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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 on one side with the change in retained earnings between the beginning and ending of the period on the other?
 - 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 the balance of retained earnings, December 31, 20xx?

- A. balance sheet
- B. income statement
- C. statement of cash flows
- D. statement of retained earnings

8. 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

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. When someone is referring to the "bottom line" they are referring to
- A. net income on the income statement.
 - B. earnings per share on the income statement.
 - C. dividends per share on the income statement.
 - D. net change in cash on the cash flow statement.
11. 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)
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. Which of the following transactions may differ in timing of cash flow versus when income/expenses are recorded on the income statement?
- A. Sales
 - B. Operating Expenses
 - C. Fixed Asset
 - D. All of these
 - E. Only A and B above

15. This is cash flow available for payments to stockholders and debtholders 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

16. 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

17. 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

18. 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.

19. 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 debtholders of a firm after the firm has made payments necessary to vendors.
- C. Cash flows available for payments to stockholders and debtholders 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 debtholders of a firm that would be tax free to the recipients.

20. This is the process of controlling a firm's earnings.

- A. Generally Accepted Accounting Principles
- B. The matching principle
- C. Earnings management
- D. Accrual basis accounting

21. The Sarbanes-Oxley Act requires public companies to ensure that these 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 Cypress Corporation. From the balance sheet you find the following balances: Cash and marketable securities = \$600,000, Accounts receivable = \$800,000, Inventory = \$500,000, Accrued wages and taxes = \$50,000, Accounts payable = \$200,000, and Notes payable = \$1,000,000. What is Cypress's net working capital?

- A. \$152,000
- B. \$650,000
- C. \$1,900,000
- D. \$3,150,000

23. **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

24. **Balance Sheet** Jack and Jill Corporation's year-end 2009 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.

25. **Balance Sheet** Nicole Corporation's year-end 2009 balance sheet lists current assets of \$750,000, fixed assets of \$600,000, current liabilities of \$545,000, and long-term debt of \$700,000. What is Nicole's total stockholders' equity?

- A. \$105,000
- B. \$1,245,000
- C. \$1,350,000
- D. There is not enough information to calculate total stockholder's equity.

26. **Income Statement** Bullseye, Inc.'s 2008 income statement lists the following income and expenses: EBIT = \$900,000, Interest expense = \$85,000, and Net income = \$570,000. What is the 2008 Taxes reported on the income statement?

- A. \$245,000
- B. \$330,000
- C. \$815,000
- D. There is not enough information to calculate 2008 Taxes.

27. **Income Statement** Barnyard, Inc.'s 2008 income statement lists the following income and expenses: EBIT = \$500,000, Interest expense = \$50,000, and Net income = \$315,000. What is the 2008 Taxes reported on the income statement?

- A. \$135,000
- B. \$450,000
- C. \$495,000
- D. There is not enough information to calculate 2008 Taxes.

28. **Income Statement** Barnyard, Inc.'s 2008 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 the 2008 earnings per share?

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

29. **Income Statement** Bullseye, Inc.'s 2008 income statement lists the following income and expenses: EBIT = \$700,000, Interest expense = \$50,000, and Taxes = \$217,000. Bullseye's has no preferred stock outstanding and 300,000 shares of common stock outstanding. What are the 2008 earnings per share?

- A. \$2.333
- B. \$2.167
- C. \$1.61
- D. \$1.443

30. **Corporate Taxes** Eccentricity, Inc. had \$300,000 in 2008 taxable income. Using the tax schedule from Table 2-3, what is the company's 2008 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, 7.4167%, 39%
- B. \$78,000, 26%, 39%
- C. \$100,250, 33.4167%, 39%
- D. \$139,250, 46.4167%, 39%

31. **Corporate Taxes** Swimmy, Inc. had \$400,000 in 2008 taxable income. Using the tax schedule from Table 2-3, what is the company's 2008 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, 5.525%, 34%
- B. \$113,900, 28.475%, 34%
- C. \$136,000, 34%, 34%
- D. \$136,000, 39%, 34%

32. **Corporate Taxes** Scuba, Inc. is concerned about the taxes paid by the company in 2008. 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 is Scuba's tax liability, average tax rate, and marginal tax rate, respectively?

- A. \$1,637,100, 31.788%, 34%
- B. \$1,751,000, 34%, 34%
- C. \$1,870,000, 34%, 34%
- D. \$1,983,900, 36.07%, 34%

33. **Corporate Taxes** Landscaping, Inc. is concerned about the taxes paid by the company in 2008. In addition to \$250,000 of taxable income, the firm received \$1,000 of interest on state-issued bonds and \$6,000 of dividends on common stock it owns in Sprinklers, Inc. What is Landscaping's tax liability, average tax rate, and marginal tax rate, respectively?

- A. \$59,202, 23.51%, 39%
- B. \$81,452, 32.3479%, 39%
- C. \$83,480, 32.48%, 39%
- D. \$98,202, 39%, 39%

34. **Statement of Cash Flows** Paige's Properties Inc. reported 2008 net income of \$5 million and depreciation of \$1,500,000. The top part Paige's Properties, Inc.'s 2007 and 2008 balance sheets is listed below (in millions of dollars).

Current assets:	2007	2008	Current liabilities:	2007	2008
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 2008 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

35. Statement of Cash Flows Ann's Flowers Inc. reported 2008 net income of \$1 million and depreciation of \$250,000. The top part Ann's Flowers, Inc.'s 2007 and 2008 balance sheets is listed below (in millions of dollars).

Current assets:	2007	2008	Current liabilities:	2007	2008
Cash and marketable securities	\$ 3	\$ 2	Accrued wages and taxes	\$ 1	\$ 1
Accounts receivable	4	5	Accounts payable	3	4
Inventory	<u>6</u>	<u>5</u>	Notes payable	<u>9</u>	<u>7</u>
Total	\$ 13	\$ 12	Total	\$ 13	\$ 12

What is the 2008 net cash flow from operating activities for Ann's Flower's, Inc.?

