxes = \$152,000. Barnyard's has no preferred stock outstanding and 200,000 shares of common stock outstanding. What are its 2013 earnings per share?

- A. \$2.50
- B. \$2.275
- C. \$1.74
- D. \$1.515

28. **Corporate Taxes** Eccentricity, Inc. had \$300,000 in 2013 taxable income. Using the tax schedule from Table 2-3, what are the company's 2013 income taxes, average tax rate, and marginal tax rate, respectively?

Taxable income	Pay this amount on Base income	Plus this percentage on anything over the base
\$0 - \$50,000	\$ 0	15%
\$50,001 - \$75,000	\$ 7,500	25%
\$75,001 - \$100,000	\$13,500	34%
\$100,001 - \$335,000	\$22,250	39%
\$335,000 - \$10,000,000	\$113,900	34%

- A. \$22,250, 7.42%, 39%
- B. \$78,000, 26.00%, 39%
- C. \$100,250, 33.42%, 39%
- D. \$139,250, 46.42%, 39%

29. **Corporate Taxes** Swimmy, Inc. had \$400,000 in 2013 taxable income. Using the tax schedule from Table 2-3, what are the company's 2013 income taxes, average tax rate, and marginal tax rate, respectively?

Taxable income	Pay this amount on Base income	Plus this percentage on anything over the base
\$0 - \$50,000	\$ 0	15%
\$50,001 - \$75,000	\$ 7,500	25%
\$75,001 - \$100,000	\$13,500	34%
\$100,001 - \$335,000	\$22,250	39%
\$335,000 - \$10,000,000	\$113,900	34%

- A. \$22,100, 5.53%, 34%
- B. \$113,900, 28.48%, 34%
- C. \$136,000, 34.00%, 34%
- D. \$136,000, 39.00%, 34%

30. **Corporate Taxes** Scuba, Inc. is concerned about the taxes paid by the company in 2013. In addition to \$5 million of taxable income, the firm received \$80,000 of interest on state-issued bonds and \$500,000 of dividends on common stock it owns in Boating Adventures, Inc. What are Scuba's tax liability, average tax rate, and marginal tax rate, respectively?

- A. \$1,637,100, 31.79%, 34%
- B. \$1,751,000, 34.00%, 34%
- C. \$1,870,000, 34.00%, 34%
- D. \$1,983,900, 36.07%, 34%

31. **Statement of Cash Flows** Paige's Properties Inc. reported 2013 net income of \$5 million and depreciation of \$1,500,000. The top part Paige's Properties, Inc.'s 2012 and 2013 balance sheets is listed as follows (in millions of dollars).

Current assets	2012	2013	Current liabilities	2012	2013
Cash and marketable securities	\$ 10	\$ 20	Accrued wages and taxes	\$ 5	\$ 11
Accounts receivable	20	34	Accounts payable	25	29
Inventory	<u>10</u>	<u>11</u>	Notes payable	<u>10</u>	<u>25</u>
Total	\$ 40	\$ 65	Total	\$40	\$65

What is the 2013 net cash flow from operating activities for Paige's Properties, Inc.?

- A. -\$13,500,000
- B. \$1,500,000
- C. \$5,000,000
- D. \$6,500,000

32. **Statement of Cash Flows** In 2013, Upper Crust had cash flows from investing activities of (\$250,000) and cash flows from financing activities of (\$150,000). The balance in the firm's cash account was \$90,000 at the beginning of 2013 and \$105,000 at the end of the year. What was Upper Crust's cash flow from operations for 2013?

- A. \$15,000
- B. \$105,000
- C. \$400,000
- D. \$415,000

33. **Statement of Cash Flows** In 2013, Lower Case Productions had cash flows from investing activities of +\$50,000 and cash flows from financing activities of +\$100,000. The balance in the firm's cash account was \$80,000 at the beginning of 2013 and \$65,000 at the end of the year. What was Lower Case's cash flow from operations for 2013?

- A. -\$15,000
- B. -\$150,000
- C. -\$165,000
- D. -\$65,000

34. **Free Cash Flow** You are considering an investment in Crew Cut, Inc. and want to evaluate the firm's free cash flow. From the income statement, you see that Crew Cut earned an EBIT of \$23 million, paid taxes of \$4 million, and its depreciation expense was \$8 million. Crew Cut's gross fixed assets increased by \$10 million from 2007 to 2008. The firm's current assets increased by \$6 million and spontaneous current liabilities increased by \$4 million. What is Crew Cut's operating cash flow, investment in operating capital and free cash flow for 2013, respectively in millions?

- A. \$23, \$10, \$13
- B. \$23, \$12, \$11
- C. \$27, \$10, \$17
- D. \$27, \$12, \$15

35. **Free Cash Flow** You are considering an investment in Cruise, Inc. and want to evaluate the firm's free cash flow. From the income statement, you see that Cruise earned an EBIT of \$202 million, paid taxes of \$51 million, and its depreciation expense was \$75 million. Cruise's gross fixed assets increased by \$70 million from 2012 to 2013. The firm's current assets decreased by \$10 million and spontaneous current liabilities increased by \$6 million. What is Cruise's operating cash flow, investment in operating capital, and free cash flow for 2013, respectively, in millions?

- A. \$202, \$70, \$130
- B. \$226, \$70, \$156
- C. \$226, \$54, \$172
- D. \$226, \$74, \$152

36. **Free Cash Flow** Catering Corp. reported free cash flows for 2013 of \$8 million and investment in operating capital of \$2 million. Catering listed \$1 million in depreciation expense and \$2 million in taxes on its 2008 income statement. What was Catering's 2013 EBIT?
- A. \$7 million
  - B. \$10 million
  - C. \$11 million
  - D. \$13 million
37. **Statement of Retained Earnings** TriCycle, Corp. began the year 2013 with \$25 million in retained earnings. The firm earned net income of \$7 million in 2008 and paid \$1 million to its preferred stockholders and \$3 million to its common stockholders. What is the year-end 2013 balance in retained earnings for TriCycle?
- A. \$25 million
  - B. \$28 million
  - C. \$32 million
  - D. \$36 million
38. **Statement of Retained Earnings** Night Scapes, Corp. began the year 2013 with \$10 million in retained earnings. The firm suffered a net loss of \$2 million in 2013 and yet paid \$2 million to its preferred stockholders and \$1 million to its common stockholders. What is the year-end 2013 balance in retained earnings for Night Scapes?
- A. \$5 million
  - B. \$8 million
  - C. \$9 million
  - D. \$15 million

39. **Statement of Retained Earnings** Use the following information to find dividends paid to common stockholders during 2013.

Balance of Retained Earnings, December 31, 2012		\$52m
Plus: Net Income for 2013		21m
Less: Cash Dividends Paid		
Preferred Stock	\$7m	
Common Stock	<u>10m</u>	
Total Cash Dividends Paid		<u>17m</u>
Balance of Retained Earnings, December 31, 2013		\$56m

- A. \$3 million
- B. \$4 million
- C. \$10 million
- D. \$17 million

40. **Balance Sheet** Harvey's Hamburger Stand has total assets of \$3 million of which \$1 million are current assets. Cash makes up 20 percent of the current assets and accounts receivable makes up another 5 percent of current assets. Harvey's gross plant and equipment has a book value of \$1.5 million and other long-term assets have a book value of \$1 million. Using this information, what is the balance of inventory and the balance of depreciation on Harvey's Hamburger Stand's balance sheet?

- A. \$250,000, \$500,000
- B. \$250,000, \$1 million
- C. \$750,000, \$500,000
- D. \$750,000, \$1 million



41. **Balance Sheet** School Books, Inc. has total assets of \$18 million of which \$6 million are current assets. Cash makes up 10 percent of the current assets and accounts receivable makes up another 40 percent of current assets. School Books' gross plant and equipment has an original cost of \$13 million and other long-term assets have a cost value of \$2 million. Using this information, what are the balance of inventory and the balance of depreciation on School Books' balance sheet?
- A. \$3 million, \$2 million
  - B. \$3 million, \$3 million
  - C. \$2.4 million, \$2 million
  - D. \$2.4 million, \$3 million
42. **Balance Sheet** Ted's Taco Shop has total assets of \$5 million. Forty percent of these assets are financed with debt of which \$400,000 is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$1 million. Using this information what is the balance for long-term debt and retained earnings on Ted's Taco Shop's balance sheet?
- A. \$400,000, \$1 million
  - B. \$1.6 million, \$2 million
  - C. \$1.6 million, \$3 million
  - D. \$2 million, \$3 million

43. **Balance Sheet** Hair Etc. has total assets of \$15 million. Twenty percent of these assets are financed with debt of which \$1 million is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$8 million. Using this information what is the balance for long-term debt and retained earnings on Hair Etc.'s balance sheet?
- A. \$1 million, \$8 million
  - B. \$2 million, \$4 million
  - C. \$2 million, \$8 million
  - D. \$3 million, \$4 million
44. **Market Value versus Book Value** Acme Bricks balance sheet lists net fixed assets as \$40 million. The fixed assets could currently be sold for \$50 million. Acme's current balance sheet shows current liabilities of \$15 million and net working capital of \$12 million. If all the current accounts were liquidated today, the company would receive \$77 million cash after paying \$15 million in liabilities. What is the book value of Acme's assets today? What is the market value of these assets?
- A. \$12 million, \$77 million
  - B. \$27 million, \$92 million
  - C. \$40 million, \$50 million
  - D. \$67 million, \$142 million

45. **Market Value versus Book Value** Glo's Glasses balance sheet lists net fixed assets as \$20 million. The fixed assets could currently be sold for \$25 million. Glo's current balance sheet shows current liabilities of \$7 million and net working capital of \$3 million. If all the current accounts were liquidated today, the company would receive \$9 million cash after paying \$7 million in liabilities. What is the book value of Glo's assets today? What is the market value of these assets?

- A. \$10 million, \$16 million
- B. \$10 million, \$35 million
- C. \$30 million, \$35 million
- D. \$30 million, \$41 million

46. **Market Value versus Book Value** Rupert's Rims balance sheet lists net fixed assets as \$15 million. The fixed assets could currently be sold for \$17 million. Rupert's current balance sheet shows current liabilities of \$5 million and net working capital of \$3 million. If all the current accounts were liquidated today, the company would receive \$6 million cash after paying \$5 million in liabilities. What is the book value of Rupert's assets today? What is the market value of these assets?

- A. \$8 million, \$23 million
- B. \$23 million, \$25 million
- C. \$23 million, \$28 million
- D. \$31 million, \$28 million

47. **Debt versus Equity Financing** You are considering a stock investment in one of two firms (AllDebt, Inc. and AllEquity, Inc.), both of which operate in the same industry and have identical operating income of \$600,000. AllDebt, Inc. finances its \$1.2 million in assets with \$1 million in debt (on which it pays 10 percent interest annually) and \$0.2 million in equity. AllEquity, Inc. finances its \$1.2 million in assets with no debt and \$1.2 million in equity. Both firms pay a tax rate of 30 percent on their taxable income. What are the asset funders' (the debt holders and stockholders) resulting return on assets for the two firms?

- A. 29.17%, and 35%, respectively
- B. 37.5%, and 35%, respectively
- C. 37.5%, and 37.5%, respectively
- D. 50%, and 50%, respectively

48. **Debt versus Equity Financing** You are considering a stock investment in one of two firms (AllDebt, Inc. and AllEquity, Inc.), both of which operate in the same industry and have identical operating income of \$3 million. AllDebt, Inc. finances its \$6 million in assets with \$5 million in debt (on which it pays 5 percent interest annually) and \$1 million in equity. AllEquity, Inc. finances its \$6 million in assets with no debt and \$6 million in equity. Both firms pay a tax rate of 40 percent on their taxable income. What are the asset funders' (the debt holders and stockholders) resulting return on assets for the two firms?

- A. 27.5%, and 30%, respectively
- B. 31.67%, and 30%, respectively
- C. 33%, and 30%, respectively
- D. 50%, and 50%, respectively

49. **Debt versus Equity Financing** You are considering a stock investment in one of two firms (AllDebt, Inc. and AllEquity, Inc.), both of which operate in the same industry and have identical operating income of \$400,000. AllDebt, Inc. finances its \$800,000 in assets with \$600,000 in debt (on which it pays 5 percent interest annually) and \$200,000 in equity. AllEquity, Inc. finances its \$800,000 in assets with no debt and \$800,000 in equity. Both firms pay a tax rate of 30 percent on their taxable income. What are the asset funders' (the debt holders and stockholders) resulting return on assets for the two firms?

- A. 32.375%, and 35.00%, respectively
- B. 36.125%, and 35.00%, respectively
- C. 46.25%, and 50%, respectively
- D. 50%, and 50%, respectively

50. **Income Statement** You have been given the following information for Fina's Furniture Corp.:

Net sales = \$25,500,000;

Cost of goods sold = \$10,250,000;

Addition to retained earnings = \$305,000;

Dividends paid to preferred and common stockholders = \$500,000;

Interest expense = \$2,000,000.

The firm's tax rate is 30 percent. What is the depreciation expense for Fina's Furniture Corp.?

- A. \$12,100,000
- B. \$12,400,000
- C. \$14,100,000
- D. \$14,400,000

51. **Income Statement** You have been given the following information for Romeo's Rockers Corp.:

Net sales = \$5,200,000;

Cost of goods sold = \$2,100,000;

Addition to retained earnings = \$1,000,000;

Dividends paid to preferred and common stockholders = \$400,000;

Interest expense = \$200,000.

The firm's tax rate is 30 percent. What is the depreciation expense for Romeo's Rockers Corp.?

A. \$900,000

B. \$1,100,000

C. \$1,500,000

D. \$1,600,000

52. **Income Statement** You have been given the following information for Nicole's Neckties Corp.:

Net sales = \$2,500,000;

Cost of goods sold = \$1,300,000;

Addition to retained earnings = \$30,000;

Dividends paid to preferred and common stockholders = \$300,000;

Interest expense = \$50,000.

The firm's tax rate is 40 percent. What is the depreciation expense for Nicole's Neckties Corp.?

A. \$550,000

B. \$600,000

C. \$650,000

D. \$820,000

53. **Income Statement** You have been given the following information for Sherry's Sandwich Corp.:

Net sales = \$300,000;

Gross profit = \$100,000;

Addition to retained earnings = \$30,000;

Dividends paid to preferred and common stockholders = \$8,500;

Depreciation expense = \$25,000.

The firm's tax rate is 30 percent. What are the cost of goods sold and the interest expense for Sherry's Sandwich Corp.?

- A. \$20,000, and \$200,000, respectively
- B. \$100,000, and \$20,000, respectively
- C. \$200,000, and \$20,000, respectively
- D. \$200,000, and \$36,500, respectively

54. **Income Statement** You have been given the following information for Kaye's Krumpet Corp.:

Net sales = \$150,000;

Gross profit = \$100,000;

Addition to retained earnings = \$20,000;

Dividends paid to preferred and common stockholders = \$8,000;

Depreciation expense = \$50,000.

The firm's tax rate is 30 percent. What are the cost of goods sold and the interest expense for Kaye's Krumpet Corp.?

- A. \$10,000, and \$50,000, respectively
- B. \$50,000, and \$10,000, respectively
- C. \$50,000, and \$22,000, respectively
- D. \$62,000, and \$10,000, respectively

55. **Income Statement** You have been given the following information for Ross's Rocket Corp.:

Net sales = \$1,000,000;

Gross profit = \$400,000;

Addition to retained earnings = \$60,000;

Dividends paid to preferred and common stockholders = \$90,000;

Depreciation expense = \$50,000.

The firm's tax rate is 40 percent. What are the cost of goods sold and the interest expense for Ross's Rocket Corp.?

- A. \$100,000, and \$600,000, respectively
- B. \$600,000, and \$100,000, respectively
- C. \$600,000, and \$200,000, respectively
- D. \$700,000, and \$100,000, respectively

56. **Corporate Taxes** The Carolina Corporation had a 2013 taxable income of \$3,000,000 from operations after all operating costs but before

- (1) interest charges of \$500,000,
- (2) dividends received of \$75,000,
- (3) dividends paid of \$1,000,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is Carolina's income tax liability?

What are Carolina's average and marginal tax rates on taxable income from operations?

- A. \$857,650, 28.59%, 34%, respectively
- B. \$875,500, 29.18%, 34%, respectively
- C. \$875,500, 34.00%, 34%, respectively
- D. \$1,020,000, 34.00%, 34%, respectively



57. **Corporate Taxes** The Ohio Corporation had a 2013 taxable income of \$50,000,000 from operations after all operating costs but before

- (1) interest charges of \$500,000,
- (2) dividends received of \$45,000,
- (3) dividends paid of \$10,000,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is Ohio's income tax liability?

What are Ohio's average and marginal tax rates on taxable income from operations?

- A. \$6,416,667, 12.83%, 35%, respectively
- B. \$13,829,725, 27.66%, 35%, respectively
- C. \$17,329,725, 34.66%, 35%, respectively
- D. \$17,340,750, 34.68%, 35%, respectively

58. **Corporate Taxes** The Sasnak Corporation had a 2013 taxable income of \$4,450,000 from operations after all operating costs but before

- (1) interest charges of \$750,000,
- (2) dividends received of \$900,000,
- (3) dividends paid of \$500,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is Sasnak's income tax liability?

What are Sasnak's average and marginal tax rates on taxable income from operations?

- A. \$1,349,800, 30.33%, 34%, respectively
- B. \$1,349,800, 34.00%, 34%, respectively
- C. \$1,564,000, 34.00%, 34%, respectively
- D. \$1,564,000, 35.15%, 34%, respectively

59. **Corporate Taxes** The AOK Corporation had a 2013 taxable income of \$2,200,000 from operations after all operating costs but before

- (1) interest charges of \$90,000,
- (2) dividends received of \$750,000,
- (3) dividends paid of \$80,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is AOK's income tax liability?

What are AOK's average and marginal tax rates on taxable income from operations?

- A. \$793,900, 34%, 34%, respectively
- B. \$793,900, 36.0864%, 34%, respectively
- C. \$972,400, 34%, 34%, respectively
- D. \$972,400, 44.2%, 34%, respectively

60. **Corporate Taxes** Suppose that in addition to the \$5.5 million of taxable income from operations, Emily's Flowers, Inc. received \$500,000 of interest on state-issued bonds and \$300,000 of dividends on common stock it owns in Amy's Iris Bulbs, Inc.

Using the tax schedule in Table 2.3 what is Emily's Flowers' income tax liability?

What are Emily's Flowers' average and marginal tax rates on total taxable income?

- A. \$1,900,600, 34%, 34%, respectively
- B. \$1,972,000, 34%, 34%, respectively
- C. \$2,070,600, 34%, 34%, respectively
- D. \$2,142,000, 34%, 34%, respectively

61. **Corporate Taxes** Suppose that in addition to the \$300,000 of taxable income from operations, Liam's Burgers, Inc. received \$25,000 of interest on state-issued bonds and \$50,000 of dividends on common stock it owns in Sodas, Inc.

Using the tax schedule in Table 2.3 what is Liam's income tax liability?

What are Liam's average and marginal tax rates on **total** taxable income?