- A. \$-1,000,000
- B. \$1,000,000
- C. \$1,250,000
- D. \$2,250,000

36. Statement of Cash Flows In 2008, 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 2008 and \$105,000 at the end of the year. What was Upper Crust's cash flow from operations for 2008?

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

37. Statement of Cash Flows In 2008, 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 2008 and \$65,000 at the end of the year. What was Lower Case's cash flow from operations for 2008?

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

38. 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 2008, respectively in millions?

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

39. 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 2007 to 2008. 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 2008, respectively in millions?

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

40. Free Cash Flow Catering Corp. reported free cash flows for 2008 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 2008 EBIT?

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

41. **Free Cash Flow** Iron Ore Corp. reported free cash flows for 2008 of \$90 million and investment in operating capital of \$200 million. Iron Ore listed \$50 million in depreciation expense and \$40 million in taxes on its 2008 income statement. What was Iron Ore's 2008 EBIT?

- A. \$140 million
- B. \$280 million
- C. \$290 million
- D. \$380 million

42. **Statement of Retained Earnings** TriCycle, Corp. began the year 2008 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 2008 balance in retained earnings for TriCycle?

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

43. **Statement of Retained Earnings** Triplette, Corp. began the year 2008 with -\$5 million in retained earnings. The firm earned net income of \$10 million in 2008 and paid \$2 million to its preferred stockholders and \$1 million to its common stockholders. What is the year-end 2008 balance in retained earnings for Triplette?

- A. \$2 million
- B. \$5 million
- C. \$8 million
- D. \$18 million

44. **Statement of Retained Earnings** Night Scapes, Corp. began the year 2008 with \$10 million in retained earnings. The firm suffered a net loss of \$2 million in 2008 and yet paid \$2 million to its preferred stockholders and \$1 million to its common stockholders. What is the year-end 2008 balance in retained earnings for Night Scapes?

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

45. **Statement of Retained Earnings** Z, Corp. began the year 2008 with \$1 million in retained earnings. The firm earned net income of \$5 million in 2008 and paid \$3 million to its common stockholders. What is the year-end 2008 balance in retained earnings for Z?

- A. \$1 million
- B. \$3 million
- C. \$6 million
- D. \$9 million

46. **Statement of Retained Earnings** Use the following information to find dividends paid to common stockholders during 2008.

Balance of Retained Earnings, December 31, 2007	\$ 52m.
Plus: Net Income for 2008	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, 2008	<u>\$ 56m.</u>

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

47. **Statement of Retained Earnings** Use the following information to find dividends paid to common stockholders during 2008.

Balance of Retained Earnings, December 31, 2007	\$ -25m.
Plus: Net Income for 2008	60m.
Less: Cash Dividends Paid	
Preferred Stock	\$ 5 m.
Common Stock	<u>20 m.</u>
Total Cash Dividends Paid	<u>25m.</u>
Balance of Retained Earnings, December 31, 2008	<u>\$ 10m.</u>

- A. \$20 million
- B. \$25 million
- C. \$70 million
- D. \$90 million

48. **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

49. **Balance Sheet** Run4It has total assets of \$20 million of which \$10 million are current assets. Cash makes up 5 percent of the current assets and accounts receivable makes up another 50 percent of current assets. Run4It's gross plant and equipment has a book value of \$15 million and other long-term assets have a book value of \$2 million. Using this information, what is the balance of inventory and the balance of depreciation on Run4It's balance sheet?

- A. \$5.5 million, \$7 million
- B. \$5.5 million, \$8 million
- C. \$4.5 million, \$7 million
- D. \$4.5 million, \$8 million

50. **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 Book's gross plant and equipment has a book value of \$13 million and other long-term assets have a book value of \$2 million. Using this information, what is the balance of inventory and the balance of depreciation on Run4It's balance sheet?

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

51. **Balance Sheet** Universe It Ts has total assets of \$250,000 of which \$100,000 are current assets. Cash makes up 15 percent of the current assets and accounts receivable makes up another 65 percent of current assets. Ts's gross plant and equipment has a book value of \$200,000 and other long-term assets have a book value of \$40,000. Using this information, what is the balance of inventory and the balance of depreciation on Ts's balance sheet?

- A. \$20,000, \$90,000
- B. \$20,000, \$110,000
- C. \$100,000, \$90,000
- D. \$100,000, \$110,000

52. **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

53. **Balance Sheet** Purse's Galour has total assets of \$2 million. Thirty percent of these assets are financed with debt of which \$200,000 is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$800,000. Using this information what is the balance for long-term debt and retained earnings on Galour's balance sheet?

- A. \$400,000, \$600,000
- B. \$400,000, \$800,000
- C. \$600,000, \$600,000
- D. \$600,000, \$800,000

54. **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

55. **Balance Sheet** Storage N More has total assets of \$25 million. Sixty percent of these assets are financed with debt of which \$5 million is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$4 million. Using this information what is the balance for long-term debt and retained earnings on More's balance sheet?

- A. \$10 million, \$6 million
- B. \$10 million, \$10 million
- C. \$15 million, \$4 million
- D. \$15 million, \$6 million

56. **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

57. Market Value versus Book Value Diva Nails balance sheet lists net fixed assets as \$4 million. The fixed assets could currently be sold for \$5 million. Diva's current balance sheet shows current liabilities of \$1 million and net working capital of \$400,000. If all the current accounts were liquidated today, the company would receive \$7 million cash after paying \$1 million in liabilities. What is the book value of Diva's assets today? What is the market value of these assets?

- A. \$1.4 million, \$6 million
- B. \$1.4 million, \$5.4 million
- C. \$4 million, \$5 million
- D. \$5.4 million, \$11 million

58. 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

59. 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

60. 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 \$.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 debtholders 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

61. 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 debtholders 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

62. 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 \$9 million. AllDebt, Inc. finances its \$18 million in assets with \$15 million in debt (on which it pays 10 percent interest annually) and \$3 million in equity. AllEquity, Inc. finances its \$18 million in assets with no debt and \$18 million in equity. Both firms pay a tax rate of 30 percent on their taxable income. What are the asset funders' (the debtholders and stockholders) resulting return on assets for the two firms?