A. \$106,100, 33.68%, 39%, respectively

B. \$122,850, 39.00%, 39%, respectively

C. \$129,500, 34.53%, 39%, respectively

D. \$139,250, 37.13%, 39%, respectively

62. **Statement of Cash Flows** Fina's Faucets, Inc. has net cash flows from operating activities for the last year of \$17 million. The income statement shows that net income is \$15 million and depreciation expense is \$6 million. During the year, the change in inventory on the balance sheet was an increase of \$4 million, change in accrued wages and taxes was an increase of \$1 million and change in accounts payable was an increase of \$1 million. At the beginning of the year the balance of accounts receivable was \$5 million. What was the end of year balance for accounts receivable?

A. \$2 million

B. \$3 million

C. \$7 million

D. \$9 million

63. **Statement of Cash Flows** Zoe's Dog Biscuits, Inc. has net cash flows from operating activities for the last year of \$226 million. The income statement shows that net income is \$150 million and depreciation expense is \$85 million. During the year, the change in inventory on the balance sheet was an increase of \$14 million, change in accrued wages and taxes was an increase of \$15 million and change in accounts payable was an increase of \$10 million. At the beginning of the year the balance of accounts receivable was \$45 million. What was the end of year balance for accounts receivable?

- A. \$20 million
- B. \$25 million
- C. \$45 million
- D. \$65 million

64. **Statement of Cash Flows** Nickolas's Nut Farms, Inc. has net cash flows from operating activities for the last year of \$25 million. The income statement shows that net income is \$15 million and depreciation expense is \$6 million. During the year, the change in inventory on the balance sheet was a decrease of \$4 million, change in accrued wages and taxes was a decrease of \$1 million and change in accounts payable was a decrease of \$1 million. At the beginning of the year the balance of accounts receivable was \$5 million. What was the end of year balance for accounts receivable?

- A. \$2 million
- B. \$3 million
- C. \$7 million
- D. \$9 million

65. **Statement of Cash Flows** Crispy Corporation has net cash flow from financing activities for the last year of \$20 million. The company paid \$5 million in dividends last year. During the year, the change in notes payable on the balance sheet was an increase of \$2 million, and change in common and preferred stock was an increase of \$3 million. The end of year balance for long-term debt was \$45 million. What was their beginning of year balance for long-term debt?

- A. \$15 million
- B. \$20 million
- C. \$25 million
- D. \$35 million

66. **Statement of Cash Flows** Full Moon Productions Inc. has net cash flow from financing activities for the last year of \$105 million. The company paid \$15 million in dividends last year. During the year, the change in notes payable on the balance sheet was an increase of \$40 million, and change in common and preferred stock was an increase of \$50 million. The end of year balance for long-term debt was \$50 million. What was their beginning of year balance for long-term debt?

- A. \$5 million
- B. \$20 million
- C. \$30 million
- D. \$35 million

67. **Statement of Cash Flows** Café Creations Inc. has net cash flow from financing activities for the last year of \$25 million. The company paid \$15 million in dividends last year. During the year, the change in notes payable on the balance sheet was a decrease of \$40 million, and change in common and preferred stock was an increase of \$50 million. The end of year balance for long-term debt was \$40 million. What was their beginning of year balance for long-term debt?

- A. \$10 million
- B. \$20 million
- C. \$30 million
- D. \$40 million

68. **Free Cash Flow** The 2010 income statement for Pete's Pumpkins shows that depreciation expense is \$250 million, EBIT is \$500 million, EBT is \$320 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$1,600 million and net operating working capital was \$640 million. At the end of the year gross fixed assets was \$2,000 million. Pete's free cash flow for the year was \$630 million. What is their end of year balance for net operating working capital?

- A. \$24 million
- B. \$264 million
- C. \$654 million
- D. \$1,064 million

69. **Free Cash Flow** The 2013 income statement for Lou's Shoes shows that depreciation expense is \$2 million, EBIT is \$5 million, EBT is \$3 million, and the tax rate is 40 percent. At the beginning of the year, the balance of gross fixed assets was \$16 million and net operating working capital was \$6 million. At the end of the year gross fixed assets was \$20 million. Lou's free cash flow for the year was \$4 million. What is their end of year balance for net operating working capital?

- A. \$1.8 million
- B. \$3.8 million
- C. \$5.8 million
- D. \$12.2 million

70. **Free Cash Flow** The 2013 income statement for Paige's Purses shows that depreciation expense is \$10 million, EBIT is \$25 million, EBT is \$15 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$80 million and net operating working capital was \$30 million. At the end of the year gross fixed assets was \$100 million. Paige's free cash flow for the year was \$20 million. What is their end of year balance for net operating working capital?

- A. \$10.5 million
- B. \$14 million
- C. \$20.5 million
- D. \$30.5 million

71. **Free Cash Flow** The 2013 income statement for Betty's Barstools shows that depreciation expense is \$100 million, EBIT is \$400 million, and taxes are \$120 million. At the end of the year, the balance of gross fixed assets was \$510 million. The increase in net operating working capital during the year was \$94 million. Betty's free cash flow for the year was \$625 million. What was the beginning of year balance for gross fixed assets?
- A. \$359 million
  - B. \$380 million
  - C. \$849 million
  - D. \$1,094 million
72. **Free Cash Flow** The 2013 income statement for John's Gym shows that depreciation expense is \$20 million, EBIT is \$80 million, and taxes are \$24 million. At the end of the year, the balance of gross fixed assets was \$102 million. The increase in net operating working capital during the year was \$18 million. John's free cash flow for the year was \$41 million. What was the beginning of year balance for gross fixed assets?
- A. \$43 million
  - B. \$85 million
  - C. \$84 million
  - D. \$163 million



73. **Statement of Retained Earnings** Bike and Hike, Inc. started the year with a balance of retained earnings of \$100 million and ended the year with retained earnings of \$128 million. The company paid dividends of \$9 million to the preferred stock holders and \$22 million to common stock holders. What was Bike and Hike's net income for the year?
- A. \$28 million
  - B. \$31 million
  - C. \$59 million
  - D. \$128 million
74. **Statement of Retained Earnings** Soccer Starz, Inc. started the year with a balance of retained earnings of \$25 million and ended the year with retained earnings of \$32 million. The company paid dividends of \$2 million to the preferred stock holders and \$6 million to common stock holders. What was Soccer Starz's net income for the year?
- A. \$7 million
  - B. \$15 million
  - C. \$40 million
  - D. \$49 million
75. **Statement of Retained Earnings** Jamaican Ice Cream Corp. started the year with a balance of retained earnings of \$100 million. The company reported net income for the year of \$45 million, paid dividends of \$2 million to the preferred stock holders and \$15 million to common stock holders. What is Jamaican Ice Cream's end of year balance in retained earnings?
- A. \$38 million
  - B. \$55 million
  - C. \$128 million
  - D. \$162 million

76. **Income Statement** The following is the 2013 income statement for Lamps, Inc.

<b>Lamps, Inc</b>	
<b>Income Statement for Year Ending December 31, 2013</b>	
<b>(in millions of dollars)</b>	
Net sales	\$ 100
Less: Cost of goods sold	<u>80</u>
Gross profits	20
Less: Depreciation	<u>5</u>
Earnings before interest and taxes (EBIT)	15
Less: Interest	<u>2</u>
Earnings before taxes (EBT)	13
Less: Taxes	<u>5</u>
Net Income	<u><u>\$ 8</u></u>

The CEO of Lamps wants the company to earn a net income of \$12 million in 2014. Cost of goods sold is expected to be 75 percent of net sales, depreciation expense is not expected to change, interest expense is expected to increase to \$4 million, and the firm's tax rate will be 40 percent. What is the net sales needed to produce net income of \$12 million?

- A. \$29 million
- B. \$112 million
- C. \$116 million
- D. \$124 million

77. **Income Statement** You have been given the following information for Halle's Holiday Store Corp. for the year 2013:

Net sales = \$50,000,000;

Cost of goods sold = \$35,000,000;

Addition to retained earnings = \$2,000,000;

Dividends paid to preferred and common stockholders = \$3,000,000;

Interest expense = \$3,000,000.

The firm's tax rate is 30 percent.

In 2014, net sales are expected to increase by \$5 million, cost of goods sold is expected to be 65 percent of net sales, expensed depreciation is expected to be the same as in 2013, interest expense is expected to be \$2,500,000, the tax rate is expected to be 30 percent of EBT, and dividends paid to preferred and common stockholders will not change. What is the addition to retained earnings expected in 2014?

- A. \$2,000,000
- B. \$5,325,000
- C. \$8,447,500
- D. \$10,304,643

78. **Free Cash Flow** Martha's Moving Van 4U, Inc. had free cash flow during 2013 of \$1 million, EBIT of \$30 million, tax expense of \$8 million, and depreciation of \$4 million. Using this information, what was Martha's Accounts Payable ending balance in 2013?

- A. \$5 million
- B. \$15 million
- C. \$35 million
- D. \$45 million

79. You are evaluating the balance sheet for Goodman's Bees Corporation. From the balance sheet you find the following balances: cash and marketable securities = \$200,000, accounts receivable = \$1,100,000, inventory = \$2,000,000, accrued wages and taxes = \$500,000, accounts payable = \$600,000, and notes payable = \$100,000. Calculate Goodman's Bees' net working capital.
- A. \$2,000,000
  - B. \$2,100,000
  - C. \$1,400,000
  - D. \$1,900,000
80. Zoeckler Mowing & Landscaping's year-end 2011 balance sheet lists current assets of \$350,000, fixed assets of \$325,000, current liabilities of \$145,000, and long-term debt of \$185,000. Calculate Zoeckler's total stockholders' equity.
- A. \$115,000
  - B. \$490,000
  - C. \$345,000
  - D. \$500,000
81. Reed's Birdie Shot, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$550,000, interest expense = \$43,000, and net income = \$300,000. Calculate the 2013 taxes reported on the income statement.
- A. \$85,000
  - B. \$107,000
  - C. \$309,000
  - D. \$207,000

82. Reed's Birdie Shot, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$555,000, interest expense = \$178,000, and taxes = \$148,000. Reed's has no preferred stock outstanding and 100,000 shares of common stock outstanding. Calculate the 2013 earnings per share.
- A. \$3.49
  - B. \$2.29
  - C. \$3.14
  - D. \$2.79
83. Oakdale Fashions Inc. had \$255,000 in 2013 taxable income. If the firm paid \$82,100 in taxes, what is the firm's average tax rate?
- A. 34.70%
  - B. 32.20%
  - C. 29.90%
  - D. 28.20%
84. Hunt Taxidermy, Inc. is concerned about the taxes paid by the company in 2013. In addition to \$36.5 million of taxable income, the firm received \$1,250,000 of interest on state-issued bonds and \$400,000 of dividends on common stock it owns in Hunt Taxidermy, Inc. Calculate Hunt Taxidermy's taxable income.
- A. \$40,250,000
  - B. \$38,150,000
  - C. \$36,900,000
  - D. \$36,620,000

85. Ramakrishnan Inc. reported 2013 net income of \$20 million and depreciation of \$1,500,000. The top part of Ramakrishnan, Inc.'s 2012 and 2013 balance sheets is listed as follows (in millions of dollars).

	<b>2012</b>	<b>2013</b>		<b>2012</b>	<b>2013</b>
<b>Assets</b>			<b>Liabilities &amp; Equity</b>		
Current Assets			Current liabilities		
Cash and marketable securities	\$15	\$20	Accrued wages and taxes	\$18	\$20
Accounts receivable	75	84	Accounts payable	45	50
Inventory	<u>110</u>	<u>121</u>	Notes payable	<u>40</u>	<u>45</u>
Total	\$200	\$225	Total	\$103	\$115

Calculate the 2013 net cash flow from operating activities for Ramakrishnan, Inc.

- A. \$12,500,000
- B. \$10,500,000
- C. \$8,500,000
- D. \$7,100,000

86. In 2014, Usher Sports Shop had cash flows from investing activities of (\$2,150,000) and cash flows from financing activities of (\$3,219,000). The balance in the firm's cash account was \$980,000 at the beginning of 2014 and \$1,025,000 at the end of the year. Calculate Usher Sports Shop's cash flow from operations for 2014.

- A. \$6,219,000
- B. \$5,414,000
- C. \$4,970,000
- D. \$5,980,000

87. You are considering an investment in Fields and Struthers, Inc. and want to evaluate the firm's free cash flow. From the income statement, you see that Fields and Struthers earned an EBIT of \$52 million, paid taxes of \$10 million, and its depreciation expense was \$5 million. Fields and Struthers' gross fixed assets increased by \$38 million from 2012 to 2013. The firm's current assets increased by \$20 million and spontaneous current liabilities increased by \$12 million. Calculate Fields and Struthers' operating cash flow (OCF), investment in operating capital (IOC), and free cash flow (FCF) for 2013.

- A. OCF = \$42,000,000; IOC = \$37,000,000; FCF = \$5,000,000
- B. OCF = \$47,000,000; IOC = \$37,000,000; FCF = \$10,000,000
- C. OCF = \$42,000,000; IOC = \$46,000,000; FCF = -\$4,000,000
- D. OCF = \$47,000,000; IOC = \$46,000,000; FCF = \$1,000,000

88. Tater and Pepper Corp. reported free cash flows for 2013 of \$20 million and investment in operating capital of \$15 million. Tater and Pepper listed \$8 million in depreciation expense and \$12 million in taxes on its 2010 income statement. Calculate Tater and Pepper's 2013 EBIT.

- A. \$49,000,000
- B. \$42,000,000
- C. \$39,000,000
- D. \$47,000,000

89. Mr. Husker's Tuxedos, Corp. began the year 2013 with \$205 million in retained earnings. The firm earned net income of \$30 million in 2013 and paid \$5 million to its preferred stockholders and \$12 million to its common stockholders. What is the year-end 2013 balance in retained earnings for Mr. Husker's Tuxedos?
- A. \$193,000,000
  - B. \$200,000,000
  - C. \$213,000,000
  - D. \$218,000,000
90. Brenda's Bar and Grill has total assets of \$17 million of which \$5 million are current assets. Cash makes up 12 percent of the current assets and accounts receivable makes up another 40 percent of current assets. Brenda's gross plant and equipment has a cost value of \$12 million and other long-term assets have a cost value of \$1,000,000. Using this information, what are the balance of inventory and the balance of depreciation on Brenda's Bar and Grill's balance sheet?
- A. \$2.4 million; \$1 million
  - B. \$3.4 million; \$2 million
  - C. \$1.4 million; \$1 million
  - D. \$0.4 million; \$3 million



91. Ed's Tobacco Shop has total assets of \$100 million. Fifty percent of these assets are financed with debt of which \$37 million is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$32 million. Using this information what is the balance for long-term debt and retained earnings on Ed's Tobacco Shop's balance sheet?
- A. \$18 million; \$27 million
  - B. \$12 million; \$12 million
  - C. \$14 million; \$29 million
  - D. \$13 million; \$18 million
92. Muffin's Masonry, Inc.'s balance sheet lists net fixed assets as \$16 million. The fixed assets could currently be sold for \$17 million. Muffin's current balance sheet shows current liabilities of \$5.5 million and net working capital of \$6.5 million. If all the current accounts were liquidated today, the company would receive \$10.25 million cash after paying \$5.5 million in liabilities. What is the book value of Muffin's Masonry's assets today? What is the market value of these assets?
- A. Book Value: \$28m; Market Value: \$32.75m
  - B. Book Value: \$32m; Market Value: \$42.25m
  - C. Book Value: \$32m; Market Value: \$32.75m
  - D. Book Value: \$28m; Market Value: \$42.25m

93. You have been given the following information for Corky's Bedding Corp.:

Net sales = \$15,250,000;

Cost of goods sold = \$5,750,000;

Addition to retained earnings = \$4,000,000;

Dividends paid to preferred and common stockholders = \$995,000;

Interest expense = \$1,150,000.

The firm's tax rate is 30 percent. Calculate the depreciation expense for Corky's Bedding Corp.

A. \$1,210,000

B. \$1,970,000

C. \$1,520,000

D. \$1,725,000

94. Dogs 4 U Corporation has net cash flow from financing activities for the last year of \$10 million.

The company paid \$8 million in dividends last year. During the year, the change in notes payable on the balance was \$9 million, and change in common and preferred stock was \$0 million. The end of year balance for long-term debt was \$44 million. Calculate the beginning of year balance for long-term debt.

A. \$37 million

B. \$34 million

C. \$33 million

D. \$35 million

95. The 2011 income statement for Duffy's Pest Control shows that depreciation expense is \$180 million, EBIT is \$420 million, EBT is \$240 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$1,500 million and net operating working capital was \$500 million. At the end of the year gross fixed assets was \$1,803 million. Duffy's free cash flow for the year was \$425 million. Calculate the end of year balance for net operating working capital.
- A. \$403 million
  - B. \$300 million
  - C. \$203 million
  - D. \$103 million
96. The CEO of Tom and Sue's wants the company to earn a net income of \$3.25 million in 2014. Cost of goods sold is expected to be 60 percent of net sales, depreciation expense is \$2.9 million, interest expense is expected to increase to \$1.050 million, and the firm's tax rate will be 30 percent. Calculate the net sales needed to produce net income of \$3.25 million.
- A. \$26.02 million
  - B. \$29.36 million
  - C. \$21.48 million
  - D. \$28.25 million
97. All of the following would be a result of changing to the MACRS method of depreciation EXCEPT:
- A. higher depreciation expense.
  - B. lower taxes in the early years of a project's life.
  - C. lower taxable income in the early years of a project's life.
  - D. All of the above.

98. Which of the following is NOT a source of cash?

- A. The firm reduces its inventory.
- B. The firm pays off some of its long-term debt.
- C. The firm has positive net income.
- D. The firm sells more common stock.

99. Which of the following is a use of cash?

- A. The firm takes its depreciation expense.
- B. The firm sells some of its fixed assets.
- C. The firm issues more long-term debt.
- D. The firm decreases its accrued wages and taxes.

100. Is it possible for a firm to have positive net income and yet to have cash flow problems?

- A. No, this is impossible since net income increases the firm's cash.
- B. Yes, this can occur when a firm is growing very rapidly.
- C. Yes, this is possible if the firm window-dressed its financial statements.
- D. No, this is impossible since net income and cash are highly correlated.

101. All of the following are cash flows from operations EXCEPT:

- A. increases or decreases in cash.
- B. net income.
- C. depreciation.
- D. increases or decreases in accounts payable.

102. All of the following are cash flows from financing EXCEPT a(n):

- A. increase in accounts payable.
- B. issuing stock.
- C. stock repurchases.
- D. paying dividends.

103. Cash flows available to pay the firm's stockholders and debt holders after the firm has made the necessary working capital investments, fixed asset investments, and developed the necessary new products to sustain the firm's ongoing operations is referred to as:

- A. operating cash flow.
- B. net operating working capital.
- C. free cash flow.
- D. None of the above.

104. Investment in operating capital is:

- A. the change in assets plus the change in current liabilities.
- B. the change in gross fixed assets plus depreciation.
- C. the change in gross fixed assets plus the change in free cash flow.
- D. None of the above.

105. A firm had EBIT of \$1,000, paid taxes of \$225, expensed depreciation at \$13, and its gross fixed assets increased by \$25. What was the firm's operating cash flow?