- A. 29.17%, and 35%, respectively
- B. 37.5%, and 35%, respectively
- C. 41.66%, and 50%, respectively
- D. 50%, and 50%, respectively

63. 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 debtholders 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

64. 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

65. 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

66. Income Statement You have been given the following information for Paige's Purses Corp.:

net sales = \$10,750,000

cost of goods sold = \$4,250,000;

addition to retained earnings = \$1,030,000;

dividends paid to preferred and common stockholders = \$2,000,000;

interest expense = \$250,000.

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

- A. \$950,000
- B. \$1,200,000
- C. \$1,450,000
- D. \$3,220,000

67. 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

68. 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

69. 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

70. Income Statement You have been given the following information for Amy's Armchairs Corp.:

net sales = \$1,500,000;

gross profit = \$1,000,000;

addition to retained earnings = \$300,000;

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

depreciation expense = \$250,000.

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

- A. \$100,000, and \$500,000, respectively
- B. \$500,000, and \$100,000, respectively
- C. \$500,000, and \$360,000, respectively
- D. \$760,000, and \$100,000, respectively

71. 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

72. Corporate Taxes The Carolina Corporation had a 2008 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, 28.5883%, 34%, respectively
- B. \$875,500, 29.1833%, 34%, respectively
- C. \$875,500, 34%, 34%, respectively
- D. \$1,020,000, 34%, 34%, respectively

73. Corporate Taxes The Ohio Corporation had a 2008 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, 12.8333%, 35%, respectively
- B. \$13,829,725.45, 27.6595%, 35%, respectively
- C. \$17,329,725.45, 34.6595%, 35%, respectively
- D. \$17,340,750.45, 34.6815%, 35%, respectively

74. Corporate Taxes The Sasnak Corporation had a 2008 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, 30.3326%, 34%, respectively
- B. \$1,349,800, 34%, 34%, respectively
- C. \$1,564,000, 34%, 34%, respectively
- D. \$1,564,000, 35.1461%, 34%, respectively

75. Corporate Taxes The AOK Corporation had a 2008 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

76. 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

77. Corporate Taxes Suppose that in addition to the \$10 million of taxable income from operations, Jack's Hills, Inc. received \$200,000 of interest on state-issued bonds and \$600,000 of dividends on common stock it owns in Jill's Pales, Inc.

Using the tax schedule in Table 2.3 what is Jack's income tax liability.

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

- A. \$3,400,000, 35%, 35%, respectively
- B. \$3,463,000, 30.0177%, 35%, respectively
- C. \$3,563,000, 35%, 35%, respectively
- D. \$3,680,000, 34.0741%, 35%, respectively

78. 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, 33.6825%, 39%, respectively
- B. \$122,850, 39%, 39%, respectively
- C. \$129,500, 34.5333%, 39%, respectively
- D. \$139,250, 37.1333%, 359%, respectively

79. Corporate Taxes Suppose that in addition to the \$250,000 of taxable income from operations, Tan Lines, Inc. received \$7,000 of interest on state-issued bonds and \$30,000 of dividends on common stock it owns in Sun Lotions, Inc.

Using the tax schedule in Table 2.3 what is Tan Lines' income tax liability.

What are Tan Lines' average and marginal tax rates on total taxable income?

- A. \$80,750, 32.3%, 39%, respectively
- B. \$84,260, 32.5328%, 39%, respectively
- C. \$95,180, 33.1638%, 39%, respectively
- D. \$105,260, 37.5929%, 359%, respectively

80. 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

81. 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

82. Statement of Cash Flows Cloe's Costumes, Inc. has net cash flows from operating activities for the last year of \$244 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 a decrease of \$14 million, change in accrued wages and taxes was a decrease of \$15 million and change in accounts payable was a decrease 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

83. 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

84. 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

85. 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

86. Statement of Cash Flows Crax 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 a decrease 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. \$16 million
- B. \$20 million
- C. \$21 million
- D. \$45 million

87. 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

88. Free Cash Flow The 2008 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

89. Free Cash Flow The 2008 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

90. **Free Cash Flow** The 2008 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

91. **Free Cash Flow** The 2008 income statement for Louis Lumberyard shows that depreciation expense is \$500 million, EBIT is \$1,000 million, EBT is \$600 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$2,000 million and net operating working capital was \$1,500 million. At the end of the year gross fixed assets was \$4,000 million. Louis's free cash flow for the year was \$1,240 million. What is their end of year balance for net operating working capital?

- A. \$-420 million
- B. \$80 million
- C. \$420 million
- D. \$1,320 million

92. **Free Cash Flow** The 2008 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 change 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

93. Free Cash Flow The 2008 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 change 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. \$77 million
- C. \$84 million
- D. \$163 million

94. 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

95. 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

96. 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

97. Statement of Retained Earnings Water Adventures Corp. started the year with a balance of retained earnings of \$50 million. The company reported net income for the year of \$12 million, paid dividends of \$1 million to the preferred stock holders and \$30 million to common stock holders. What is Water Adventure's end of year balance in retained earnings?

- A. \$19 million
- B. \$31 million
- C. \$43 million
- D. \$62 million

98. **Income Statement** Listed below is the 2008 income statement for Lamps, Inc.

Lamps, Inc.	
Income Statement for Year Ending December 31, 2008	
(in millions of dollars)	
	<u>2008</u>
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 Lamp's wants the company to earn a net income of \$12 million in 2009. 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 firms 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

99. **Income Statement** You have been given the following information for Halle's Holiday Store Corp. for the year 2008:

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 2009, 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 2008,

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 2009?

A. \$2,000,000

B. \$5,447,500

C. \$8,447,500

D. \$10,304,643

100. **Free Cash Flow** Martha's Moving Van 4U, Inc. had free cash flow during 2008 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 2008?

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

101. **Free Cash Flow** Windy City Designs had free cash flow during 2008 of \$1 million. The change in gross fixed assets on Windy's balance sheet during 2008 was \$25 million and the change in net operating working capital was \$37 million. Using this information, what will Windy's taxes be?

- A. \$20 million
- B. \$25 million
- C. \$32 million
- D. \$36 million

Essay Questions

102. LG 5 2-21 **Statement of Cash Flows** Use the balance sheet and income statement below to construct a statement of cash flows for Betty's Bakery Corp.

Betty's Bakery Corporation					
Balance Sheet as of December 31, 2007 and 2008					
(in millions of dollars)					
Assets	2007	2008	Liabilities & Equity	2007	2008
Current assets:			Current liabilities :		
Cash and marketable securities	\$ 12	\$ 5	Accrued wages and taxes	\$ 5	\$ 4
Accounts receivable	21	15	Accounts payable	18	16
Inventory	<u>25</u>	<u>30</u>	Notes payable	<u>35</u>	<u>30</u>
Total	\$ 58	\$ 50	Total	\$ 58	\$ 50
Fixed assets:			Long-term debt:	\$ 40	\$ 45
Gross plant and equipment	\$ 60	\$ 80	Stockholders' equity:		
Less: Depreciation	<u>10</u>	<u>15</u>	Preferred stock (1 million shares)	\$ 1	\$ 1
Net plant and equipment	\$ 50	\$ 65	Common stock and paid-in surplus (4 million shares)	4	4
Other long-term 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 and equity	<u>\$128</u>	<u>\$140</u>

Betty's Bakery Corporation		
Income Statement for Years Ending December 31, 2007 and 2008		
(in millions of dollars)		
	2007	2008
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 (price) per share (MV)	\$24.00	\$24.25

103. **Statement of Cash Flows** Use the balance sheet and income statement below to construct a statement of cash flows for Val's Vegetable Corp.

Val's Vegetable Corporation					
Balance Sheet as of December 31, 2007 and 2008					
(in millions of dollars)					
Assets	2007	2008	Liabilities & Equity	2007	2008
Current assets:			Current liabilities:		
Cash and marketable securities	\$ 12	\$ 12	Accrued wages and taxes	\$ 6	\$ 9
Accounts receivable	31	39	Accounts payable	26	27
Inventory	<u>44</u>	<u>58</u>	Notes payable	<u>22</u>	<u>29</u>
Total	\$ 87	\$109	Total	\$ 54	\$ 65
Fixed assets:			Long-term debt:	\$ 36	\$ 45
Gross plant and equipment	\$107	\$116	Stockholders' equity:		
Less: Depreciation	<u>17</u>	<u>21</u>	Preferred stock (1 million shares)	\$ 1	\$ 1
Net plant and equipment	\$ 90	\$ 95	Common stock and paid-in surplus (10 million shares)	20	20
Other long-term assets	<u>22</u>	<u>20</u>	Retained earnings	<u>88</u>	<u>93</u>
Total	\$112	\$115	Total	\$ 109	\$114
Total assets	<u>\$199</u>	<u>\$224</u>	Total liabilities and equity	<u>\$199</u>	<u>\$224</u>

Val's Vegetable Corporation		
Income Statement for Years Ending December 31, 2007 and 2008		
(in millions of dollars)		
	2007	2008
Net sales	\$ 150	\$ 195
Less: Cost of goods sold	<u>60</u>	<u>152</u>
Gross profits	90	43
Less: Depreciation	<u>2</u>	<u>3</u>
Earnings before interest and taxes (EBIT)	88	40
Less: Interest	<u>4</u>	<u>5</u>
Earnings before taxes (EBT)	84	35
Less: Taxes	<u>34</u>	<u>14</u>
Net income	<u>\$ 50</u>	<u>\$ 21</u>
Less: Preferred stock dividends	<u>\$ 1</u>	<u>\$ 1</u>
Net income available to common stockholders	\$ 49	\$ 20
Less: Common stock dividends	<u>\$ 10</u>	<u>\$ 12</u>
Addition to retained earnings	\$ 39	\$ 8
Per (common) share data:		
Earnings per share (EPS)	\$ 5.00	\$ 2.10
Dividends per share (DPS)	\$ 1.00	\$ 1.20
Book value per share (BV)	\$ 10.90	\$ 11.40
Market value (price) per share (MV)	\$ 18.50	\$ 19.55

104. When might earnings management become an ethical consideration?

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

106. 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?

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

Bloom's: Remember & Understand

Difficulty: Basic

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

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

Bloom's: Remember & Understand

Difficulty: Basic

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

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

Bloom's: Remember & Understand

Difficulty: Basic

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

4. Which financial statement reconciles net income earned during a given period and any cash dividends paid within that period on one side with the change in retained earnings between the beginning and ending of the period on the other?

- A. Balance Sheet
- B. Income Statement.
- C. Statement of Retained Earnings.**
- D. Statement of Cash Flows.

AACSB: Reflective Thinking

Bloom's: Remember & Understand

Difficulty: Basic

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

Chapter 02 - Reviewing Financial Statements

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

Bloom's: Remember & Understand

Difficulty: Basic

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

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

Bloom's: Remember & Understand

Difficulty: Basic

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

7. On which of the four major financial statements would you find the balance of retained earnings, December 31, 20xx?

- A. balance sheet
- B. income statement
- C. statement of cash flows
- D. statement of retained earnings

AACSB: Reflective Thinking

Bloom's: Remember & Understand

Difficulty: Basic

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

Chapter 02 - Reviewing Financial Statements

8. 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

Bloom's: Remember & Understand

Difficulty: Basic

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

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

Bloom's: Remember & Understand

Difficulty: Basic

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

10. When someone is referring to the "bottom line" they are referring to
- A.** net income on the income statement.
 - B. earnings per share on the income statement.
 - C. dividends per share on the income statement.
 - D. net change in cash on the cash flow statement.

AACSB: Reflective Thinking

Bloom's: Remember & Understand

Difficulty: Basic

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

Chapter 02 - Reviewing Financial Statements

11. 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

Bloom's: Remember & Understand

Difficulty: Basic

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

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

Bloom's: Remember & Understand

Difficulty: Basic

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

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

Bloom's: Remember & Understand

Difficulty: Intermediate

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

14. Which of the following transactions may differ in timing of cash flow versus when income/expenses are recorded on the income statement?