- A. \$763
- B. \$737
- C. \$813
- D. \$788

106. Which of the following is an example of a capital structure?

- A. 15 percent current assets and 85 percent fixed assets
- B. 10 percent current liabilities and 90 percent long-term debt
- C. 20 percent debt and 80 percent equity
- D. None of the above

107. Lemmon Inc. lists fixed assets of \$100 on its balance sheet. The firm's fixed assets have recently been appraised at \$140. The firm's balance sheet also lists current assets at \$15. Current assets were appraised at \$16.50. Current liabilities book and market values stand at \$12 and the firm's long-term debt is \$40. Calculate the market value of the firm's stockholders' equity.

- A. \$156.50
- B. \$112.50
- C. \$104.50
- D. \$144.50

108. A firm has operating income of \$1,000, depreciation expense of \$185, and its investment in operating capital is \$400. The firm is 100 percent equity financed and has a 35 percent tax rate. What is the firm's operating cash flow?

- A. \$725
- B. \$795
- C. \$835
- D. \$965

109. All of the following are reasons that one should be cautious in interpreting financial statements EXCEPT:

- A. Firms can take steps to over- or understate earnings at various times.
- B. It is difficult to compare two firms that use different depreciation methods.
- C. Financial managers have quite a bit of latitude in using accounting rules to manage their reported earnings.
- D. All of these are reasons to be cautious in interpreting financial statements.

110. Which of the following statements is correct?

- A. The bottom line on the statement of cash flows equals the change in the retained earnings on the balance sheet.
- B. The reason the statement of cash flows is important is because cash is what pays the firm's obligations, not accounting profit.
- C. If a firm has accounting profit, its cash account will always increase.
- D. All of these statements are correct.

111. ABC Inc. has \$100 in cash on its balance sheet at the end of 2009. During 2010, the firm issued \$450 in common stock, reduced its notes payable by \$40, purchased fixed assets in the amount of \$750, and had cash flows from operating activities of \$315. How much cash did ABC Inc. have on its balance sheet at the end of 2010?
- A. \$75
  - B. \$140
  - C. \$225
  - D. -\$25
112. LLV Inc. originally forecasted the following financial data for next year: sales = \$1,000, cost of goods sold = \$675, and interest expense = \$90. The firm believes that COGS will always be 67.5 percent of sales. Due to increased global demand, the firm is now projecting that sales will be 20 percent higher than the original forecast. What is the *additional* net income (as compared to the original forecast) the firm can expect assuming a 35 percent tax rate?
- A. \$59.45
  - B. \$195.00
  - C. \$42.25
  - D. \$74.00



113. LLV Inc. originally forecasted the following financial data for next year: sales = \$1,000, cost of goods sold = \$710, and interest expense = \$95. The firm believes that COGS will always be 71 percent of sales. Due to pressure from shareholders, the firm wants to achieve a net income of \$150. Assuming the interest expense will remain the same, how large must sales be to achieve this goal? Assume a 35 percent tax rate.

- A. \$1,403.82
- B. \$1,3009.18
- C. \$1,123.34
- D. \$1,296.51

114. A firm has sales of \$690, EBIT of \$300, depreciation of \$40, and fixed assets increased by \$265. If the firm's tax rate is 40 percent and there were no increases in net operating working capital, what is the firm's free cash flow?

- A. \$15
- B. \$75
- C. -\$45
- D. -\$55

115. GW Inc. had \$800 million in retained earnings at the beginning of the year. During the year, the firm paid \$0.75 per share dividend and generated \$1.92 earnings per share. The firm has 100 million shares outstanding. At the end of year, what was the level of retained earnings for GW?

- A. \$725 million
- B. \$917 million
- C. \$882 million
- D. \$807 million

## Essay Questions

116. **Statement of Cash Flows** Use the following balance sheet and income statement to construct a statement of cash flows for Betty's Bakery Corp.

Betty's Bakery Corp.					
Balance Sheet as of December 31, 2012 and 2013					
(in millions of dollars)					
	2012	2013		2012	2013
<b>Assets</b>			<b>Liabilities &amp; Equity</b>		
Current Assets			Current liabilities		
Cash and marketable			Accrued wages and taxes	\$ 5	\$ 4
Securities	\$12	\$ 5	Accounts payable	18	16
Accounts receivable	21	15	Notes payable	<u>35</u>	<u>30</u>
Inventory	<u>25</u>	<u>30</u>			
Total	\$ 58	\$ 50	Total	\$58	\$50
Fixed assets:			Long-term debt:	\$40	\$45
Gross plant and			Stockholders' equity:		
Equipment	\$ 60	\$ 80	Preferred stock (1m shares)	\$1	\$ 1
Less: Depreciation	<u>10</u>	<u>15</u>	Common stock and		
Net plant and	\$ 50	\$ 65	paid in surplus	4	4
Other long-term			(4m shares)		
assets	<u>20</u>	<u>25</u>	Retained earnings	<u>25</u>	<u>40</u>
Total	\$ 70	\$ 90	Total	\$ 30	\$ 45
Total Assets	<u>\$128</u>	<u>\$140</u>	Total liabilities & equity	<u>\$128</u>	<u>\$140</u>

Betty's Bakery Corp.		
Income Statement for Years Ending December 2012 and 2013		
(in millions of dollars)		
	<u>2012</u>	<u>2013</u>
Net Sales	\$ 33	\$ 40.5
Less: Cost of goods sold	<u>8</u>	<u>11</u>
Gross profits	\$ 25	\$ 29.5
Less: Depreciation	<u>2</u>	<u>2</u>
Earnings before interest and taxes (EBIT)	\$ 23	\$ 27.5
Less: Interest	<u>1</u>	<u>1.5</u>
Earnings before taxes (EBT)	\$ 22	\$ 26
Less: Taxes	<u>9</u>	<u>10</u>
Net income	<u>\$ 13</u>	<u>\$ 16</u>
Less: Preferred stock dividends	<u>\$ 1</u>	<u>\$ 1</u>
Net income available to common stockholders	\$ 12	\$ 15
Less: Common stock dividends	<u>\$ 1</u>	<u>\$ 2</u>
Addition to retained earnings	\$ 11	\$ 13
Per (common) share data:		
Earnings per share (EPS)	\$6.75	\$4.00
Dividends per share (DPS)	\$0.25	\$0.50
Book value per share (BV)	\$22.00	\$23.75
Market value per share (MV)	\$24.00	\$24.25

117. When might earnings management become an ethical consideration?

118. How do taxes influence how corporate managers and investors structure transactions and capitalize their companies?

119. How would you explain to a friend why market value of a firm is more important to an investor than book value of the firm?

120. What are free cash flows for a firm? What does it mean when a firm's free cash flow is negative?

121. What are the costs and benefits of holding liquid securities on a firm's balance sheet?

## Chapter 02 Reviewing Financial Statements **Answer Key**

### Multiple Choice Questions

1. Which financial statement reports a firm's assets, liabilities, and equity at a particular point in time?

- A.** Balance sheet
- B. Income statement
- C. Statement of retained earnings
- D. Statement of cash flows

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

2. Which financial statement shows the total revenues that a firm earns and the total expenses the firm incurs to generate those revenues over a specific period of time—generally one year?

- A. Balance sheet
- B.** Income statement
- C. Statement of retained earnings
- D. Statement of cash flows

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

3. Which financial statement reports the amounts of cash that the firm generated and distributed during a particular time period?
- A. Balance sheet
  - B. Income statement
  - C. Statement of retained Earnings
  - D.** Statement of cash Flows

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Cash Flows*

4. Which financial statement reconciles net income earned during a given period and any cash dividends paid within that period using the change in retained earnings between the beginning and end of the period?
- A. Balance sheet
  - B. Income statement
  - C.** Statement of retained earnings
  - D. Statement of cash flows

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Retained Earnings*

5. On which of the four major financial statements would you find the common stock and paid-in surplus?

- A. Balance sheet
- B. Income statement
- C. Statement of cash flows
- D. Statement of retained earnings

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

6. On which of the four major financial statements would you find the increase in inventory?

- A. Balance sheet
- B. Income statement
- C. Statement of cash flows
- D. Statement of retained earnings

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Cash Flows*



7. On which of the four major financial statements would you find net plant and equipment?

- A. Balance sheet
- B. Income statement
- C. Statement of cash flows
- D. Statement of retained earnings

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

8. Financial statements of publicly traded firms can be found in a number of places. Which of the following is NOT an option for finding publicly traded firms' financial statements?

- A. Facebook
- B. A firm's website
- C. Securities and Exchange Commission's (SEC) website
- D. Websites such as finance.yahoo.com

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Remember*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Financial Statements*

9. For which of the following would one expect the book value of the asset to differ widely from its market value?

- A. Cash
- B. Accounts receivable
- C. Inventory
- D. Fixed assets

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

*Topic: Book Value versus Market Value*

10. Common stockholders' equity divided by number of shares of common stock outstanding is the formula for calculating

- A. Earnings per share (EPS).
- B. Dividends per share (DPS).
- C. Book value per share (BVPS).
- D. Market value per share (MVPS).

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

*Topic: Liabilities and Stockholders' Equity*

11. When a firm alters its capital structure to include more or less debt (and, in turn, less or more equity), it impacts which of the following?
- A. The residual cash flows available for stock holders
  - B. The number of shares of stock outstanding
  - C. The earnings per share (EPS)
  - D.** All of the choices

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Debt versus Equity Financing*

12. This is the amount of additional taxes a firm must pay out for every additional dollar of taxable income it earns.
- A. Average tax rate
  - B.** Marginal tax rate
  - C. Progressive tax system
  - D. Earnings before tax

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

13. An equity-financed firm will:
- A. pay more in income taxes than a debt-financed firm.
  - B. pay less in income taxes than a debt-financed firm.
  - C. pay the same in income taxes as a debt-finance firm.
  - D. not pay any income taxes.

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

14. Deferred taxes occur when a company postpones taxes on profits pertaining to:
- A. tax years they are under an audit by the Internal Revenue Service.
  - B. funds they have not collected because they use the accrual method of accounting.
  - C. a loss they intend to carry back or carry forward on their income tax returns.
  - D. a particular period as they end up postponing part of their tax liability on this year's profits to future years.

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

15. Net operating profit after taxes (NOPAT) is defined as which of the following?

- A. Net profit a firm earns before taxes, but after any financing costs
- B. Net profit a firm earns after taxes, and after any financing costs
- C. Net profit a firm earns after taxes, but before any financing costs
- D. Net profit a firm earns before taxes, and before any financing cost

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Differentiate between accounting income and cash flows.*

*Topic: Free Cash Flow*

16. This is cash flow available for payments to stockholders and debt holders of a firm after the firm has made investments in assets necessary to sustain the ongoing operations of the firm.

- A. Net income available to common stockholders
- B. Cash flow from operations
- C. Net cash flow
- D. Free cash flow

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

17. Which of the following activities result in an increase in a firm's cash?

- A.** Decrease fixed assets
- B. Decrease accounts payable
- C. Pay dividends
- D. Repurchase of common stock

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Sources and Uses of Cash*

18. These are cash inflows and outflows associated with buying and selling of fixed or other long-term assets.

- A. Cash flows from operations
- B.** Cash flows from investing activities
- C. Cash flows from financing activities
- D. Net change in cash and cash equivalents

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Sources and Uses of Cash*

19. If a company reports a large amount of net income on its income statement during a year, the firm will have:
- A. positive cash flow.
  - B. negative cash flow.
  - C. zero cash flow.
  - D. Any of these scenarios are possible.

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Sources and Uses of Cash*

20. Free cash flow is defined as:
- A. cash flows available for payments to stockholders of a firm after the firm has made payments to all others will claims against it.
  - B. cash flows available for payments to stockholders and debt holders of a firm after the firm has made payments necessary to vendors.
  - C. cash flows available for payments to stockholders and debt holders of a firm after the firm has made investments in assets necessary to sustain the ongoing operations of the firm.
  - D. cash flows available for payments to stockholders and debt holders of a firm that would be tax-free to the recipients.

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

21. The Sarbanes-Oxley Act requires public companies to ensure which of the following individuals have considerable experience applying generally accepted accounting principles (GAAP) for financial statements.
- A. External auditors
  - B. Internal auditors
  - C. Chief financial officers
  - D. Corporate boards' audit committees

*AACSB: Reflective Thinking*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Observe cautions that should be taken when examining financial statements.*

*Topic: GAAP Accounting Principles*



22. **Balance Sheet** You are evaluating the balance sheet for Campus Corporation. From the balance sheet you find the following balances: cash and marketable securities = \$400,000, accounts receivable = \$200,000, inventory = \$100,000, accrued wages and taxes = \$10,000, accounts payable = \$300,000, and notes payable = \$600,000. What is Campus's net working capital?

- A. -\$210,000
- B. \$700,000
- C. \$910,000
- D. \$1,610,000

**net working capital** = current assets - current liabilities.

Cypress's current assets =

Cash and marketable securities	=	\$400,000
Accounts receivable	=	\$200,000
Inventory	=	<u>\$100,000</u>
<b>Total current assets</b>		<b>\$700,000</b>

and current liabilities =

Accrued wages and taxes	=	\$ 10,000
Accounts payable	=	\$300,000
Notes payable	=	<u>\$600,000</u>
<b>Total current liabilities</b>		<b>\$910,000</b>

So the firm's net working capital was -\$210,000 (\$700,000 - \$910,000).

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

23. **Balance Sheet** Jack and Jill Corporation's year-end 2013 balance sheet lists current assets of \$250,000, fixed assets of \$800,000, current liabilities of \$195,000, and long-term debt of \$300,000. What is Jack and Jill's total stockholders' equity?

- A. \$495,000
- B. \$555,000**
- C. \$1,050,000
- D. There is not enough information to calculate total stockholder's equity.

Recall the balance sheet identity in Equation 2-1: Assets = Liabilities + Equity.

Rearranging this equation: Equity = Assets - Liabilities. Thus, the balance sheets would appear as follows:

	Book value		Book value
<b>Assets</b>		<b>Liabilities and Equity</b>	
Current assets	\$ 250,000	Current liabilities	\$ 195,000
Fixed assets	<u>800,000</u>	Long-term debt	300,000
		Stockholders' equity	<u>555,000</u>
<b>Total</b>	<b>\$1,050,000</b>	<b>Total</b>	<b>\$1,050,000</b>

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

24. **Income Statement** Bullseye, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$900,000, interest expense = \$85,000, and net income = \$570,000. What are the 2013 taxes reported on the income statement?

- A. \$245,000
- B. \$330,000
- C. \$815,000
- D. There is not enough information to calculate 2013 taxes.

Using the setup of an Income Statement in Table 2.2:

EBIT	\$900,000
Interest expense	<u>-85,000</u>
EBT	815,000
Taxes	<u>-245,000</u>
Net income	\$570,000

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

25. **Income Statement** Consider a firm with an EBIT of \$500,000. The firm finances its assets with \$2,000,000 debt (costing 6 percent) and 50,000 shares of stock selling at \$20.00 per share. To reduce the firm's risk associated with this financial leverage, the firm is considering reducing its debt by \$1,000,000 by selling an additional 50,000 shares of stock. The firm is in the 40 percent tax bracket. The change in capital structure will have no effect on the operations of the firm. Thus, EBIT will remain \$500,000. What is the change in the firm's EPS from this change in capital structure?
- A. Decrease EPS by \$1.68
  - B. Decrease EPS by \$1.92**
  - C. Decrease EPS by \$3.20
  - D. Increase EPS by \$0.72

Using the setup of an Income Statement in Example 2.2:

	Before Capital Structure Change	After Capital Structure Change
Change		
EBIT	\$500,000	\$500,000
-Interest (\$2,000,000 × 0.06)	<u>120,000</u>	
-Interest (\$1,000,000 × 0.06)		<u>60,000</u>
EBT	\$380,000	\$440,000
-Taxes (40%)	<u>152,000</u>	<u>176,000</u>
Net Income	\$228,000	\$264,000
Divide # of Shares	50,000	100,000
EPS	\$4.56	\$2.64

The change in capital structure would dilute the stockholders' EPS by \$1.92

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

26. **Income Statement** Consider a firm with an EBIT of \$5,000,000. The firm finances its assets with \$20,000,000 debt (costing 5 percent) and 70,000 shares of stock selling at \$50.00 per share. To reduce the firm's risk associated with this financial leverage, the firm is considering reducing its debt by \$5,000,000 by selling an additional 100,000 shares of stock. The firm is in the 40 percent tax bracket. The change in capital structure will have no effect on the operations of the firm. Thus, EBIT will remain \$5,000,000. What is the change in the firm's EPS from this change in capital structure?
- A. Decrease EPS by \$9.29
  - B. Decrease EPS by \$18.70
  - C. Decrease EPS by \$19.29
  - D. Increase EPS by \$2.14

Using the setup of an Income Statement in Example 2.2:

Change	Before Capital Structure Change	After Capital Structure Change
EBIT	\$5,000,000	\$5,000,000
-Interest (\$20,000,000 × 0.05)	<u>1,000,000</u>	
-Interest (\$15,000,000 × 0.05)		<u>750,000</u>
EBT	\$4,000,000	\$4,250,000
-Taxes (40%)	<u>1,600,000</u>	<u>1,700,000</u>
Net Income	\$2,400,000	\$2,550,000
Divide # of Shares	70,000	170,000
EPS	\$34.29	\$15.00

The change in capital structure would dilute the stockholders' EPS by \$19.29

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

27. **Income Statement** Barnyard, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$500,000, interest expense = \$45,000, and taxes = \$152,000. Barnyard's has no preferred stock outstanding and 200,000 shares of common stock outstanding. What are its 2013 earnings per share?

- A. \$2.50
- B. \$2.275
- C. \$1.74
- D. \$1.515

Using the setup of an Income Statement in Table 2.2:

EBIT	\$500,000
Interest expense	<u>-45,000</u>
EBT	455,000
Taxes	<u>-152,000</u>
Net income	\$303,000

Thus,

$$\text{Earnings per share (EPS)} = \frac{\$303,000}{200,000} = \$1.515 \text{ per share}$$

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

28. **Corporate Taxes** Eccentricity, Inc. had \$300,000 in 2013 taxable income. Using the tax schedule from Table 2-3, what are the company's 2013 income taxes, average tax rate, and marginal tax rate, respectively?

Taxable income	Pay this amount on Base income	Plus this percentage on anything over the base
\$0 - \$50,000	\$ 0	15%
\$50,001 - \$75,000	\$ 7,500	25%
\$75,001 - \$100,000	\$13,500	34%
\$100,001 - \$335,000	\$22,250	39%
\$335,000 - \$10,000,000	\$113,900	34%

- A. \$22,250, 7.42%, 39%  
 B. \$78,000, 26.00%, 39%  
 C. \$100,250, 33.42%, 39%  
 D. \$139,250, 46.42%, 39%

From Table 2.3, the \$300,000 of taxable income puts Eccentricity in the 39 percent marginal tax bracket. Thus,

$$\text{Tax liability} = \text{Tax on base amount} + \text{Tax rate (amount over base)} = \$22,250 + .39 (\$300,000 - \$100,000) = \$100,250$$

Note that the base amount is the maximum dollar value listed in the previous tax bracket. The *average* tax rate for Eccentricity Inc. comes to:

$$\begin{aligned} \text{Average tax rate} &= \frac{\$100,250}{\$300,000} \\ &= 33.4167\% \end{aligned}$$

If Eccentricity earned \$1 more of taxable income, it would pay 39 cents (its tax rate of 39 percent) more in taxes. Thus, the firm's marginal tax rate is 39 percent.