- A. Sales
- B. Operating Expenses
- C. Fixed Asset
- D. All of these**
- E. Only A and B above

AACSB: Reflective Thinking

Bloom's: Remember & Understand

Difficulty: Basic

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

15. This is cash flow available for payments to stockholders and debtholders 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

Bloom's: Remember & Understand

Difficulty: Basic

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

16. 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

Bloom's: Remember & Understand

Difficulty: Intermediate

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

17. 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

Bloom's: Remember & Understand

Difficulty: Basic

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

18. 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

Bloom's: Remember & Understand

Difficulty: Intermediate

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

19. 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 debtholders of a firm after the firm has made payments necessary to vendors.
- C.** Cash flows available for payments to stockholders and debtholders 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 debtholders of a firm that would be tax free to the recipients.

AACSB: Reflective Thinking

Bloom's: Remember & Understand

Difficulty: Intermediate

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

Chapter 02 - Reviewing Financial Statements

20. This is the process of controlling a firm's earnings.
- A. Generally Accepted Accounting Principles
 - B. The matching principle
 - C. Earnings management**
 - D. Accrual basis accounting

AACSB: Reflective Thinking

Bloom's: Remember & Understand

Difficulty: Basic

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

21. The Sarbanes-Oxley Act requires public companies to ensure that these 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

Bloom's: Remember & Understand

Difficulty: Intermediate

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

22. **Balance Sheet** You are evaluating the balance sheet for Cypress Corporation. From the balance sheet you find the following balances: Cash and marketable securities = \$600,000, Accounts receivable = \$800,000, Inventory = \$500,000, Accrued wages and taxes = \$50,000, Accounts payable = \$200,000, and Notes payable = \$1,000,000. What is Cypress's net working capital?

- A. \$152,000
- B. \$650,000**
- C. \$1,900,000
- D. \$3,150,000

net working capital = current assets - current liabilities.

Cypress's current assets =

Cash and marketable securities	=	\$600,000
Accounts receivable	=	\$800,000
Inventory	=	<u>\$500,000</u>
Total current assets		\$1,900,000

and current liabilities =

Accrued wages and taxes	=	\$ 50,000
Accounts payable	=	\$200,000
Notes payable	=	<u>\$1,000,000</u>
Total current liabilities		\$1,250,000

was \$650,000 (\$1,900,000 - \$1,250,000).

So the firm's net working capital

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

23. **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>
Total current assets		\$700,000

and current liabilities =

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

was -\$210,000 (\$700,000 - \$910,000).

So the firm's net working capital

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

24. **Balance Sheet** Jack and Jill Corporation's year-end 2009 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: $\text{Assets} = \text{Liabilities} + \text{Equity}$. Rearranging this equation: $\text{Equity} = \text{Assets} - \text{Liabilities}$. Thus, the balance sheets would appear as

	Book value		Book value	
	Assets		Liabilities and Equity	
	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>
follows:	Total	\$1,050,000	Total	\$1,050,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

25. **Balance Sheet** Nicole Corporation's year-end 2009 balance sheet lists current assets of \$750,000, fixed assets of \$600,000, current liabilities of \$545,000, and long-term debt of \$700,000. What is Nicole's total stockholders' equity?

- A. \$105,000
- B. \$1,245,000
- C. \$1,350,000
- 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	
	Assets		Liabilities and Equity	
	Current assets	\$ 750,000	Current liabilities	\$ 545,000
	Fixed assets	<u>600,000</u>	Long-term debt	700,000
			Stockholders' equity	<u>105,000</u>
Feedback:	Total	\$1,350,000	Total	\$1,350,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

26. **Income Statement** Bullseye, Inc.'s 2008 income statement lists the following income and expenses: EBIT = \$900,000, Interest expense = \$85,000, and Net income = \$570,000. What is the 2008 Taxes reported on the income statement?

- A. \$245,000
- B. \$330,000
- C. \$815,000
- D. There is not enough information to calculate 2008 Taxes.

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

Using the setup of an Income Statement in Table 2.2:

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

27. **Income Statement** Barnyard, Inc.'s 2008 income statement lists the following income and expenses: EBIT = \$500,000, Interest expense = \$50,000, and Net income = \$315,000. What is the 2008 Taxes reported on the income statement?

- A. \$135,000
- B. \$450,000
- C. \$495,000
- D. There is not enough information to calculate 2008 Taxes.

EBIT	\$500,000
Interest expense	<u>-50,000</u>
EBT	450,000
Taxes	<u>-135,000</u>
Net income	\$315,000

Using the setup of an Income Statement in Table 2.2:

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

28. **Income Statement** Barnyard, Inc.'s 2008 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 the 2008 earnings per share?

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

Using the setup of an Income Statement in Table

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

Thus,

$$2.2: \text{Earnings per share (EPS)} = \frac{\$303,000}{200,000} = \$1.515 \text{ per share}$$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

29. Income Statement Bullseye, Inc.'s 2008 income statement lists the following income and expenses: EBIT = \$700,000, Interest expense = \$50,000, and Taxes = \$217,000. Bullseye's has no preferred stock outstanding and 300,000 shares of common stock outstanding. What are the 2008 earnings per share?

- A. \$2.333
- B. \$2.167
- C. \$1.61
- D.** \$1.443

Using the setup of an Income Statement in Table

EBIT	\$700,000
Interest expense	<u>-50,000</u>
EBT	650,000
Taxes	<u>-217,000</u>
Net income	\$433,000

Thus,

$$2.2: \text{Earnings per share (EPS)} = \frac{\$433,000}{300,000} = \$1.443 \text{ per share}$$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

30. **Corporate Taxes** Eccentricity, Inc. had \$300,000 in 2008 taxable income. Using the tax schedule from Table 2-3, what is the company's 2008 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, 7.4167%, 39%
- B. \$78,000, 26%, 39%
- C. \$100,250, 33.4167%, 39%**
- D. \$139,250, 46.4167%, 39%

From Table 2.3, the \$300,000 of taxable income puts Eccentricity in the 39 percent marginal tax bracket. Thus, Tax liability = Tax on base amount + 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.

$$\text{Average tax rate} = \frac{\$100,250}{\$300,000}$$

comes to: = 33.4167% 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: Analytical
 Bloom's: Apply & Analyze
 Difficulty: Basic
 Learning Objective: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

31. **Corporate Taxes** Swimmy, Inc. had \$400,000 in 2008 taxable income. Using the tax schedule from Table 2-3, what is the company's 2008 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, 5.525%, 34%
- B. \$113,900, 28.475%, 34%
- C.** \$136,000, 34%, 34%
- D. \$136,000, 39%, 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 + .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

$$\text{Average tax rate} = \frac{\$136,000}{\$400,000}$$

to: $= 34\%$ 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.

AACSB: Analytical
 Bloom's: Apply & Analyze
 Difficulty: Basic

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

32. Corporate Taxes Scuba, Inc. is concerned about the taxes paid by the company in 2008. 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 is Scuba's tax liability, average tax rate, and marginal tax rate, respectively?

- A. \$1,637,100, 31.788%, 34%
- B. \$1,751,000, 34%, 34%**
- C. \$1,870,000, 34%, 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 + (.3)\$500,000 = \$5,150,000
Now Scuba's tax liability will be:
Tax liability = \$113,900 + .34 (\$5,150,000 - \$335,000) = \$1,751,000
The \$500,000 of dividend income increased Scuba's tax liability by \$51,000 (= (.3) x \$500,000 x (.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: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

33. Corporate Taxes Landscaping, Inc. is concerned about the taxes paid by the company in 2008. In addition to \$250,000 of taxable income, the firm received \$1,000 of interest on state-issued bonds and \$6,000 of dividends on common stock it owns in Sprinklers, Inc. What is Landscaping's tax liability, average tax rate, and marginal tax rate, respectively?

A. \$59,202, 23.51%, 39%

B. \$81,452, 32.3479%, 39%

C. \$83,480, 32.48%, 39%

D. \$98,202, 39%, 39%

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 Sprinklers is not taxable. Thus, only 30 percent of the dividends received are taxed, so: Taxable income = $\$250,000 + (.3)\$6,000 = \$251,800$ Now Landscaping's tax liability will be: Tax liability = $\$22,250 + .39 (\$251,800 - \$100,000) = \$81,452$ The \$6,000 of dividend income increased Landscaping's tax liability by \$702 ($= (.3) \times \$60,000 \times (.39)$). Landscaping's resulting average tax rate is now: Average tax rate = $\$81,452 / \$251,800 = 32.3479\%$ Finally, if Landscaping 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

34. **Statement of Cash Flows** Paige's Properties Inc. reported 2008 net income of \$5 million and depreciation of \$1,500,000. The top part Paige's Properties, Inc.'s 2007 and 2008 balance sheets is listed below (in millions of dollars).

Current assets:	2007	2008	Current liabilities:	2007	2008
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 2008 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

35. Statement of Cash Flows Ann's Flowers Inc. reported 2008 net income of \$1 million and depreciation of \$250,000. The top part Ann's Flowers, Inc.'s 2007 and 2008 balance sheets is listed below (in millions of dollars).

Current assets:	2007	2008	Current liabilities:	2007	2008
Cash and marketable securities	\$ 3	\$ 2	Accrued wages and taxes	\$ 1	\$ 1
Accounts receivable	4	5	Accounts payable	3	4
Inventory	<u>6</u>	<u>5</u>	Notes payable	<u>9</u>	<u>7</u>
Total	\$ 13	\$ 12	Total	\$ 13	\$ 12

What is the 2008 net cash flow from operating activities for Ann's Flower's, Inc.?

- A. \$-1,000,000
- B. \$1,000,000
- C. \$1,250,000
- D.** \$2,250,000

Cash Flows from Operating Activities

Net income	\$ 1,000,000
Additions (sources of cash):	
Depreciation	250,000
Decrease in inventory	1,000,000
Increase in accounts payable	1,000,000
Subtractions (uses of cash):	
Increase in accounts receivable	<u>- 1,000,000</u>
 Net cash flow from operating activities:	 \$ 2,250,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

36. Statement of Cash Flows In 2008, 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 2008 and \$105,000 at the end of the year. What was Upper Crust's cash flow from operations for 2008?

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

$$\begin{array}{r}
 \text{Net change in cash and marketable securities} = \$105,000 - \$90,000 = \\
 \text{Cash Flows from Operating Activities} \qquad \qquad \qquad = \$415,000 \\
 \\
 \text{Cash Flows from Investing Activities} \qquad \qquad \qquad = - 250,000 \\
 \text{Cash Flows from Financing Activities} \qquad \qquad \qquad = - \underline{150,000} \\
 \text{\$15,000 Net Change in Cash and Marketable Securities} \qquad = \$ 15,000
 \end{array}$$

AACSB: Analytical
Bloom's: Apply & Analyze
Difficulty: Basic
Learning Objective: 02-04 Differentiate between accounting income and cash flows.

37. Statement of Cash Flows In 2008, 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 2008 and \$65,000 at the end of the year. What was Lower Case's cash flow from operations for 2008?

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

$$\begin{array}{r}
 \text{Net change in cash and marketable securities} = \$65,000 - \$80,000 = \$- \\
 \text{Cash Flows from Operating Activities} \qquad \qquad \qquad = \$-165,000 \\
 \\
 \text{Cash Flows from Investing Activities} \qquad \qquad \qquad = +50,000 \\
 \text{Cash Flows from Financing Activities} \qquad \qquad \qquad = + \underline{100,000} \\
 \text{15,000 Net Change in Cash and Marketable Securities} \qquad = \$ -15,000
 \end{array}$$

AACSB: Analytical
Bloom's: Apply & Analyze
Difficulty: Basic
Learning Objective: 02-04 Differentiate between accounting income and cash flows.