*AACSB: Analytic*  
*Blooms: Apply*  
*Difficulty: 1 Easy*

29. **Corporate Taxes** Swimmy, Inc. had \$400,000 in 2013 taxable income. Using the tax schedule from Table 2-3, what are the company's 2013 income taxes, average tax rate, and marginal tax rate, respectively?

Taxable income	Pay this amount on Base income	Plus this percentage on anything over the base
\$0 - \$50,000	\$ 0	15%
\$50,001 - \$75,000	\$ 7,500	25%
\$75,001 - \$100,000	\$13,500	34%
\$100,001 - \$335,000	\$22,250	39%
\$335,000 - \$10,000,000	\$113,900	34%

- A. \$22,100, 5.53%, 34%  
 B. \$113,900, 28.48%, 34%  
C. \$136,000, 34.00%, 34%  
 D. \$136,000, 39.00%, 34%

From Table 2.3, the \$400,000 of taxable income puts Swimmy in the 34 percent marginal tax bracket. Thus, Tax liability = Tax on base amount + Tax rate (amount over base): = \$113,900 + 0.34 (\$400,000 - \$335,000) = \$136,000

Note that the base amount is the maximum dollar value listed in the previous tax bracket. The *average* tax rate for Swimmy Inc. comes to:

$$\begin{aligned} \text{Average tax rate} &= \frac{\$136,000}{\$400,000} \\ &= 34\% \end{aligned}$$

If Swimmy earned \$1 more of taxable income, it would pay 34 cents (its tax rate of 34 percent) more in taxes. Thus, the firm's marginal tax rate is 34 percent.



*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

30. **Corporate Taxes** Scuba, Inc. is concerned about the taxes paid by the company in 2013. In addition to \$5 million of taxable income, the firm received \$80,000 of interest on state-issued bonds and \$500,000 of dividends on common stock it owns in Boating Adventures, Inc. What are Scuba's tax liability, average tax rate, and marginal tax rate, respectively?
- A. \$1,637,100, 31.79%, 34%
  - B. \$1,751,000, 34.00%, 34%**
  - C. \$1,870,000, 34.00%, 34%
  - D. \$1,983,900, 36.07%, 34%

In this case, interest on the state-issued bonds is not taxable and should not be included in taxable income. Further, the first 70 percent of the dividends received from Boating Adventures is not taxable. Thus, only 30 percent of the dividends received are taxed, so: Taxable income = \$5,000,000 + (0.3)\$500,000 = \$5,150,000

Now Scuba's tax liability will be: Tax liability = \$113,900 + 0.34 (\$5,150,000 - \$335,000) = \$1,751,000

The \$500,000 of dividend income increased Scuba's tax liability by \$51,000 (= (0.3) × \$500,000 × (0.34)). Scuba's resulting average tax rate is now: Average tax rate = \$1,751,000/\$5,150,000 = 34.00%.

Finally, if Scuba earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

31. **Statement of Cash Flows** Paige's Properties Inc. reported 2013 net income of \$5 million and depreciation of \$1,500,000. The top part Paige's Properties, Inc.'s 2012 and 2013 balance sheets is listed as follows (in millions of dollars).

Current assets	2012	2013	Current liabilities	2012	2013
Cash and marketable securities	\$ 10	\$ 20	Accrued wages and taxes	\$ 5	\$ 11
Accounts receivable	20	34	Accounts payable	25	29
Inventory	<u>10</u>	<u>11</u>	Notes payable	<u>10</u>	<u>25</u>
Total	\$ 40	\$ 65	Total	\$ 40	\$ 65

What is the 2013 net cash flow from operating activities for Paige's Properties, Inc.?

- A. -\$13,500,000
- B. \$1,500,000**
- C. \$5,000,000
- D. \$6,500,000

**Cash Flows from Operating Activities**

Net income	\$ 5,000,000
Additions (sources of cash):	
Depreciation	1,500,000
Increase accrued wages and taxes	6,000,000
Increase in accounts payable	4,000,000
Subtractions (uses of cash):	
Increase in accounts receivable	-14,000,000
Increase in inventory	<u>- 1,000,000</u>
Net cash flow from operating activities:	\$ 1,500,000

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Differentiate between accounting income and cash flows.*

*Topic: Corporate Income Taxes*

32. **Statement of Cash Flows** In 2013, Upper Crust had cash flows from investing activities of (\$250,000) and cash flows from financing activities of (\$150,000). The balance in the firm's cash account was \$90,000 at the beginning of 2013 and \$105,000 at the end of the year. What was Upper Crust's cash flow from operations for 2013?

- A. \$15,000
- B. \$105,000
- C. \$400,000
- D. \$415,000

Net change in cash and marketable securities = \$105,000 - \$90,000 = \$15,000

<b>Cash Flows from Operating Activities</b>	<b>= \$415,000</b>
<b>Cash Flows from Investing Activities</b>	<b>= - 250,000</b>
<b>Cash Flows from Financing Activities</b>	<b>= - <u>150,000</u></b>
<b>Net Change in Cash and Marketable Securities</b>	<b>= \$ 15,000</b>

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Differentiate between accounting income and cash flows.*

*Topic: Statement of Cash Flows*

33. **Statement of Cash Flows** In 2013, Lower Case Productions had cash flows from investing activities of +\$50,000 and cash flows from financing activities of +\$100,000. The balance in the firm's cash account was \$80,000 at the beginning of 2013 and \$65,000 at the end of the year. What was Lower Case's cash flow from operations for 2013?

- A. -\$15,000
- B. -\$150,000
- C. -\$165,000
- D. -\$65,000

Net change in cash and marketable securities = \$65,000 - \$80,000 = -\$15,000

<b>Cash Flows from Operating Activities</b>	<b>= -\$165,000</b>
<b>Cash Flows from Investing Activities</b>	<b>= +50,000</b>
<b>Cash Flows from Financing Activities</b>	<b>= +<u>100,000</u></b>
<b>Net Change in Cash and Marketable Securities</b>	<b>= -<u>15,000</u></b>

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Differentiate between accounting income and cash flows.*

*Topic: Statement of Cash Flows*

34. **Free Cash Flow** You are considering an investment in Crew Cut, Inc. and want to evaluate the firm's free cash flow. From the income statement, you see that Crew Cut earned an EBIT of \$23 million, paid taxes of \$4 million, and its depreciation expense was \$8 million. Crew Cut's gross fixed assets increased by \$10 million from 2007 to 2008. The firm's current assets increased by \$6 million and spontaneous current liabilities increased by \$4 million. What is Crew Cut's operating cash flow, investment in operating capital and free cash flow for 2013, respectively in millions?

- A. \$23, \$10, \$13
- B. \$23, \$12, \$11
- C. \$27, \$10, \$17
- D. \$27, \$12, \$15

**Crew Cut's operating cash flow was:**

$$\begin{aligned} \text{OCF} &= \text{EBIT} - \text{Taxes} + \text{Depreciation} \\ &= (\$23\text{m.} - \$4\text{m.} + \$8\text{m.}) = \$27\text{m} \end{aligned}$$

**Investment in operating capital for 2008 was:**

$$\begin{aligned} \text{IOC} &= \Delta\text{Gross fixed assets} + \Delta\text{Net operating working capital} \\ &= \$10\text{m.} + (\$6\text{m.} - \$4\text{m.}) = \$12\text{m.} \end{aligned}$$

**Accordingly, Crew Cut's free cash flow for 2008 was:**

$$\begin{aligned} \text{FCF} &= \text{Operating cash flow} - \text{Investment in operating capital} \\ &= \$27\text{m.} - \$12\text{m.} = \$15\text{m.} \end{aligned}$$

In other words, in 2013 Crew Cut had cash flows of \$15 million available to pay its stockholders and debt holders.

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

35. **Free Cash Flow** You are considering an investment in Cruise, Inc. and want to evaluate the firm's free cash flow. From the income statement, you see that Cruise earned an EBIT of \$202 million, paid taxes of \$51 million, and its depreciation expense was \$75 million. Cruise's gross fixed assets increased by \$70 million from 2012 to 2013. The firm's current assets decreased by \$10 million and spontaneous current liabilities increased by \$6 million. What is Cruise's operating cash flow, investment in operating capital, and free cash flow for 2013, respectively, in millions?
- A. \$202, \$70, \$130  
 B. \$226, \$70, \$156  
C. \$226, \$54, \$172  
 D. \$226, \$74, \$152

**Cruise's operating cash flow was:**

$$\begin{aligned} \text{OCF} &= \text{EBIT} - \text{Taxes} + \text{Depreciation} \\ &= (\$202\text{m.} - \$51\text{m.} + \$75\text{m.}) = \$226\text{m} \end{aligned}$$

**Investment in operating capital for 2008 was:**

$$\begin{aligned} \text{IOC} &= \Delta\text{Gross fixed assets} + \Delta\text{Net operating working capital} \\ &= \$70\text{m.} + (-\$10\text{m.} - \$6\text{m.}) = \$54\text{m.} \end{aligned}$$

**Accordingly, Cruise's free cash flow for 2008 was:**

$$\begin{aligned} \text{FCF} &= \text{Operating cash flow} - \text{Investment in operating capital} \\ &= \$226\text{m.} - \$54\text{m.} = \$172\text{m.} \end{aligned}$$

In other words, in 2013 Cruise had cash flows of \$172 million available to pay its stockholders and debt holders.

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

36. **Free Cash Flow** Catering Corp. reported free cash flows for 2013 of \$8 million and investment in operating capital of \$2 million. Catering listed \$1 million in depreciation expense and \$2 million in taxes on its 2008 income statement. What was Catering's 2013 EBIT?

- A. \$7 million
- B. \$10 million
- C. \$11 million
- D. \$13 million

Catering's free cash flow for 2013 was:

$$\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital}$$

$$\$8\text{m} = \text{Operating cash flow} - \$2\text{m}$$

$$\text{So, operating cash flow} = \$8\text{m} + \$2\text{m} = \$10\text{m}$$

Catering's operating cash flow was:

$$\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation}$$

$$\$10\text{m} = (\text{EBIT} - \$2\text{m} + \$1\text{m})$$

$$\text{So, EBIT} = \$10\text{m} + \$2\text{m} + \$1\text{m} = \$11\text{m}$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

37. **Statement of Retained Earnings** TriCycle, Corp. began the year 2013 with \$25 million in retained earnings. The firm earned net income of \$7 million in 2008 and paid \$1 million to its preferred stockholders and \$3 million to its common stockholders. What is the year-end 2013 balance in retained earnings for TriCycle?

- A. \$25 million
- B. \$28 million**
- C. \$32 million
- D. \$36 million

The statement of retained earnings for 2013 is as follows:

Balance of Retained Earnings, December 31, 2012	\$25m
Plus: Net Income for 2013	7m
Less: Cash Dividends Paid	
Preferred Stock	\$1m
Common Stock	<u>3m</u>
Total Cash Dividends Paid	<u>4m</u>
Balance of Retained Earnings, December 31, 2013	\$28m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Retained Earnings*



38. **Statement of Retained Earnings** Night Scapes, Corp. began the year 2013 with \$10 million in retained earnings. The firm suffered a net loss of \$2 million in 2013 and yet paid \$2 million to its preferred stockholders and \$1 million to its common stockholders. What is the year-end 2013 balance in retained earnings for Night Scapes?

- A. \$5 million
- B. \$8 million
- C. \$9 million
- D. \$15 million

The statement of retained earnings for 2013 is as follows:

Balance of Retained Earnings, December 31, 2012	\$10m
Less: Net Loss for 2013	2m
Less: Cash Dividends Paid	
Preferred Stock	\$2m
Common Stock	<u>1m</u>
Total Cash Dividends Paid	<u>3m</u>
Balance of Retained Earnings, December 31, 2013	\$ 5m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Retained Earnings*

39. **Statement of Retained Earnings** Use the following information to find dividends paid to common stockholders during 2013.

Balance of Retained Earnings, December 31, 2012		\$52m
Plus: Net Income for 2013		21m
Less: Cash Dividends Paid		
Preferred Stock	\$7m	
Common Stock	<u>10m</u>	
Total Cash Dividends Paid		<u>17m</u>
Balance of Retained Earnings, December 31, 2013		\$56m

- A. \$3 million
- B. \$4 million
- C. \$10 million
- D. \$17 million

Total Cash Dividends Paid = \$56m - \$21m - \$52m = -\$17m. Thus, common stock dividends paid = \$17m - \$7m = \$10m.

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Retained Earnings*

40. **Balance Sheet** Harvey's Hamburger Stand has total assets of \$3 million of which \$1 million are current assets. Cash makes up 20 percent of the current assets and accounts receivable makes up another 5 percent of current assets. Harvey's gross plant and equipment has a book value of \$1.5 million and other long-term assets have a book value of \$1 million. Using this information, what is the balance of inventory and the balance of depreciation on Harvey's Hamburger Stand's balance sheet?

- A. \$250,000, \$500,000
- B. \$250,000, \$1 million
- C. \$750,000, \$500,000
- D. \$750,000, \$1 million

<b>Current assets:</b>			
<b>Cash and marketable</b>			
<b>Securities (.2 x \$1)</b>		<b>\$ 0.20</b>	
<b>Accounts receivable (.05 x \$1)</b>		<b>0.05</b>	
<b>Inventory</b>	<b>step 1.</b>	<u><b>.75</b></u>	<b>(\$ 1- \$0.2 - \$0.05)</b>
<b>Total</b>		<b>\$ 1.0</b>	
 <b>Fixed assets:</b>			
<b>Gross plant and</b>			
<b>equipment</b>			
		<b>\$ 1.5</b>	
<b>Less: Depreciation</b>	<b>step 4.</b>	<u><b>0.5</b></u>	<b>(\$1.5- \$1.0)</b>
<b>Net plant and</b>			
<b>equipment</b>	<b>step 3.</b>	<b>\$1.0</b>	<b>(\$2.0 - \$1.0)</b>
<b>Other long-term</b>			
<b>assets</b>		<u><b>1.0</b></u>	
<b>Total</b>	<b>step 2.</b>	<b>\$ 2.0</b>	<b>(\$3.0 - \$1.0)</b>
 <b>Total assets</b>		 <u><b>\$ 3.0</b></u>	

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

41. **Balance Sheet** School Books, Inc. has total assets of \$18 million of which \$6 million are current assets. Cash makes up 10 percent of the current assets and accounts receivable makes up another 40 percent of current assets. School Books' gross plant and equipment has an original cost of \$13 million and other long-term assets have a cost value of \$2 million. Using this information, what are the balance of inventory and the balance of depreciation on School Books' balance sheet?

- A. \$3 million, \$2 million
- B. \$3 million, \$3 million**
- C. \$2.4 million, \$2 million
- D. \$2.4 million, \$3 million

**Current assets:**

<b>Cash and marketable</b>			
Securities (.10 x \$6)		\$ 0.6	
Accounts receivable (.40 x \$6)		2.4	
Inventory	step 1.	<u>3.0</u>	(\$ 6- \$0.6 - \$3.0)
<b>Total</b>		<b>\$ 6.0</b>	

**Fixed assets:**

<b>Gross plant and</b>			
<b>equipment</b>			
		\$ 13.0	
Less: Depreciation	step 4.	<u>3.0</u>	(\$13- \$10)
<b>Net plant and</b>			
<b>equipment</b>	step 3.	\$10.0	(\$12 - \$2)
<b>Other long-term</b>			
<b>assets</b>			
		<u>2.0</u>	
<b>Total</b>	step 2.	<b>\$12.0</b>	(\$18 - \$6)

**Total assets** \$ 18.0

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

42. **Balance Sheet** Ted's Taco Shop has total assets of \$5 million. Forty percent of these assets are financed with debt of which \$400,000 is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$1 million. Using this information what is the balance for long-term debt and retained earnings on Ted's Taco Shop's balance sheet?

- A. \$400,000, \$1 million
- B. \$1.6 million, \$2 million**
- C. \$1.6 million, \$3 million
- D. \$2 million, \$3 million

<b>Total current liabilities</b>		<b>\$ .4</b>	
<b>Long-term debt:</b>	step 3.	<u>\$1.6</u>	(= \$2 - \$.4)
<b>Total debt:</b>	step 2.	\$2	(= .4 x \$5)
<b>Stockholders' equity:</b>			
Preferred stock		\$ 0	
Common stock and paid-in surplus (2 million shares)		1	
<b>Retained earnings</b>	step 5.	<u>2</u>	(= \$3 - \$1)
<b>Total</b>	step 4	\$ 3	(= \$5 - \$2)
<b>Total liabilities and equity</b>	step 1.	<u>\$5</u>	(= Total Assets)

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

43. **Balance Sheet** Hair Etc. has total assets of \$15 million. Twenty percent of these assets are financed with debt of which \$1 million is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$8 million. Using this information what is the balance for long-term debt and retained earnings on Hair Etc.'s balance sheet?

- A. \$1 million, \$8 million
- B. \$2 million, \$4 million**
- C. \$2 million, \$8 million
- D. \$3 million, \$4 million

<b>Total current liabilities</b>		<b>\$ 1</b>
<b>Long-term debt:</b>	step 3.	<u>\$ 2</u> (= \$3 - \$1)
<b>Total debt:</b>	step 2.	<b>\$ 3</b> (= .2 x \$15 m)
<b>Stockholders' equity:</b>		
Preferred stock		\$ 0
Common stock and paid-in surplus (2 million shares)		8
Retained earnings	step 5.	<u>4</u> (= \$12 - \$8)
<b>Total</b>	step 4	<b>\$12</b> (= \$15 - \$3)
<b>Total liabilities and equity</b>	step 1.	<b><u>\$15</u></b> (= Total Assets)

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

44. **Market Value versus Book Value** Acme Bricks balance sheet lists net fixed assets as \$40 million. The fixed assets could currently be sold for \$50 million. Acme's current balance sheet shows current liabilities of \$15 million and net working capital of \$12 million. If all the current accounts were liquidated today, the company would receive \$77 million cash after paying \$15 million in liabilities. What is the book value of Acme's assets today? What is the market value of these assets?
- A. \$12 million, \$77 million  
 B. \$27 million, \$92 million  
 C. \$40 million, \$50 million  
D. \$67 million, \$142 million

	Book value		Market value
<b>Assets</b>			
Current assets step 1.	\$27m.	step 3.	\$92m.
Fixed assets	<u>40m.</u>		<u>50m.</u>
Total step 2.	\$67m.		\$142m.