38. 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 2008, 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 2008, Crew Cut had cash flows of \$15 million available to pay its stockholders and debtholders.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

39. 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 2007 to 2008. 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 2008, 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 2008, Cruise had cash flows of \$172 million available to pay its stockholders and debtholders.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

40. **Free Cash Flow** Catering Corp. reported free cash flows for 2008 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 2008 EBIT?

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

Catering's free cash flow for 2008 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

41. **Free Cash Flow** Iron Ore Corp. reported free cash flows for 2008 of \$90 million and investment in operating capital of \$200 million. Iron Ore listed \$50 million in depreciation expense and \$40 million in taxes on its 2008 income statement. What was Iron Ore's 2008 EBIT?

- A. \$140 million
- B. \$280 million**
- C. \$290 million
- D. \$380 million

Iron Ore's free cash flow for 2008 was:

$$\begin{aligned} \text{FCF} &= \text{Operating cash flow} - \text{Investment in operating capital} \\ \$90\text{m.} &= \text{Operating cash flow} - \$200\text{m.} \end{aligned}$$

$$\text{So, operating cash flow} = \$90\text{m.} + \$200\text{m.} = \$290\text{m.}$$

Iron Ore's operating cash flow was:

$$\begin{aligned} \text{OCF} &= \text{EBIT} - \text{Taxes} + \text{Depreciation} \\ \$290\text{m.} &= (\text{EBIT} - \$40\text{m.} + \$50\text{m.}) \end{aligned}$$

$$\text{So, EBIT} = \$290\text{m.} + \$40\text{m.} - \$50\text{m.} = \$280\text{m.}$$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

42. **Statement of Retained Earnings** TriCycle, Corp. began the year 2008 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 2008 balance in retained earnings for TriCycle?

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

The statement of retained earnings for 2008 is as

	<u>2008</u>	
Balance of Retained Earnings, December 31, 2007		\$25m.
Plus: Net Income for 2008		7m.
Less: Cash Dividends Paid		
Preferred Stock	\$1m.	
Common Stock	<u>3m.</u>	
Total Cash Dividends Paid		<u>4m.</u>
follows: Balance of Retained Earnings, December 31, 2008		<u><u>\$ 28m.</u></u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

43. **Statement of Retained Earnings** Triplette, Corp. began the year 2008 with -\$5 million in retained earnings. The firm earned net income of \$10 million in 2008 and paid \$2 million to its preferred stockholders and \$1 million to its common stockholders. What is the year-end 2008 balance in retained earnings for Triplette?

- A. \$2 million
- B. \$5 million**
- C. \$8 million
- D. \$18 million

The statement of retained earnings for 2008 is as

	<u>2008</u>
Balance of Retained Earnings, December 31, 2007	\$-5m.
Plus: Net Income for 2008	10m.
Less: Cash Dividends Paid	
Preferred Stock	\$2m.
Common Stock	<u>1m.</u>
Total Cash Dividends Paid	<u>3m.</u>
follows: Balance of Retained Earnings, December 31, 2008	<u><u>\$ 2m.</u></u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

44. **Statement of Retained Earnings** Night Scapes, Corp. began the year 2008 with \$10 million in retained earnings. The firm suffered a net loss of \$2 million in 2008 and yet paid \$2 million to its preferred stockholders and \$1 million to its common stockholders. What is the year-end 2008 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 2008 is as

	<u>2008</u>
Balance of Retained Earnings, December 31, 2007	\$10m.
Less: Net Loss for 2008	2 m.
Less: Cash Dividends Paid	
Preferred Stock	\$2m.
Common Stock	<u>1m.</u>
Total Cash Dividends Paid	<u>3m.</u>
follows: Balance of Retained Earnings, December 31, 2008	<u><u>\$ 5m.</u></u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

45. **Statement of Retained Earnings** Z, Corp. began the year 2008 with \$1 million in retained earnings. The firm earned net income of \$5 million in 2008 and paid \$3 million to its common stockholders. What is the year-end 2008 balance in retained earnings for Z?

- A. \$1 million
- B. \$3 million**
- C. \$6 million
- D. \$9 million

The statement of retained earnings for 2008 is as

	<u>2008</u>
Balance of Retained Earnings, December 31, 2007	\$ 1m.
Plus: Net Income for 2008	5m.
Less: Cash Dividends Paid	<u>3m.</u>
follows: Balance of Retained Earnings, December 31, 2008	<u>\$ 3m.</u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

46. Statement of Retained Earnings Use the following information to find dividends paid to common stockholders during 2008.

Balance of Retained Earnings, December 31, 2007	\$ 52m.
Plus: Net Income for 2008	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, 2008	<u>\$ 56m.</u>

- 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

47. Statement of Retained Earnings Use the following information to find dividends paid to common stockholders during 2008.

Balance of Retained Earnings, December 31, 2007		\$ -25m.
Plus: Net Income for 2008		60m.
Less: Cash Dividends Paid		
Preferred Stock	\$ 5 m.	
Common Stock	<u>20 m.</u>	
Total Cash Dividends Paid		<u>25m.</u>
Balance of Retained Earnings, December 31, 2008		<u>\$ 10m.</u>

- A. \$20 million
- B. \$25 million
- C. \$70 million
- D. \$90 million

Total Cash Dividends Paid = \$10m. - \$60m. + \$25m. = -\$25m. Thus, common stock dividends paid = \$25m. - \$5m = \$20m.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Basic

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

48. **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

Current assets:

Cash and marketable			
Securities (.2 x \$1)		\$ 0.20	
Accounts receivable (.05 x \$1)		0.05	
Inventory	step 1.	<u>.75</u>	(\$ 1 - \$0.2 - \$0.05)
Total		\$ 1.0	

Fixed assets:

Gross plant and equipment		\$ 1.5	
Less: Depreciation	step 4.	<u>0.5</u>	(\$1.5 - \$1.0)
Net plant and equipment	step 3.	\$1.0	(\$2.0 - \$1.0)
Other long-term assets		<u>1.0</u>	
Total	step 2.	\$ 2.0	(\$3.0 - \$1.0)
Total assets		<u>\$ 3.0</u>	

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

49. Balance Sheet Run4It has total assets of \$20 million of which \$10 million are current assets. Cash makes up 5 percent of the current assets and accounts receivable makes up another 50 percent of current assets. Run4It's gross plant and equipment has a book value of \$15 million and other long-term assets have a book value of \$2 million. Using this information, what is the balance of inventory and the balance of depreciation on Run4It's balance sheet?