Step 1: Net working capital (book value) = Current assets (book value) - Current liabilities (book value)

$$= \$12m = \text{Current assets (book value)} - \$15m \Rightarrow \text{Current assets (book value)} = \$12m + \$15m = \$27m$$

$$\text{Step 2: Total assets (book value)} = \$27m + \$40m = \$67m$$

Step 3: Net working capital (market value) = Current assets (market value) - Current liabilities (market value)

$$= \$77m = \text{Current assets (market value)} - \$15m \Rightarrow \text{Current assets (market value)} = \$77m + \$15m = \$92m$$

$$\text{Step 4: Total assets (market value)} = \$92m + \$50m = \$142m$$

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

45. **Market Value versus Book Value** Glo's Glasses balance sheet lists net fixed assets as \$20 million. The fixed assets could currently be sold for \$25 million. Glo's current balance sheet shows current liabilities of \$7 million and net working capital of \$3 million. If all the current accounts were liquidated today, the company would receive \$9 million cash after paying \$7 million in liabilities. What is the book value of Glo's assets today? What is the market value of these assets?
- A. \$10 million, \$16 million
  - B. \$10 million, \$35 million
  - C. \$30 million, \$35 million
  - D. \$30 million, \$41 million

	Book value		Market value
<b>Assets</b>			
Current assets step 1.	\$10m.	step 3.	\$16m.
Fixed assets	<u>20m.</u>		<u>25m.</u>
Total step 2.	\$30m.		\$41m.

Step 1: Net working capital (book value) = Current assets (book value) - Current liabilities (book value)

$$= \$3m = \text{Current assets (book value)} - \$7m \Rightarrow \text{Current assets (book value)} = \$3m + \$7m = \$10m$$

$$\text{Step 2: Total assets (book value)} = \$10m + \$20m = \$30m$$

Step 3: Net working capital (market value) = Current assets (market value) - Current liabilities (market value)

$$= \$9m = \text{Current assets (market value)} - \$7m \Rightarrow \text{Current assets (market value)} = \$9m + \$7m = \$16m$$

$$\text{Step 4: Total assets (market value)} = \$16m + \$25m = \$41m$$

AACSB: Analytic

Blooms: Apply



*Difficulty: 2 Medium*

*Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

*Topic: Market Value versus Book Value*

46. **Market Value versus Book Value** Rupert's Rims balance sheet lists net fixed assets as \$15 million. The fixed assets could currently be sold for \$17 million. Rupert's current balance sheet shows current liabilities of \$5 million and net working capital of \$3 million. If all the current accounts were liquidated today, the company would receive \$6 million cash after paying \$5 million in liabilities. What is the book value of Rupert's assets today? What is the market value of these assets?
- A. \$8 million, \$23 million  
 B. \$23 million, \$25 million  
C. \$23 million, \$28 million  
 D. \$31 million, \$28 million

	Book value		Market value
<b>Assets</b>			
Current assets step 1.	\$ 8m.	step 3.	\$11m.
Fixed assets	<u>15m.</u>		<u>17m.</u>
Total step 2.	\$23m.		\$28m.

Step 1: Net working capital (book value) = Current assets (book value) - Current liabilities (book value)

$$= \$3m = \text{Current assets (book value)} - \$5m \Rightarrow \text{Current assets (book value)} = \$3m + \$5m = \$8m$$

Step 2: Total assets (book value) = \$8m + \$15m = \$23m

Step 3: Net working capital (market value) = Current assets (market value) - Current liabilities (market value)

$$= \$6m = \text{Current assets (market value)} - \$5m \Rightarrow \text{Current assets (market value)} = \$6m + \$5m = \$11m$$

Step 4: Total assets (market value) = \$11m + \$17m = \$28m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

47. **Debt versus Equity Financing** You are considering a stock investment in one of two firms (AllDebt, Inc. and AllEquity, Inc.), both of which operate in the same industry and have identical operating income of \$600,000. AllDebt, Inc. finances its \$1.2 million in assets with \$1 million in debt (on which it pays 10 percent interest annually) and \$0.2 million in equity. AllEquity, Inc. finances its \$1.2 million in assets with no debt and \$1.2 million in equity. Both firms pay a tax rate of 30 percent on their taxable income. What are the asset funders' (the debt holders and stockholders) resulting return on assets for the two firms?
- A. 29.17%, and 35%, respectively
  - B. 37.5%, and 35%, respectively**
  - C. 37.5%, and 37.5%, respectively
  - D. 50%, and 50%, respectively

	<u>AllDebt</u>	<u>AllEquity</u>
Operating income	\$ .6m.	\$.6m.
Less: Interest (\$1m. x .1)	<u>.1m.</u>	<u>0m.</u>
Taxable income	.5m.	.6m.
Less: Taxes (30%)	<u>.15m.</u>	<u>.18m.</u>
Net income	<u><u>\$.35m.</u></u>	<u><u>\$.42m.</u></u>
Income available for asset funders (= operating income - taxes)	\$.45m.	\$.42m.

Return on assets funders' investment  $\$0.45m/\$1.2m = 37.50\%$

$\$0.42m/\$1.2m = 35.00\%$

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Medium

Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.

Topic: Debt versus Equity Financing

48. **Debt versus Equity Financing** You are considering a stock investment in one of two firms (AllDebt, Inc. and AllEquity, Inc.), both of which operate in the same industry and have identical operating income of \$3 million. AllDebt, Inc. finances its \$6 million in assets with \$5 million in debt (on which it pays 5 percent interest annually) and \$1 million in equity. AllEquity, Inc. finances its \$6 million in assets with no debt and \$6 million in equity. Both firms pay a tax rate of 40 percent on their taxable income. What are the asset funders' (the debt holders and stockholders) resulting return on assets for the two firms?
- A. 27.5%, and 30%, respectively
- B.** 31.67%, and 30%, respectively
- C. 33%, and 30%, respectively
- D. 50%, and 50%, respectively

	<u>AllDebt</u>	<u>AllEquity</u>
Operating income	\$ 3m.	\$ 3m.
Less: Interest	(\$5m. × .05) <u>.25m.</u>	<u>0m.</u>
Taxable income	2.75m.	3m.
Less: Taxes (40%)	<u>1.1m.</u>	<u>1.2m.</u>
Net income	<u>\$1.65m.</u>	<u>\$1.8m.</u>
Income available for asset funders (= operating income - taxes)	\$ 1.9m.	\$1.8m.

Return on assets funders' investment  $\$1.9m/\$6m = 31.67\%$

$\$1.8m/\$6m = 30.00\%$

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Debt versus Equity Financing*

49. **Debt versus Equity Financing** You are considering a stock investment in one of two firms (AllDebt, Inc. and AllEquity, Inc.), both of which operate in the same industry and have identical operating income of \$400,000. AllDebt, Inc. finances its \$800,000 in assets with \$600,000 in debt (on which it pays 5 percent interest annually) and \$200,000 in equity. AllEquity, Inc. finances its \$800,000 in assets with no debt and \$800,000 in equity. Both firms pay a tax rate of 30 percent on their taxable income. What are the asset funders' (the debt holders and stockholders) resulting return on assets for the two firms?
- A. 32.375%, and 35.00%, respectively  
**B.** 36.125%, and 35.00%, respectively  
 C. 46.25%, and 50%, respectively  
 D. 50%, and 50%, respectively

	<u>AllDebt</u>	<u>AllEquity</u>
Operating income	\$ .4m.	\$ .4m.
Less: Interest	(\$.6m. × .05) <u>.03m.</u>	<u>0m.</u>
Taxable income	.37m.	.4m.
Less: Taxes (30%)	<u>.111m.</u>	<u>.12m.</u>
Net income	<u>\$.259m.</u>	<u>\$.28m.</u>
Income available for asset funders (= operating income - taxes)	\$.289m.	\$.28m.

Return on assets funders' investment  $\$0.289m/\$0.8m = 36.125\%$

$\$0.28m/\$0.8m = 35.00\%$

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Debt versus Equity Financing*

50. **Income Statement** You have been given the following information for Fina's Furniture Corp.:

Net sales = \$25,500,000;

Cost of goods sold = \$10,250,000;

Addition to retained earnings = \$305,000;

Dividends paid to preferred and common stockholders = \$500,000;

Interest expense = \$2,000,000.

The firm's tax rate is 30 percent. What is the depreciation expense for Fina's Furniture Corp.?

A. \$12,100,000

B. \$12,400,000

C. \$14,100,000

D. \$14,400,000

Net sales (all credit)		\$25,500,000
Less: Cost of goods sold		<u>10,250,000</u>
Gross profits	step 4.	\$15,250,000
Less: Depreciation	step 5.	<u>\$12,100,000</u>
Earnings before interest and taxes (EBIT)	step 3.	\$ 3,150,000
Less: Interest		<u>2,000,000</u>
Earnings before taxes (EBT)	step 2.	\$1,150,000
Less: Taxes		
Net income	step 1.	<u>\$ 805,000</u>
Less: Common and preferred stock dividends		<u>\$ 500,000</u>
Addition to retained earnings		\$ 305,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings =  
\$500,000 + \$305,000 = \$805,000

Step 2: EBT (1 - tax rate) = Net income => EBT = Net income/(1 - tax rate) = \$805,000/(1 - 0.3)  
= \$1,150,000

Step 3: EBIT - Interest = EBT => EBIT = EBT + Interest = \$1,150,000 + \$2,000,000 = \$3,150,000

Step 4: Gross profits = Net sales - Cost of goods sold = \$25,500,000 - 10,250,000 = \$15,250,000

Step 5: Gross profits - Depreciation = EBIT => Depreciation = Gross profits - EBIT =  
\$15,250,000 - \$3,150,000 = \$12,100,000

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

51. **Income Statement** You have been given the following information for Romeo's Rockers Corp.:

Net sales = \$5,200,000;

Cost of goods sold = \$2,100,000;

Addition to retained earnings = \$1,000,000;

Dividends paid to preferred and common stockholders = \$400,000;

Interest expense = \$200,000.

The firm's tax rate is 30 percent. What is the depreciation expense for Romeo's Rockers Corp.?

- A. \$900,000
- B. \$1,100,000
- C. \$1,500,000
- D. \$1,600,000

Net sales (all credit)		\$5,200,000
Less: Cost of goods sold		<u>2,100,000</u>
Gross profits	step 4.	\$3,100,000
Less: Depreciation	step 5.	<u>\$ 900,000</u>
Earnings before interest and taxes (EBIT)	step 3.	\$2,200,000
Less: Interest		<u>200,000</u>
Earnings before taxes (EBT)	step 2.	\$2,000,000
Less: Taxes		
Net income	step 1.	<u><u>\$1,400,000</u></u>
Less: Common and preferred stock dividends		<u>\$ 400,000</u>
Addition to retained earnings		\$1,000,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings = \$400,000 + \$1,000,000 = \$1,400,000

Step 2:  $EBT(1 - \text{tax rate}) = \text{Net income} \Rightarrow EBT = \text{Net income} / (1 - \text{tax rate}) = \$1,400,000 / (1 - 0.3) = \$2,000,000$

Step 3:  $EBIT - \text{Interest} = EBT \Rightarrow EBIT = EBT + \text{Interest} = \$2,000,000 + \$200,000 = \$2,200,000$

Step 4:  $\text{Gross profits} = \text{Net sales} - \text{Cost of goods sold} = \$5,200,000 - 2,100,000 = \$3,100,000$

Step 5:  $\text{Gross profits} - \text{Depreciation} = EBIT \Rightarrow \text{Depreciation} = \text{Gross profits} - EBIT = \$3,100,000 - \$2,200,000 = \$900,000$



*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

52. **Income Statement** You have been given the following information for Nicole's Neckties Corp.:

Net sales = \$2,500,000;

Cost of goods sold = \$1,300,000;

Addition to retained earnings = \$30,000;

Dividends paid to preferred and common stockholders = \$300,000;

Interest expense = \$50,000.

The firm's tax rate is 40 percent. What is the depreciation expense for Nicole's Neckties Corp.?

A. \$550,000

**B.** \$600,000

C. \$650,000

D. \$820,000

Net sales (all credit)		\$ 2,500,000
Less: Cost of goods sold		<u>1,300,000</u>
Gross profits	step 4.	\$ 1,200,000
Less: Depreciation	step 5.	<u>\$ 600,000</u>
Earnings before interest and taxes (EBIT)	step 3.	\$ 600,000
Less: Interest		<u>50,000</u>
Earnings before taxes (EBT)	step 2.	\$ 550,000
Less: Taxes		
Net income	step 1.	<u>\$ 330,000</u>
Less: Common and preferred stock dividends		<u>\$ 300,000</u>
Addition to retained earnings		\$ 30,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings =  
\$300,000 + \$30,000 = \$330,000

Step 2:  $EBT(1 - \text{tax rate}) = \text{Net income} \Rightarrow EBT = \text{Net income} / (1 - \text{tax rate}) = \$330,000 / (1 - 0.4)$   
= \$550,000

Step 3:  $EBIT - \text{Interest} = EBT \Rightarrow EBIT = EBT + \text{Interest} = \$550,000 + \$50,000 = \$600,000$

Step 4:  $\text{Gross profits} = \text{Net sales} - \text{Cost of goods sold} = \$2,500,000 - 1,300,000 = \$1,200,000$

Step 5:  $\text{Gross profits} - \text{Depreciation} = EBIT \Rightarrow \text{Depreciation} = \text{Gross profits} - EBIT = \$1,200,000$   
- \$600,000 = \$600,000

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

53. **Income Statement** You have been given the following information for Sherry's Sandwich Corp.:

Net sales = \$300,000;

Gross profit = \$100,000;

Addition to retained earnings = \$30,000;

Dividends paid to preferred and common stockholders = \$8,500;

Depreciation expense = \$25,000.

The firm's tax rate is 30 percent. What are the cost of goods sold and the interest expense for Sherry's Sandwich Corp.?

- A. \$20,000, and \$200,000, respectively
- B. \$100,000, and \$20,000, respectively
- C. \$200,000, and \$20,000, respectively**
- D. \$200,000, and \$36,500, respectively

Net sales (all credit)		\$300,000
Less: Cost of goods sold	step 3.	<u>200,000</u>
Gross profits		\$100,000
Less: Depreciation		<u>\$ 25,000</u>
Earnings before interest and taxes (EBIT)	step 4.	\$ 75,000
Less: Interest	step 5.	<u>20,000</u>
Earnings before taxes (EBT)	step 2.	\$ 55,000
Less: Taxes		
Net income	step 1.	<u>\$ 38,500</u>
Less: Common and preferred stock dividends		<u>\$ 8,500</u>
Addition to retained earnings		\$30,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings = \$8,500 + \$30,000 = \$38,500

Step 2: EBT (1 - tax rate) = Net income => EBT = Net income/(1 - tax rate) = \$38,500/(1 - 0.3) = \$55,000

Step 3: Gross profits = Net sales - Cost of goods sold => Net Sales - Gross Profit = Cost of Goods Sold \$300,000 - 100,000 = \$200,000

Step 4: Gross profits - Depreciation = EBIT = \$100,000 - \$25,000 = \$75,000

Step 5:  $EBIT - \text{Interest} = EBT \Rightarrow \text{Interest} = EBIT - EBT = \$75,000 - \$55,000 = \$20,000$

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

54. **Income Statement** You have been given the following information for Kaye's Krumpet Corp.:

Net sales = \$150,000;

Gross profit = \$100,000;

Addition to retained earnings = \$20,000;

Dividends paid to preferred and common stockholders = \$8,000;

Depreciation expense = \$50,000.

The firm's tax rate is 30 percent. What are the cost of goods sold and the interest expense for Kaye's Krumpet Corp.?

A. \$10,000, and \$50,000, respectively

**B.** \$50,000, and \$10,000, respectively

C. \$50,000, and \$22,000, respectively

D. \$62,000, and \$10,000, respectively

Net sales (all credit)		\$150,000
Less: Cost of goods sold	step 3.	<u>50,000</u>
Gross profits		\$100,000
Less: Depreciation		<u>\$50,000</u>
Earnings before interest and taxes (EBIT)	step 4.	\$ 50,000
Less: Interest	step 5.	<u>10,000</u>
Earnings before taxes (EBT)	step 2.	\$ 40,000
Less: Taxes		
Net income	step 1.	<u>\$ 28,000</u>
Less: Common and preferred stock dividends		<u>\$ 8,000</u>
Addition to retained earnings		\$20,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings =  
\$8,000 + \$20,000 = \$28,000

Step 2: EBT (1 - tax rate) = Net income => EBT = Net income / (1 - tax rate) = \$28,000 / (1 - 0.3) =  
\$40,000

Step 3: Gross profits = Net sales - Cost of goods sold => Net Sales - Gross Profit = Cost of  
Goods Sold \$150,000 - 50,000 = \$50,000

Step 4: Gross profits - Depreciation = EBIT = \$100,000 - \$50,000 = \$50,000

Step 5:  $\text{EBIT} - \text{Interest} = \text{EBT} \Rightarrow \text{Interest} = \text{EBIT} - \text{EBT} = \$50,000 - \$40,000 = \$10,000$

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

55. **Income Statement** You have been given the following information for Ross's Rocket Corp.:

Net sales = \$1,000,000;

Gross profit = \$400,000;

Addition to retained earnings = \$60,000;

Dividends paid to preferred and common stockholders = \$90,000;

Depreciation expense = \$50,000.

The firm's tax rate is 40 percent. What are the cost of goods sold and the interest expense for Ross's Rocket Corp.?

- A. \$100,000, and \$600,000, respectively
- B. \$600,000, and \$100,000, respectively**
- C. \$600,000, and \$200,000, respectively
- D. \$700,000, and \$100,000, respectively

Net sales (all credit)		\$1,000,000
Less: Cost of goods sold	step 3.	<u>600,000</u>
Gross profits		\$ 400,000
Less: Depreciation		<u>\$ 50,000</u>
Earnings before interest and taxes (EBIT)	step 4.	\$ 350,000
Less: Interest	step 5 .	<u>100,000</u>
Earnings before taxes (EBT)	step 2.	\$ 250,000
Less: Taxes		
Net income	step 1.	<u><u>\$ 150,000</u></u>
Less: Common and preferred stock dividends		<u>\$ 90,000</u>
Addition to retained earnings		\$ 60,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings = \$90,000 + \$60,000 = \$150,000

Step 2:  $EBT(1 - \text{tax rate}) = \text{Net income} \Rightarrow EBT = \text{Net income} / (1 - \text{tax rate}) = \$150,000 / (1 - 0.4) = \$250,000$

Step 3: Gross profits = Net sales - Cost of goods sold  $\Rightarrow \text{Net Sales} - \text{Gross Profit} = \text{Cost of Goods Sold}$   
 $\$1,000,000 - 400,000 = \$600,000$

Step 4: Gross profits - Depreciation = EBIT = \$400,000 - \$50,000 = \$350,000



Step 5:  $\text{EBIT} - \text{Interest} = \text{EBT} \Rightarrow \text{Interest} = \text{EBIT} - \text{EBT} = \$350,000 - \$250,000 = \$100,000$

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

56. **Corporate Taxes** The Carolina Corporation had a 2013 taxable income of \$3,000,000 from operations after all operating costs but before

- (1) interest charges of \$500,000,
- (2) dividends received of \$75,000,
- (3) dividends paid of \$1,000,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is Carolina's income tax liability?

What are Carolina's average and marginal tax rates on taxable income from operations?

- A. \$857,650, 28.59%, 34%, respectively
- B. \$875,500, 29.18%, 34%, respectively
- C. \$875,500, 34.00%, 34%, respectively
- D. \$1,020,000, 34.00%, 34%, respectively

The first 70 percent of the dividends received by Carolina Corp. is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

$$\text{Taxable income} = \$3,000,000 - \$500,000 + (0.3)\$75,000 = \$2,522,500$$

Now Carolina's Corp.'s tax liability will be:

$$\text{Tax liability} = \$113,900 + 0.34 (\$2,522,500 - \$335,000) = \$857,650$$

Carolina Corp.'s resulting average tax rate is now:

$$\text{Average tax rate} = \$857,650 / \$3,000,000 = 28.59\%$$

Finally, if Carolina Corp. earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

57. **Corporate Taxes** The Ohio Corporation had a 2013 taxable income of \$50,000,000 from operations after all operating costs but before

- (1) interest charges of \$500,000,
- (2) dividends received of \$45,000,
- (3) dividends paid of \$10,000,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is Ohio's income tax liability?

What are Ohio's average and marginal tax rates on taxable income from operations?

- A. \$6,416,667, 12.83%, 35%, respectively
- B. \$13,829,725, 27.66%, 35%, respectively
- C.** \$17,329,725, 34.66%, 35%, respectively
- D. \$17,340,750, 34.68%, 35%, respectively

The first 70 percent of the dividends received by Ohio Corp. is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

$$\text{Taxable income} = \$50,000,000 - \$500,000 + (0.3)\$45,000 = \$49,513,500$$

Now Ohio's Corp.'s tax liability will be:

$$\text{Tax liability} = \$6,416,667 + 0.35 (\$49,513,500 - \$18,333,333) = \$17,329,725$$

Ohio Corp.'s resulting average tax rate is now:

$$\text{Average tax rate} = \$17,329,725.45 / \$50,000,000 = 34.66\%$$

Finally, if Ohio Corp. earned \$1 more of taxable income, it would still pay 35 cents (based upon its marginal tax rate of 35 percent) more in taxes.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

58. **Corporate Taxes** The Sasnak Corporation had a 2013 taxable income of \$4,450,000 from operations after all operating costs but before

- (1) interest charges of \$750,000,
- (2) dividends received of \$900,000,
- (3) dividends paid of \$500,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is Sasnak's income tax liability?

What are Sasnak's average and marginal tax rates on taxable income from operations?

- A. \$1,349,800, 30.33%, 34%, respectively
- B. \$1,349,800, 34.00%, 34%, respectively
- C. \$1,564,000, 34.00%, 34%, respectively
- D. \$1,564,000, 35.15%, 34%, respectively

The first 70 percent of the dividends received by Sasnak Corp. is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

$$\text{Taxable income} = \$4,450,000 - \$750,000 + (0.3)\$900,000 = \$3,970,000$$

Now Sasnak's Corp.'s tax liability will be:

$$\text{Tax liability} = \$113,900 + 0.34 (\$3,970,000 - \$335,000) = \$1,349,800$$

Sasnak Corp.'s resulting average tax rate is now:

$$\text{Average tax rate} = \$1,349,800 / \$4,450,000 = 30.33\%$$

Finally, if Sasnak Corp. earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

59. **Corporate Taxes** The AOK Corporation had a 2013 taxable income of \$2,200,000 from operations after all operating costs but before

- (1) interest charges of \$90,000,
- (2) dividends received of \$750,000,
- (3) dividends paid of \$80,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is AOK's income tax liability?

What are AOK's average and marginal tax rates on taxable income from operations?

- A. \$793,900, 34%, 34%, respectively
- B. \$793,900, 36.0864%, 34%, respectively**
- C. \$972,400, 34%, 34%, respectively
- D. \$972,400, 44.2%, 34%, respectively

The first 70 percent of the dividends received by AOK Corp. is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

$$\text{Taxable income} = \$2,200,000 - \$90,000 + (0.3)\$750,000 = \$2,335,000$$

Now AOK's Corp.'s tax liability will be:

$$\text{Tax liability} = \$113,900 + 0.34 (\$2,335,000 - \$335,000) = \$793,900$$

AOK Corp.'s resulting average tax rate is now:

$$\text{Average tax rate} = \$793,900 / \$2,200,000 = 36.0864\%$$

Finally, if AOK Corp. earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

60. **Corporate Taxes** Suppose that in addition to the \$5.5 million of taxable income from operations, Emily's Flowers, Inc. received \$500,000 of interest on state-issued bonds and \$300,000 of dividends on common stock it owns in Amy's Iris Bulbs, Inc. Using the tax schedule in Table 2.3 what is Emily's Flowers' income tax liability? What are Emily's Flowers' average and marginal tax rates on total taxable income?

- A. \$1,900,600, 34%, 34%, respectively
- B. \$1,972,000, 34%, 34%, respectively
- C. \$2,070,600, 34%, 34%, respectively
- D. \$2,142,000, 34%, 34%, respectively

Interest on the state-issued bonds is not taxable and should not be included in taxable income. Further, the first 70 percent of the dividends received from Amy's is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

$$\text{Taxable income} = \$5,500,000 + (0.3)\$300,000 = \$5,590,000$$

Now Emily's tax liability will be:

$$\text{Tax liability} = \$113,900 + 0.34 (\$5,590,000 - \$335,000) = \$1,900,600$$

Emily's resulting average tax rate is now:

$$\text{Average tax rate} = \$1,900,600 / \$5,590,000 = 34\%$$

Finally, if Emily earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

61. **Corporate Taxes** Suppose that in addition to the \$300,000 of taxable income from operations, Liam's Burgers, Inc. received \$25,000 of interest on state-issued bonds and \$50,000 of dividends on common stock it owns in Sodas, Inc.

Using the tax schedule in Table 2.3 what is Liam's income tax liability?

What are Liam's average and marginal tax rates on **total** taxable income?

A. \$106,100, 33.68%, 39%, respectively

B. \$122,850, 39.00%, 39%, respectively

C. \$129,500, 34.53%, 39%, respectively

D. \$139,250, 37.13%, 39%, respectively

Interest on the state-issued bonds is not taxable and should not be included in taxable income.

Further, the first 70 percent of the dividends received from Sodas is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

$$\text{Taxable income} = \$300,000 + (0.3)\$50,000 = \$315,000$$

Now Liam's tax liability will be:

$$\text{Tax liability} = \$22,250 + 0.39 (\$315,000 - \$100,000) = \$106,100$$

Liam's resulting average tax rate is now:

$$\text{Average tax rate} = \$106,100/\$315,000 = 33.68\%$$

Finally, if Liam earned \$1 more of taxable income, it would still pay 39 cents (based upon its marginal tax rate of 39 percent) more in taxes.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

62. **Statement of Cash Flows** Fina's Faucets, Inc. has net cash flows from operating activities for the last year of \$17 million. The income statement shows that net income is \$15 million and depreciation expense is \$6 million. During the year, the change in inventory on the balance sheet was an increase of \$4 million, change in accrued wages and taxes was an increase of \$1 million and change in accounts payable was an increase of \$1 million. At the beginning of the year the balance of accounts receivable was \$5 million. What was the end of year balance for accounts receivable?
- A. \$2 million
  - B. \$3 million
  - C. \$7 million
  - D. \$9 million

**Cash Flows from Operating Activities**

Net income	\$15m.
Additions (sources of cash):	
Depreciation	6m.
Increase accrued wages and taxes	1m.
Increase in accounts payable	1m.
Subtractions (uses of cash):	
Increase in accounts receivable	- 2m. (= \$17m. - \$15m. - \$6m. - \$1m. - \$1m. + \$4m.)
Increase in inventory	<u>- 4m.</u>
Net cash flow from operating activities:	\$17m.

Thus, end of year balance of accounts receivable = \$5m + \$2m = \$7m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Statement of Cash Flows*



63. **Statement of Cash Flows** Zoe's Dog Biscuits, Inc. has net cash flows from operating activities for the last year of \$226 million. The income statement shows that net income is \$150 million and depreciation expense is \$85 million. During the year, the change in inventory on the balance sheet was an increase of \$14 million, change in accrued wages and taxes was an increase of \$15 million and change in accounts payable was an increase of \$10 million. At the beginning of the year the balance of accounts receivable was \$45 million. What was the end of year balance for accounts receivable?
- A. \$20 million
  - B. \$25 million
  - C. \$45 million
  - D. \$65 million

**Cash Flows from Operating Activities**

Net income	\$ 150m.
Additions (sources of cash):	
Depreciation	85m.
Increase accrued wages and taxes	15m.
Increase in accounts payable	10m.
Subtractions (uses of cash):	
Increase in accounts receivable	- 20m. (= \$226m. - \$150m. - \$85m. - \$15m. - \$10m. + \$14m.)
Increase in inventory	<u>- 14m.</u>

Net cash flow from operating activities: \$ 226m.

Thus, end of year balance of accounts receivable = \$45m + \$20m = \$65m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Statement of Cash Flows*

64. **Statement of Cash Flows** Nickolas's Nut Farms, Inc. has net cash flows from operating activities for the last year of \$25 million. The income statement shows that net income is \$15 million and depreciation expense is \$6 million. During the year, the change in inventory on the balance sheet was a decrease of \$4 million, change in accrued wages and taxes was a decrease of \$1 million and change in accounts payable was a decrease of \$1 million. At the beginning of the year the balance of accounts receivable was \$5 million. What was the end of year balance for accounts receivable?
- A. \$2 million
  - B. \$3 million**
  - C. \$7 million
  - D. \$9 million

**Cash Flows from Operating Activities**

Net income	\$ 15m.
Additions (sources of cash):	
Depreciation	6m.
Decrease in accounts receivable	2m (= \$25m. - \$15m. - \$6m. - \$4m. + \$1m. - \$1m.)
Decrease in inventory	4m
Subtractions (uses of cash):	
Decrease accrued wages and taxes	- 1m.
Decrease in accounts payable	<u>- 1m.</u>

Net cash flow from operating activities: \$25m.

Thus, end of year balance of accounts receivable = \$5m - \$2m = \$3m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Statement of Cash Flows*

65. **Statement of Cash Flows** Crispy Corporation has net cash flow from financing activities for the last year of \$20 million. The company paid \$5 million in dividends last year. During the year, the change in notes payable on the balance sheet was an increase of \$2 million, and change in common and preferred stock was an increase of \$3 million. The end of year balance for long-term debt was \$45 million. What was their beginning of year balance for long-term debt?
- A. \$15 million
  - B. \$20 million
  - C. \$25 million
  - D. \$35 million

**Cash Flows from Financing Activities**

Additions:	
Increase in notes payable	\$ 2m.
Increase in long-term debt	20m. (=\$20m.+\$5m.-\$2m.-3m)
Increase in common and preferred stock	3m.
Subtractions:	
Pay stock dividends	<u>- 5m.</u>
Net cash flow from financing activities:	\$20m.

Thus, beginning of year balance for long-term debt = \$45 - \$20m = \$25m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Statement of Cash Flows*

66. **Statement of Cash Flows** Full Moon Productions Inc. has net cash flow from financing activities for the last year of \$105 million. The company paid \$15 million in dividends last year. During the year, the change in notes payable on the balance sheet was an increase of \$40 million, and change in common and preferred stock was an increase of \$50 million. The end of year balance for long-term debt was \$50 million. What was their beginning of year balance for long-term debt?

- A. \$5 million
- B. \$20 million**
- C. \$30 million
- D. \$35 million

**Cash Flows from Financing Activities**

Additions:

Increase in notes payable	\$ 40m.
Increase in long-term debt	30m. (=\$105m.+\$15m.-\$40m.-50m)
Increase in common and preferred stock	50m.

Subtractions:

Pay stock dividends	<u>- 15m.</u>
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Net cash flow from financing activities: \$105m.

Thus, beginning of year balance for long-term debt = \$50 - \$30m = \$20m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Statement of Cash Flows*

67. **Statement of Cash Flows** Café Creations Inc. has net cash flow from financing activities for the last year of \$25 million. The company paid \$15 million in dividends last year. During the year, the change in notes payable on the balance sheet was a decrease of \$40 million, and change in common and preferred stock was an increase of \$50 million. The end of year balance for long-term debt was \$40 million. What was their beginning of year balance for long-term debt?

- A. \$10 million
- B. \$20 million
- C. \$30 million
- D. \$40 million

**Cash Flows from Financing Activities**

Additions:	
Increase in long-term debt	30m. (=\$25m.+\$15m.+\$40m.-50m)
Increase in common and preferred stock	50m.
Subtractions:	
Decrease in notes payable	- 40m.
Pay stock dividends	<u>- 15m.</u>
Net cash flow from financing activities:	\$25m.

Thus, beginning of year balance for long-term debt = \$40 - \$30m = \$10m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Statement of Cash Flows*

68. **Free Cash Flow** The 2010 income statement for Pete's Pumpkins shows that depreciation expense is \$250 million, EBIT is \$500 million, EBT is \$320 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$1,600 million and net operating working capital was \$640 million. At the end of the year gross fixed assets was \$2,000 million. Pete's free cash flow for the year was \$630 million. What is their end of year balance for net operating working capital?

- A. \$24 million
- B. \$264 million**
- C. \$654 million
- D. \$1,064 million

Taxes =  $\$320\text{m} \times (0.3) = \$96\text{m} \Rightarrow$  Pete's operating cash flow was:  $\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation} = (\$500\text{m} - \$96\text{m} + \$250\text{m}) = \$654\text{m}$

Pete's free cash flow for 2010 was:  $\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital}$   
 $\$630\text{m} = \$654\text{m} - \text{Investment in operating capital} \Rightarrow \text{Investment in operating capital} = \$654\text{m} - \$630\text{m} = \$24\text{m}$

Accordingly, investment in operating capital for 2010 was:  $\text{IOC} = \Delta\text{Gross fixed assets} + \Delta\text{Net operating working capital}$   
 $\$24\text{m} = (\$2,000\text{m} - \$1,600\text{m}) + (\text{Ending net operating working capital} - \$640\text{m}) \Rightarrow \text{Ending net operating working capital} = \$24\text{m} - (\$2,000\text{m} - \$1,600\text{m}) + \$640\text{m} = \$264\text{m}$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

69. **Free Cash Flow** The 2013 income statement for Lou's Shoes shows that depreciation expense is \$2 million, EBIT is \$5 million, EBT is \$3 million, and the tax rate is 40 percent. At the beginning of the year, the balance of gross fixed assets was \$16 million and net operating working capital was \$6 million. At the end of the year gross fixed assets was \$20 million. Lou's free cash flow for the year was \$4 million. What is their end of year balance for net operating working capital?

- A. \$1.8 million
- B. \$3.8 million**
- C. \$5.8 million
- D. \$12.2 million

$$\text{Taxes} = \$3\text{m} \times (0.4) = \$1.2\text{m} \Rightarrow$$

Lou's operating cash flow was:

$$\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation}$$

$$= (\$5\text{m} - \$1.2\text{m} + \$2\text{m}) = \$5.8\text{m}$$

Lou's free cash flow for 2010 was:

$$\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital}$$

$$\$4\text{m} = \$5.8\text{m} - \text{Investment in operating capital}$$

$$\Rightarrow \text{Investment in operating capital} = \$5.8\text{m} - \$4\text{m} = \$1.8\text{m}$$

Accordingly, investment in operating capital for 2010 was:

$$\text{IOC} = \Delta\text{Gross fixed assets} + \Delta\text{Net operating working capital}$$

$$\$1.8\text{m} = (\$20\text{m} - \$16\text{m}) + (\text{Ending net operating working capital} - \$6\text{m})$$

$$\Rightarrow \text{Ending net operating working capital} = \$1.8\text{m} - (\$20\text{m} - \$16\text{m}) + \$6\text{m} = \$3.8\text{m}$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

70. **Free Cash Flow** The 2013 income statement for Paige's Purses shows that depreciation expense is \$10 million, EBIT is \$25 million, EBT is \$15 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$80 million and net operating working capital was \$30 million. At the end of the year gross fixed assets was \$100 million. Paige's free cash flow for the year was \$20 million. What is their end of year balance for net operating working capital?

- A. \$10.5 million
- B. \$14 million
- C. \$20.5 million
- D. \$30.5 million

$$\text{Taxes} = \$15\text{m} \times (0.3) = \$4.5\text{m} \Rightarrow$$

Paige's operating cash flow was:

$$\begin{aligned} \text{OCF} &= \text{EBIT} - \text{Taxes} + \text{Depreciation} \\ &= (\$25\text{m} - \$4.5\text{m} + \$10\text{m}) = \$30.5\text{m} \end{aligned}$$

Paige's free cash flow for 2010 was:

$$\begin{aligned} \text{FCF} &= \text{Operating cash flow} - \text{Investment in operating capital} \\ \$20\text{m} &= \$30.5\text{m} - \text{Investment in operating capital} \\ \Rightarrow \text{Investment in operating capital} &= \$30.5\text{m} - \$20\text{m} = \$10.5\text{m} \end{aligned}$$

Accordingly, investment in operating capital for 2010 was:

$$\begin{aligned} \text{IOC} &= \Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital} \\ \$10.5\text{m} &= (\$100\text{m} - \$80\text{m}) + (\text{Ending net operating working capital} - \$30\text{m}) \\ \Rightarrow \text{Ending net operating working capital} &= \$10.5\text{m} - (\$100\text{m} - \$80\text{m}) + 30\text{m} = \$20.5\text{m} \end{aligned}$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*



71. **Free Cash Flow** The 2013 income statement for Betty's Barstools shows that depreciation expense is \$100 million, EBIT is \$400 million, and taxes are \$120 million. At the end of the year, the balance of gross fixed assets was \$510 million. The increase in net operating working capital during the year was \$94 million. Betty's free cash flow for the year was \$625 million. What was the beginning of year balance for gross fixed assets?

- A. \$359 million
- B. \$380 million
- C. \$849 million
- D. \$1,094 million

Betty's operating cash flow was:

$$\begin{aligned} \text{OCF} &= \text{EBIT} - \text{Taxes} + \text{Depreciation} \\ &= (\$400\text{m} - \$120\text{m} + \$100\text{m}) = \$380\text{m} \end{aligned}$$

Betty's free cash flow for 2010 was:

$$\begin{aligned} \text{FCF} &= \text{Operating cash flow} - \text{Investment in operating capital} \\ \$625\text{m} &= \$380\text{m} - \text{Investment in operating capital} \\ \Rightarrow \text{Investment in operating capital} &= \$380\text{m} - \$625\text{m} = -\$245\text{m} \end{aligned}$$

Accordingly, investment in operating capital for 2010 was:

$$\begin{aligned} \text{IOC} &= \Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital} \\ -\$245\text{m} &= (\$510\text{m} - \text{Beginning of year gross fixed assets}) + \$94\text{m} \\ \Rightarrow \text{Beginning of year gross fixed assets} &= 510\text{m} - (-\$245\text{m}). + \$94\text{m} = \$849\text{m} \end{aligned}$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

72. **Free Cash Flow** The 2013 income statement for John's Gym shows that depreciation expense is \$20 million, EBIT is \$80 million, and taxes are \$24 million. At the end of the year, the balance of gross fixed assets was \$102 million. The increase in net operating working capital during the year was \$18 million. John's free cash flow for the year was \$41 million. What was the beginning of year balance for gross fixed assets?

- A. \$43 million
- B. \$85 million**
- C. \$84 million
- D. \$163 million

John's operating cash flow was:

$$\begin{aligned} \text{OCF} &= \text{EBIT} - \text{Taxes} + \text{Depreciation} \\ &= (\$80\text{m} - \$24\text{m} + \$20\text{m}) = \$76\text{m} \end{aligned}$$

John's free cash flow for 2010 was:

$$\begin{aligned} \text{FCF} &= \text{Operating cash flow} - \text{Investment in operating capital} \\ \$41\text{m} &= \$76\text{m} - \text{Investment in operating capital} \\ \Rightarrow \text{Investment in operating capital} &= \$76\text{m} - \$41\text{m} = \$35\text{m} \end{aligned}$$

Accordingly, investment in operating capital for 2010 was:

$$\begin{aligned} \text{IOC} &= \Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital} \\ \$35\text{m} &= (\$102\text{m} - \text{Beginning of year gross fixed assets}) + \$18\text{m} \\ \Rightarrow \text{Beginning of year gross fixed assets} &= 102\text{m} - \$35\text{m} + \$18\text{m} = \$85\text{m} \end{aligned}$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

73. **Statement of Retained Earnings** Bike and Hike, Inc. started the year with a balance of retained earnings of \$100 million and ended the year with retained earnings of \$128 million. The company paid dividends of \$9 million to the preferred stock holders and \$22 million to common stock holders. What was Bike and Hike's net income for the year?
- A. \$28 million
  - B. \$31 million
  - C. \$59 million
  - D. \$128 million

Statement of Retained Earnings as of December 31, 2013  
(in millions of dollars)

Balance of Retained Earnings, December 31, 2012	\$100m
Plus: Net Income for 2013 (= \$128m + 31m - 100m)	59m
Less: Cash Dividends Paid	
Preferred Stock	\$ 9m
Common Stock	<u>22m</u>
Total Cash Dividends Paid	<u>31m</u>
Balance of Retained Earnings, December 31, 2013	\$ 128m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Retained Earnings*

74. **Statement of Retained Earnings** Soccer Starz, Inc. started the year with a balance of retained earnings of \$25 million and ended the year with retained earnings of \$32 million. The company paid dividends of \$2 million to the preferred stock holders and \$6 million to common stock holders. What was Soccer Starz's net income for the year?

- A. \$7 million
- B. \$15 million**
- C. \$40 million
- D. \$49 million

Statement of Retained Earnings as of December 31, 2013  
(in millions of dollars)

Balance of Retained Earnings, December 31, 2012	\$ 25m
Plus: Net Income for 2013 (= \$32m + 8m - 25m)	15m
Less: Cash Dividends Paid	
Preferred Stock	\$ 2m
Common Stock	<u>6m</u>
Total Cash Dividends Paid	<u>8m</u>
Balance of Retained Earnings, December 31, 2013	\$ 32m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Retained Earnings*

75. **Statement of Retained Earnings** Jamaican Ice Cream Corp. started the year with a balance of retained earnings of \$100 million. The company reported net income for the year of \$45 million, paid dividends of \$2 million to the preferred stock holders and \$15 million to common stock holders. What is Jamaican Ice Cream's end of year balance in retained earnings?
- A. \$38 million
  - B. \$55 million
  - C. \$128 million
  - D. \$162 million

Statement of Retained Earnings as of December 31, 2013  
(in millions of dollars)

Balance of Retained Earnings, December 31, 2012	\$100m
Plus: Net Income for 2013	45m
Less: Cash Dividends Paid	
Preferred Stock	\$2m
Common Stock	<u>15m</u>
Total Cash Dividends Paid	<u>17m</u>
Balance of Retained Earnings, December 31, 2013	\$ 128m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Retained Earnings*

76. **Income Statement** The following is the 2013 income statement for Lamps, Inc.

Lamps, Inc	
Income Statement for Year Ending December 31, 2013	
(in millions of dollars)	
Net sales	\$ 100
Less: Cost of goods sold	<u>80</u>
Gross profits	20
Less: Depreciation	<u>5</u>
Earnings before interest and taxes (EBIT)	15
Less: Interest	<u>2</u>
Earnings before taxes (EBT)	13
Less: Taxes	<u>5</u>
Net Income	<u><u>\$ 8</u></u>

The CEO of Lamps wants the company to earn a net income of \$12 million in 2014. Cost of goods sold is expected to be 75 percent of net sales, depreciation expense is not expected to change, interest expense is expected to increase to \$4 million, and the firm's tax rate will be 40 percent. What is the net sales needed to produce net income of \$12 million?

- A. \$29 million
- B. \$112 million
- C. \$116 million
- D. \$124 million

Lamps, Inc	
Income Statement for Year Ending December 31, 2014	
(in millions of dollars)	
Net sales	Step 4 \$ 116
Less: Cost of goods sold	Step 5 <u>87</u>
Gross profits	Step 3 29
Less: Depreciation	<u>5</u>
Earnings before interest and taxes (EBIT)	Step 2 24
Less: Interest	<u>2</u>
Earnings before taxes (EBT)	Step 1 20
Less: Taxes	
Net Income	<u><u>\$ 12</u></u>

Step 1:  $EBT(1 - t) = \text{Net income} = \$12\text{m} = EBT(1 - 0.4) \Rightarrow EBT = \$12\text{m}/(1 - 0.4) = \$20\text{m}$

Step 2:  $EBIT = EBT + \text{Interest} = \$20\text{m} + \$4\text{m} = \$24\text{m}$

Step 3: Gross profits = EBIT + Depreciation = \$24m + \$5m = \$29m

Step 4: Net sales = Gross profits/(1 - Cost of goods sold percent) = \$29m/(1 - 0.75) = \$116m

Step 5: Cost of goods sold = Sales - Gross profits = \$116m - \$29 = \$87m

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 3 Hard*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

77. **Income Statement** You have been given the following information for Halle's Holiday Store Corp. for the year 2013:

Net sales = \$50,000,000;

Cost of goods sold = \$35,000,000;

Addition to retained earnings = \$2,000,000;

Dividends paid to preferred and common stockholders = \$3,000,000;

Interest expense = \$3,000,000.

The firm's tax rate is 30 percent.

In 2014, net sales are expected to increase by \$5 million,

cost of goods sold is expected to be 65 percent of net sales,

expensed depreciation is expected to be the same as in 2013,

interest expense is expected to be \$2,500,000,

the tax rate is expected to be 30 percent of EBT, and

dividends paid to preferred and common stockholders will not change.

What is the addition to retained earnings expected in 2014?

A. \$2,000,000

**B.** \$5,325,000

C. \$8,447,500

D. \$10,304,643

**Income Statement for Year Ending December 31, 2013**

(in millions of dollars)

Net sales (all credit)		\$50,000,000
Less: Cost of goods sold		<u>35,000,000</u>
Gross profits		15,000,000
Less: Depreciation (\$15,000,000 – \$10,142,857)		<u>4,857,143</u>
Earnings before interest and taxes (EBIT) \$7,142,857 + \$3,000,000		10,142,857
Less: Interest		<u>3,000,000</u>
Earnings before taxes (EBT) \$5,000,000/(1 – 0.30)		7,142,857
Less: Taxes		
Net Income		<u>\$ 5,000,000</u>
Less: Preferred and common stock dividends		\$ 3,000,000
Addition to retained earnings		\$ 2,000,000



*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 3 Hard*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

78. **Free Cash Flow** Martha's Moving Van 4U, Inc. had free cash flow during 2013 of \$1 million, EBIT of \$30 million, tax expense of \$8 million, and depreciation of \$4 million. Using this information, what was Martha's Accounts Payable ending balance in 2013?

- A. \$5 million
- B. \$15 million
- C. \$35 million
- D. \$45 million

Martha's operating cash flow for 2013 was:

$$\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation} = (\$30\text{m} - \$8\text{m} + \$4\text{m}) = \$26\text{m}$$

Martha's free cash flow was:

$$\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital}$$

$$\$1\text{m} = \$26\text{m} - \text{Investment in operating capital}$$

$$\text{So, Investment in operating capital} = \$26\text{m} - \$1\text{m} = \$25\text{m}$$

$$\text{IOC} = \Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital}$$

$$\$25\text{m} = (\$40\text{m} - \$30\text{m}) + \Delta \text{Net operating working capital}$$

$$\Rightarrow \Delta \text{Net operating working capital} = \$25\text{m} - (\$40\text{m} - \$30\text{m}) = \$15\text{m}$$

$$\Delta \text{Net operating working capital} = \$15\text{m} = \Delta \text{Current assets} - \Delta \text{Current liabilities}$$

$$\$15\text{m} = (\$130\text{m} - \$110\text{m}) - \Delta \text{Current liabilities}$$

$$\Rightarrow \Delta \text{Current liabilities} = (\$130\text{m} - \$110\text{m}) - \$15\text{m} = \$5\text{m}$$

$$\Rightarrow 2011 \text{ Current liabilities} = \$85\text{m} + \$5\text{m} = \$90\text{m}$$

and 2011 Current liabilities = Accrued wages and taxes + Accounts payable + Notes payable

$$\$90\text{m} = \$20\text{m} + \text{Accounts payable} + \$35\text{m}$$

$$\Rightarrow \text{Accounts payable} = \$90\text{m} - \$20\text{m} - \$35\text{m} = \$35\text{m}$$

Martha's Moving Van 4U, Inc.  
Balance Sheet as of December 31, 2012 and 2013  
(in millions of dollars)

	<b>2012</b>	<b>2013</b>		<b>2012</b>	<b>2013</b>
<b>Assets</b>			<b>Liabilities &amp; Equity</b>		
Current Assets			Current liabilities		
Cash and marketable securities	\$10	\$15	Accrued wages and taxes	\$10	\$20
Accounts receivable	20	25	Accounts payable	40	35
Inventory	80	90	Notes payable	<u>30</u>	<u>35</u>
Total	<u>\$110</u>	<u>\$130</u>	Total	\$85	\$95
Fixed assets:			Long-term debt:	\$20	\$25
Gross plant and equipment	\$ 30	\$ 40	Stockholders' equity:		
Less: Depreciation	<u>10</u>	<u>12</u>	Preferred stock (5m shares)	\$5	\$ 5
Net plant and equipment	\$ 20	\$ 28	Common stock and paid in surplus (20m shares)	10	10
Other long-term assets	<u>30</u>	<u>30</u>	Retained earnings	<u>40</u>	<u>58</u>
Total	<u>\$ 50</u>	<u>\$ 58</u>	Total	<u>\$ 55</u>	<u>\$ 73</u>
<b>Total Assets</b>	<u><b>\$160</b></u>	<u><b>\$188</b></u>	<b>Total liabilities &amp; equity</b>	<u><b>\$160</b></u>	<u><b>\$188</b></u>

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 3 Hard*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

79. You are evaluating the balance sheet for Goodman's Bees Corporation. From the balance sheet you find the following balances: cash and marketable securities = \$200,000, accounts receivable = \$1,100,000, inventory = \$2,000,000, accrued wages and taxes = \$500,000, accounts payable = \$600,000, and notes payable = \$100,000. Calculate Goodman's Bees' net working capital.

- A. \$2,000,000
- B. \$2,100,000**
- C. \$1,400,000
- D. \$1,900,000

$$(0.2m + 1.1m + 2.0m) - (0.5m + 0.6m + 0.1m) = 2.1m$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Net Working Capital*

80. Zoekler Mowing & Landscaping's year-end 2011 balance sheet lists current assets of \$350,000, fixed assets of \$325,000, current liabilities of \$145,000, and long-term debt of \$185,000. Calculate Zoekler's total stockholders' equity.

- A. \$115,000
- B. \$490,000
- C. \$345,000**
- D. \$500,000

$$[0.350 + 0.325] - [0.145 + 0.185] = 0.345m$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

81. Reed's Birdie Shot, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$550,000, interest expense = \$43,000, and net income = \$300,000. Calculate the 2013 taxes reported on the income statement.

- A. \$85,000
- B. \$107,000
- C. \$309,000
- D.** \$207,000

$$[0.550\text{m} - 0.043\text{m}] - 0.3\text{m} = 0.207\text{m}$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

82. Reed's Birdie Shot, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$555,000, interest expense = \$178,000, and taxes = \$148,000. Reed's has no preferred stock outstanding and 100,000 shares of common stock outstanding. Calculate the 2013 earnings per share.

- A. \$3.49
- B. \$2.29**
- C. \$3.14
- D. \$2.79

$$[0.555\text{m} - 0.178\text{m} - 0.148\text{m}]/0.1\text{m} = \$2.29$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

83. Oakdale Fashions Inc. had \$255,000 in 2013 taxable income. If the firm paid \$82,100 in taxes, what is the firm's average tax rate?

- A. 34.70%
- B. 32.20%**
- C. 29.90%
- D. 28.20%

$$82100/255000 = 32.20\%$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Taxes*

84. Hunt Taxidermy, Inc. is concerned about the taxes paid by the company in 2013. In addition to \$36.5 million of taxable income, the firm received \$1,250,000 of interest on state-issued bonds and \$400,000 of dividends on common stock it owns in Hunt Taxidermy, Inc. Calculate Hunt Taxidermy's taxable income.

A. \$40,250,000

B. \$38,150,000

C. \$36,900,000

D. \$36,620,000

$$\$36.5\text{m} + (0.3)0.4\text{m} = 36.620\text{m}$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Taxes*

85. Ramakrishnan Inc. reported 2013 net income of \$20 million and depreciation of \$1,500,000. The top part of Ramakrishnan, Inc.'s 2012 and 2013 balance sheets is listed as follows (in millions of dollars).

	2012	2013		2012	2013
<b>Assets</b>			<b>Liabilities &amp; Equity</b>		
Current Assets			Current liabilities		
Cash and marketable securities	\$15	\$20	Accrued wages and taxes	\$18	\$20
Accounts receivable	75	84	Accounts payable	45	50
Inventory	110	121	Notes payable	40	45
Total	\$200	\$225	Total	\$103	\$115

Calculate the 2013 net cash flow from operating activities for Ramakrishnan, Inc.

- A. \$12,500,000
- B. \$10,500,000
- C. \$8,500,000
- D. \$7,100,000

$$20 + [1.5 + 2 + 5] - [9 + 11] = \$8.5\text{m}$$

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Differentiate between accounting income and cash flows.*

*Topic: Statement of Cash Flows*



86. In 2014, Usher Sports Shop had cash flows from investing activities of (\$2,150,000) and cash flows from financing activities of (\$3,219,000). The balance in the firm's cash account was \$980,000 at the beginning of 2014 and \$1,025,000 at the end of the year. Calculate Usher Sports Shop's cash flow from operations for 2014.

- A. \$6,219,000
- B. \$5,414,000**
- C. \$4,970,000
- D. \$5,980,000

$$[1,025,000 - 980,000] = X - 2,150,000 - 3,219,000; \Rightarrow X = \text{Cash flow from operations} = \$5,414,000$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Differentiate between accounting income and cash flows.*

*Topic: Statement of Cash Flows*

87. You are considering an investment in Fields and Struthers, Inc. and want to evaluate the firm's free cash flow. From the income statement, you see that Fields and Struthers earned an EBIT of \$52 million, paid taxes of \$10 million, and its depreciation expense was \$5 million. Fields and Struthers' gross fixed assets increased by \$38 million from 2012 to 2013. The firm's current assets increased by \$20 million and spontaneous current liabilities increased by \$12 million. Calculate Fields and Struthers' operating cash flow (OCF), investment in operating capital (IOC), and free cash flow (FCF) for 2013.

- A. OCF = \$42,000,000; IOC = \$37,000,000; FCF = \$5,000,000
- B. OCF = \$47,000,000; IOC = \$37,000,000; FCF = \$10,000,000
- C. OCF = \$42,000,000; IOC = \$46,000,000; FCF = -\$4,000,000
- D.** OCF = \$47,000,000; IOC = \$46,000,000; FCF = \$1,000,000

$$\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation} = (\$52\text{m} - \$10\text{m} + \$5\text{m}) = \$47\text{m}$$

$$\begin{aligned} \text{Investment in operating capital: } & \Delta\text{Gross fixed assets} + \Delta\text{Net operating working capital} = \$38\text{m} \\ & + (\$20\text{m} - \$12\text{m}) = \$46\text{m} \end{aligned}$$

Accordingly, Fields and Struthers' free cash flow for 2008 was:  $\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital} = \$47\text{m} - \$46\text{m} = \$1\text{m}$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

88. Tater and Pepper Corp. reported free cash flows for 2013 of \$20 million and investment in operating capital of \$15 million. Tater and Pepper listed \$8 million in depreciation expense and \$12 million in taxes on its 2010 income statement. Calculate Tater and Pepper's 2013 EBIT.

- A. \$49,000,000
- B. \$42,000,000
- C. \$39,000,000
- D. \$47,000,000

FCF = Operating cash flow - Investment in operating capital;  $\$20\text{m} = X - \$15\text{m}$ ;  $X = \$35\text{m}$  OCF  
= EBIT - Taxes + Depreciation;  $\$35\text{m} = (\text{EBIT} - \$12\text{m} + \$8\text{m})$ ; EBIT = \$39m

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

89. Mr. Husker's Tuxedos, Corp. began the year 2013 with \$205 million in retained earnings. The firm earned net income of \$30 million in 2013 and paid \$5 million to its preferred stockholders and \$12 million to its common stockholders. What is the year-end 2013 balance in retained earnings for Mr. Husker's Tuxedos?

- A. \$193,000,000
- B. \$200,000,000
- C. \$213,000,000
- D. \$218,000,000

$$\$205\text{m} + \$30\text{m} - \$5\text{m} - \$12\text{m} = \$218\text{m}$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Statement of Retained Earnings*

90. Brenda's Bar and Grill has total assets of \$17 million of which \$5 million are current assets. Cash makes up 12 percent of the current assets and accounts receivable makes up another 40 percent of current assets. Brenda's gross plant and equipment has a cost value of \$12 million and other long-term assets have a cost value of \$1,000,000. Using this information, what are the balance of inventory and the balance of depreciation on Brenda's Bar and Grill's balance sheet?

- A. \$2.4 million; \$1 million
- B. \$3.4 million; \$2 million
- C. \$1.4 million; \$1 million
- D. \$0.4 million; \$3 million

Step 1: Find Inventory:  $CA = 5 = \text{Cash} + A/R + \text{Inv} = 0.12 \times 5 + 0.40 \times 5 + \text{Inv}$ ;  $\Rightarrow \text{Inv} = \$2.4\text{m}$ ;  
Step 2: Find Depreciation Expense:  $TA = CA + FA - \text{Accumulated Depreciation}$ ;  $17 = 5 + (12 + 1) - \text{Accumulated Depreciation}$ ;  $\Rightarrow \text{Accumulated Depreciation} = \$1\text{m}$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

91. Ed's Tobacco Shop has total assets of \$100 million. Fifty percent of these assets are financed with debt of which \$37 million is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$32 million. Using this information what is the balance for long-term debt and retained earnings on Ed's Tobacco Shop's balance sheet?
- A. \$18 million; \$27 million
  - B. \$12 million; \$12 million
  - C. \$14 million; \$29 million
  - D. \$13 million; \$18 million

Step 1: Find long-term debt:  $TL = CL + \text{long-term debt} = 0.5 \times 100 = 50 = 37 + \text{long-term debt}$ ;  
long-term debt = \$13 million;

Step 2: Find RE: Total equity =  $0.5 \times 100 = 50 = CS + P - I - S + RE = 32 + RE$ ; RE = \$18 million

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

92. Muffin's Masonry, Inc.'s balance sheet lists net fixed assets as \$16 million. The fixed assets could currently be sold for \$17 million. Muffin's current balance sheet shows current liabilities of \$5.5 million and net working capital of \$6.5 million. If all the current accounts were liquidated today, the company would receive \$10.25 million cash after paying \$5.5 million in liabilities. What is the book value of Muffin's Masonry's assets today? What is the market value of these assets?

- A. Book Value: \$28m; Market Value: \$32.75m
- B. Book Value: \$32m; Market Value: \$42.25m
- C. Book Value: \$32m; Market Value: \$32.75m
- D. Book Value: \$28m; Market Value: \$42.25m

Step 1: Find CA (book value):  $CA - CL = NWC$ ;  $\Rightarrow CA$  (book value)  $= 6.5m + 5.5m = \$12m$

Step 2: Find TA (book value):  $TA = Net\ FA + CA = \$16m + \$12m = \$28m$

Step 3: Find CA (market value):  $NWC$  (market)  $+ CL = \$10.25 + \$5.5m = \$15.75m$

Step 4: Find TA (market value):  $Net\ FA + CA = \$17m + \$15.75m = \$32.75m$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

*Topic: Market Value versus Book Value*

93. You have been given the following information for Corky's Bedding Corp.:

Net sales = \$15,250,000;

Cost of goods sold = \$5,750,000;

Addition to retained earnings = \$4,000,000;

Dividends paid to preferred and common stockholders = \$995,000;

Interest expense = \$1,150,000.

The firm's tax rate is 30 percent. Calculate the depreciation expense for Corky's Bedding Corp.

- A. \$1,210,000
- B. \$1,970,000
- C. \$1,520,000
- D. \$1,725,000

Step 1: NI = Dividends + Addition to RE = 4m + 0.995m = \$4.995m

Step 2: NI = EBT (1 - tax rate) => EBT = NI/(1 - tax rate) = \$4.995m/(1 - 0.30) = \$7.14m

Step 3: EBIT - Interest = EBT => EBIT = \$7.14m + \$1.15m = \$8.29m

Step 4: Gross profits = Net sales - COGS = \$15.25m - \$5.75m = \$9.5m

Step 5: Gross profits - Depreciation = EBIT => Depreciation = \$9.5m - \$8.29m = \$1.21m

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*



94. Dogs 4 U Corporation has net cash flow from financing activities for the last year of \$10 million. The company paid \$8 million in dividends last year. During the year, the change in notes payable on the balance was \$9 million, and change in common and preferred stock was \$0 million. The end of year balance for long-term debt was \$44 million. Calculate the beginning of year balance for long-term debt.

- A. \$37 million
- B. \$34 million
- C. \$33 million
- D. \$35 million**

$\$10 = \$9 - \$8 - \$0 + \text{Change in long-term debt}; \Rightarrow \text{change in long-term debt} = \$9 = \text{Ending Bal} - \text{Change in long-term debt}; \Rightarrow \text{Beg balance of long-term debt} = \$35$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Statement of Cash Flows*

95. The 2011 income statement for Duffy's Pest Control shows that depreciation expense is \$180 million, EBIT is \$420 million, EBT is \$240 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$1,500 million and net operating working capital was \$500 million. At the end of the year gross fixed assets was \$1,803 million. Duffy's free cash flow for the year was \$425 million. Calculate the end of year balance for net operating working capital.

- A. \$403 million
- B. \$300 million**
- C. \$203 million
- D. \$103 million

Step 1: Find OCF:  $OCF = \$420 - (\$240 \times 0.3) + \$180 = \$528$ ;

Step 2: Find investment in operating capital:  $FCF = \$425 = \$528 - \text{Investment in Op Cap}$ ;

Investment in operating capital = \$103

Step 3: Find ending level of net op. working cap:  $\$103 = (\$1803 - \$1500) + (\text{Ending net op. working capital} - \$500)$ ; Ending net op. working capital = \$300

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

96. The CEO of Tom and Sue's wants the company to earn a net income of \$3.25 million in 2014. Cost of goods sold is expected to be 60 percent of net sales, depreciation expense is \$2.9 million, interest expense is expected to increase to \$1.050 million, and the firm's tax rate will be 30 percent. Calculate the net sales needed to produce net income of \$3.25 million.
- A. \$26.02 million
  - B. \$29.36 million
  - C. \$21.48 million
  - D. \$28.25 million

Work backwards (up) the income statement:  $EBT = 3.25 / (1 - 0.3) = \$4.64m$ ;  $EBIT = \$4.64m + \$1.05m = \$5.69m$ ;  $Gross\ Profits = \$5.69m + \$2.9 = \$8.59m$ ;  $Net\ sales = \$8.59 / (1 - 0.6) = \$21.475m$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 3 Hard*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

97. All of the following would be a result of changing to the MACRS method of depreciation EXCEPT:
- A. higher depreciation expense.
  - B. lower taxes in the early years of a project's life.
  - C. lower taxable income in the early years of a project's life.
  - D. All of the above.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Depreciation*

98. Which of the following is NOT a source of cash?

- A. The firm reduces its inventory.
- B.** The firm pays off some of its long-term debt.
- C. The firm has positive net income.
- D. The firm sells more common stock.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Sources and Uses of Cash*

99. Which of the following is a use of cash?

- A. The firm takes its depreciation expense.
- B. The firm sells some of its fixed assets.
- C. The firm issues more long-term debt.
- D.** The firm decreases its accrued wages and taxes.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Analyze*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Sources and Uses of Cash*

100. Is it possible for a firm to have positive net income and yet to have cash flow problems?

- A. No, this is impossible since net income increases the firm's cash.
- B.** Yes, this can occur when a firm is growing very rapidly.
- C. Yes, this is possible if the firm window-dressed its financial statements.
- D. No, this is impossible since net income and cash are highly correlated.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-04 Differentiate between accounting income and cash flows.*

*Topic: Statement of Cash Flows*

101. All of the following are cash flows from operations EXCEPT:

- A.** increases or decreases in cash.
- B. net income.
- C. depreciation.
- D. increases or decreases in accounts payable.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Sources and Uses of Cash*

102. All of the following are cash flows from financing EXCEPT a(n):

- A. increase in accounts payable.
- B. issuing stock.
- C. stock repurchases.
- D. paying dividends.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Sources and Uses of Cash*

103. Cash flows available to pay the firm's stockholders and debt holders after the firm has made the necessary working capital investments, fixed asset investments, and developed the necessary new products to sustain the firm's ongoing operations is referred to as:

- A. operating cash flow.
- B. net operating working capital.
- C. free cash flow.
- D. None of the above.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

104. Investment in operating capital is:
- A. the change in assets plus the change in current liabilities.
  - B. the change in gross fixed assets plus depreciation.
  - C. the change in gross fixed assets plus the change in free cash flow.
  - D. None of the above.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

105. A firm had EBIT of \$1,000, paid taxes of \$225, expensed depreciation at \$13, and its gross fixed assets increased by \$25. What was the firm's operating cash flow?
- A. \$763
  - B. \$737
  - C. \$813
  - D. \$788

$$\$1,000 - \$225 + \$13 = \$788$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

106. Which of the following is an example of a capital structure?

- A. 15 percent current assets and 85 percent fixed assets
- B. 10 percent current liabilities and 90 percent long-term debt
- C. 20 percent debt and 80 percent equity
- D. None of the above

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*

107. Lemmon Inc. lists fixed assets of \$100 on its balance sheet. The firm's fixed assets have recently been appraised at \$140. The firm's balance sheet also lists current assets at \$15. Current assets were appraised at \$16.50. Current liabilities book and market values stand at \$12 and the firm's long-term debt is \$40. Calculate the market value of the firm's stockholders' equity.

- A. \$156.50
- B. \$112.50
- C. \$104.50
- D. \$144.50

$$[\$140 + \$16.50] - \$12 - \$40 = \$104.50$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*



108. A firm has operating income of \$1,000, depreciation expense of \$185, and its investment in operating capital is \$400. The firm is 100 percent equity financed and has a 35 percent tax rate. What is the firm's operating cash flow?

- A. \$725
- B. \$795
- C. \$835
- D. \$965

$$[\$1,000 - \$350 + \$185] = \$835$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

*Topic: Income Statement*

109. All of the following are reasons that one should be cautious in interpreting financial statements EXCEPT:

- A. Firms can take steps to over- or understate earnings at various times.
- B. It is difficult to compare two firms that use different depreciation methods.
- C. Financial managers have quite a bit of latitude in using accounting rules to manage their reported earnings.
- D. All of these are reasons to be cautious in interpreting financial statements.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Observe cautions that should be taken when examining financial statements.*

110. Which of the following statements is correct?
- A. The bottom line on the statement of cash flows equals the change in the retained earnings on the balance sheet.
  - B.** The reason the statement of cash flows is important is because cash is what pays the firm's obligations, not accounting profit.
  - C. If a firm has accounting profit, its cash account will always increase.
  - D. All of these statements are correct.

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-04 Differentiate between accounting income and cash flows.*

*Topic: Statement of Cash Flows*

111. ABC Inc. has \$100 in cash on its balance sheet at the end of 2009. During 2010, the firm issued \$450 in common stock, reduced its notes payable by \$40, purchased fixed assets in the amount of \$750, and had cash flows from operating activities of \$315. How much cash did ABC Inc. have on its balance sheet at the end of 2010?

- A.** \$75
- B. \$140
- C. \$225
- D. -\$25

$$100 + 315 - 40 - 750 + 450 = \$75$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Statement of Cash Flows*

112. LLV Inc. originally forecasted the following financial data for next year: sales = \$1,000, cost of goods sold = \$675, and interest expense = \$90. The firm believes that COGS will always be 67.5 percent of sales. Due to increased global demand, the firm is now projecting that sales will be 20 percent higher than the original forecast. What is the *additional* net income (as compared to the original forecast) the firm can expect assuming a 35 percent tax rate?
- A. \$59.45
  - B. \$195.00
  - C. \$42.25
  - D. \$74.00

Step 1: Original forecasted NI =  $[(1,000 - 675) - 90](1 - 0.35) = 152.75$ ;

Step 2: NI under increase in sales =  $[1,200 - (0.675 \times 1,200) - 90](1 - 0.35) = 195$ ;

Additional NI =  $195 - 152.75 = 42.25$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 3 Hard*

*Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

*Topic: Income Statement*

113. LLV Inc. originally forecasted the following financial data for next year: sales = \$1,000, cost of goods sold = \$710, and interest expense = \$95. The firm believes that COGS will always be 71 percent of sales. Due to pressure from shareholders, the firm wants to achieve a net income of \$150. Assuming the interest expense will remain the same, how large must sales be to achieve this goal? Assume a 35 percent tax rate.
- A. \$1,403.82  
B. \$1,3009.18  
C. \$1,123.34  
D. \$1,296.51

$$150/(1 - 0.35) = \text{EBT} = 230.77; \text{EBT} + \text{Int Exp} = \text{EBIT} = 325.77; \text{EBIT}/(1 - 0.71) = \text{Sales} = 1,123.34$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 3 Hard*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Income Statement*

114. A firm has sales of \$690, EBIT of \$300, depreciation of \$40, and fixed assets increased by \$265. If the firm's tax rate is 40 percent and there were no increases in net operating working capital, what is the firm's free cash flow?

- A. \$15
- B. \$75
- C. -\$45
- D. -\$55

$$[300 - (300 \times 0.4) + 40] - 265 = \text{FCF} = -\$45$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

115. GW Inc. had \$800 million in retained earnings at the beginning of the year. During the year, the firm paid \$0.75 per share dividend and generated \$1.92 earnings per share. The firm has 100 million shares outstanding. At the end of year, what was the level of retained earnings for GW?

- A. \$725 million
- B. \$917 million
- C. \$882 million
- D. \$807 million

$$800\text{m} + [1.92 \times 100\text{m}] - [0.75 \times 100\text{m}] = \$917\text{m}$$

*AACSB: Analytic*

*Accessibility: Keyboard Navigation*

*Blooms: Apply*

*Difficulty: 3 Hard*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Statement of Retained Earnings*

## Essay Questions

116. **Statement of Cash Flows** Use the following balance sheet and income statement to construct a statement of cash flows for Betty's Bakery Corp.

Betty's Bakery Corp.					
Balance Sheet as of December 31, 2012 and 2013					
(in millions of dollars)					
	2012	2013		2012	2013
<b>Assets</b>			<b>Liabilities &amp; Equity</b>		
Current Assets			Current liabilities		
Cash and marketable			Accrued wages and taxes	\$ 5	\$ 4
Securities	\$12	\$ 5	Accounts payable	18	16
Accounts receivable	21	15	Notes payable	<u>35</u>	<u>30</u>
Inventory	<u>25</u>	<u>30</u>			
Total	\$ 58	\$ 50	Total	\$58	\$50
Fixed assets:			Long-term debt:	\$40	\$45
Gross plant and			Stockholders' equity:		
Equipment	\$ 60	\$ 80	Preferred stock (1m shares)	\$1	\$ 1
Less: Depreciation	<u>10</u>	<u>15</u>	Common stock and		
Net plant and	\$ 50	\$ 65	paid in surplus	4	4
Other long-term			(4m shares)		
assets	<u>20</u>	<u>25</u>	Retained earnings	<u>25</u>	<u>40</u>
Total	\$ 70	\$ 90	Total	\$ 30	\$ 45
Total Assets	<u>\$128</u>	<u>\$140</u>	Total liabilities & equity	<u>\$128</u>	<u>\$140</u>

Betty's Bakery Corp.		
Income Statement for Years Ending December 2012 and 2013		
(in millions of dollars)		
	<u>2012</u>	<u>2013</u>
Net Sales	\$ 33	\$ 40.5
Less: Cost of goods sold	<u>8</u>	<u>11</u>
Gross profits	\$ 25	\$ 29.5
Less: Depreciation	<u>2</u>	<u>2</u>
Earnings before interest and taxes (EBIT)	\$ 23	\$ 27.5
Less: Interest	<u>1</u>	<u>1.5</u>
Earnings before taxes (EBT)	\$ 22	\$ 26
Less: Taxes	<u>9</u>	<u>10</u>
Net income	<u>\$ 13</u>	<u>\$ 16</u>
Less: Preferred stock dividends	<u>\$ 1</u>	<u>\$ 1</u>
Net income available to common stockholders	\$ 12	\$ 15
Less: Common stock dividends	<u>\$ 1</u>	<u>\$ 2</u>
Addition to retained earnings	\$ 11	\$ 13
Per (common) share data:		
Earnings per share (EPS)	\$6.75	\$4.00
Dividends per share (DPS)	\$0.25	\$0.50
Book value per share (BV)	\$22.00	\$23.75
Market value per share (MV)	\$24.00	\$24.25

Statement of Cash Flows for Year Ending December 31, 2013  
(in millions of dollars)

A. Cash Flows from Operating Activities	
Net Income	\$ 16
Additions (sources of cash):	
Depreciation	2
Decrease in accounts receivable	6
Subtractions (uses of cash):	
Decrease accrued wages and taxes	-1
Decrease in accounts payable	-2
Increase in inventory	<u>-5</u>
Net cash flow from operating activities	\$ 16
B. Cash Flows from Investing Activities	
Subtractions:	
Increase fixed assets	-\$20
Increase in other long-term assets	<u>-0</u>
Net cash flow from investing activities	-\$20
C. Cash Flows from Financing Activities	
Additions:	
Increase in long-term debt	\$ 5
Increase in common and preferred stock	0
Subtractions:	
Decrease in notes payable	-5
Pay preferred stock dividends	-1
Pay common stock dividends	<u>-2</u>
Net cash flow from financing activities	<u>-\$3</u>
D. Net Change in Cash and Marketable Securities	<u>-\$57</u>

*AACSB: Analytic*

*Blooms: Apply*

*Difficulty: 3 Hard*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Statement of Cash Flows*



117. When might earnings management become an ethical consideration?

Per authors' end of chapter questions: Managers and financial analysts have recognized for years that firms use considerable latitude in using accounting rules to manage their reported earnings in a wide variety of contexts. Indeed, within the GAAP framework, firms can "smooth" earnings. That is, firms often take steps to over- or understate earnings at various times. Managers may choose to smooth earnings to show investors that firm assets are growing steadily. Similarly, one firm may be using straight line depreciation for its fixed assets, while another is using a modified accelerated cost recovery method (MACRS), which causes depreciation to accrue quickly. If the firm uses MACRS accounting methods, they write fixed asset values down quickly; assets will thus have lower book value than if the firm used straight line depreciation methods. This process of controlling a firm's earnings is called earnings management.

Ethical considerations: Earnings management could become an ethical issue if managers started applying GAAP inconsistently throughout accounting periods in order to "manage" the financial reports given to outsiders and/or insiders. One example could be the smoothing previously mentioned.

*AACSB: Ethics*

*Blooms: Create*

*Blooms: Evaluate*

*Difficulty: 2 Medium*

*Learning Objective: 02-06 Observe cautions that should be taken when examining financial statements.*

*Topic: Cautions in Interpreting Financial Statements*

118. How do taxes influence how corporate managers and investors structure transactions and capitalize their companies?

Many firms pay out much of their earnings in taxes. The focus on this chapter has been income taxes, but there are other taxes that a company must pay, too. Many companies will look for transactions with tax advantages. One such example would be to finance their company with debt versus equity. Interest payments are deductible from income taxes, whereas dividend payments are not.

*AACSB: Reflective Thinking*

*Blooms: Create*

*Blooms: Evaluate*

*Difficulty: 2 Medium*

*Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.*

*Topic: Corporate Income Taxes*

119. How would you explain to a friend why market value of a firm is more important to an investor than book value of the firm?

What assets can be sold (market value) for might differ than the historical costs that are reflected on the balance sheet. What the equity can be sold for (market value or price per share) might differ from the balances reflected in the stockholder equity section of the balance sheet. Financial managers and investors are often more concerned with the value of physical and financial assets in the market place and find those numbers more relevant than what is reported on the balance sheet.

NOTE: (was an end of chapter question with a new twist)

*AACSB: Reflective Thinking*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

*Topic: Book Value versus Market Value*

120. What are free cash flows for a firm? What does it mean when a firm's free cash flow is negative?

Free cash flows are the cash flows available to pay the firm's stockholders and debt holders after the firm has made the necessary working capital investments, fixed asset investments, and developed the necessary new products to sustain the firm's ongoing operations. If free cash flow is negative, the firm's operations produce no cash flows available for investors.

*AACSB: Analytic*

*Blooms: Understand*

*Difficulty: 2 Medium*

*Learning Objective: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.*

*Topic: Free Cash Flow*

121. What are the costs and benefits of holding liquid securities on a firm's balance sheet?

The more liquid assets a firm holds, the less likely the firm will be to experience financial distress. However, liquid assets generate no profits for a firm. For example, cash is the most liquid of all assets, but it earns no return for the firm. In contrast, fixed assets are illiquid, but provide the means to generate revenue. Thus, managers must consider the trade-off between the advantages of liquidity on the balance sheet and the disadvantages of having money sit idle rather than generating profits.

*AACSB: Analytic*

*Blooms: Understand*

*Difficulty: 1 Easy*

*Learning Objective: 02-01 Recall the major financial statements that firms must prepare and provide.*

*Topic: Balance Sheet*