- A. \$5.5 million, \$7 million
- B. \$5.5 million, \$8 million
- C. \$4.5 million, \$7 million**
- D. \$4.5 million, \$8 million

Current assets:

Cash and marketable			
Securities (.05 x \$10)		\$ 0.5	
Accounts receivable (.50 x \$10)		5.0	
Inventory	step 1.	<u>4.5</u>	(\$ 10- \$0.5 - \$5.0)
Total		\$ 10.0	

Fixed assets:

Gross plant and equipment		\$ 15.0	
Less: Depreciation	step 4.	<u>7.0</u>	(\$15- \$8)
Net plant and equipment	step 3.	\$8.0	(\$10 - \$2)
Other long-term assets		<u>2.0</u>	
Total	step 2.	\$10.0	(\$20 - \$10)

Total assets \$ 20.0

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

50. 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 Book's gross plant and equipment has a book value of \$13 million and other long-term assets have a book value of \$2 million. Using this information, what is the balance of inventory and the balance of depreciation on Run4It's 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:

Cash and marketable			
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)
Total		\$ 6.0	

Fixed assets:

Gross plant and equipment		\$ 13.0	
Less: Depreciation	step 4.	<u>3.0</u>	(\$13- \$10)
Net plant and equipment	step 3.	\$10.0	(\$12 - \$2)
Other long-term assets		<u>2.0</u>	
Total	step 2.	\$12.0	(\$18 - \$6)
Total assets		<u>\$ 18.0</u>	

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

51. Balance Sheet Universe It Ts has total assets of \$250,000 of which \$100,000 are current assets. Cash makes up 15 percent of the current assets and accounts receivable makes up another 65 percent of current assets. Ts's gross plant and equipment has a book value of \$200,000 and other long-term assets have a book value of \$40,000. Using this information, what is the balance of inventory and the balance of depreciation on Ts's balance sheet?

- A.** \$20,000, \$90,000
- B.** \$20,000, \$110,000
- C.** \$100,000, \$90,000
- D.** \$100,000, \$110,000

Current assets:

Cash and marketable			
Securities (.15 x \$100,000)		\$ 15,000	
Accounts receivable (.65 x \$100,000)		65,000	
Inventory	step 1.	<u>20,000</u>	(\$100- \$15 - \$65)
Total		\$ 100,000	

Fixed assets:

Gross plant and equipment			
		\$ 200,000	
Less: Depreciation	step 4.	<u>90,000</u>	(\$200- \$110)
Net plant and equipment	step 3.	\$110,000	(\$150,000 - \$40,000)
Other long-term assets		<u>40,000</u>	
Total	step 2.	\$150,000	(\$250 - \$100)
Total assets		<u>\$ 250,000</u>	

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

52. 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

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

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

53. **Balance Sheet** Purse's Galour has total assets of \$2 million. Thirty percent of these assets are financed with debt of which \$200,000 is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$800,000. Using this information what is the balance for long-term debt and retained earnings on Galour's balance sheet?

- A. \$400,000, \$600,000
- B. \$400,000, \$800,000
- C. \$600,000, \$600,000
- D. \$600,000, \$800,000

Total current liabilities		\$200,000	
Long-term debt:	step 3.	<u>\$400,000</u>	(= \$600,000 - \$200,000)
Total debt:	step 2.	\$600,000	(= .3 x \$2 m)
Stockholders' equity:			
Preferred stock		\$0	
Common stock and paid-in surplus (2 million shares)		800,000	
Retained earnings	step 5.	<u>600,000</u>	(= \$1.4 - \$.8)
Total	step 4	\$1,400,000	(= \$2 m - \$.6)
 Total liabilities and equity	 step 1.	 <u>\$2,000,000</u>	 (= Total Assets)

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

54. **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

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

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

55. Balance Sheet Storage N More has total assets of \$25 million. Sixty percent of these assets are financed with debt of which \$5 million is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$4 million. Using this information what is the balance for long-term debt and retained earnings on More's balance sheet?

- A. \$10 million, \$6 million
- B. \$10 million, \$10 million
- C. \$15 million, \$4 million
- D. \$15 million, \$6 million

Total current liabilities		\$	5
Long-term debt:	step 3.		<u>\$10</u> (= \$15 - \$5)
Total debt:	step 2.		\$15 (= .6 x \$25 m)
Stockholders' equity:			
Preferred stock		\$	0
Common stock and paid-in surplus (2 million shares)			4
Retained earnings	step 5.		<u>6</u> (= \$10 - \$4)
Total	step 4		\$10 (= \$25 - \$15)
Total liabilities and equity	step 1.		<u>\$25</u> (= Total Assets)

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

56. 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
Assets			
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. = Current assets (book value) - \$15m. => Current assets (book value) = \$12m. + \$15m. = \$27m. 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. = Current assets (market value) - \$15m. => Current assets (market value) = \$77m. + \$15m. = \$92m. Step 4. Total assets (market value) = \$92m. + \$50m. = \$142m.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

57. Market Value versus Book Value Diva Nails balance sheet lists net fixed assets as \$4 million. The fixed assets could currently be sold for \$5 million. Diva's current balance sheet shows current liabilities of \$1 million and net working capital of \$400,000. If all the current accounts were liquidated today, the company would receive \$7 million cash after paying \$1 million in liabilities. What is the book value of Diva's assets today? What is the market value of these assets?

- A. \$1.4 million, \$6 million
- B. \$1.4 million, \$5.4 million
- C. \$4 million, \$5 million
- D.** \$5.4 million, \$11 million

	Book value	Market value
Assets		
Current assets step 1.	\$1.4m.	step 3. \$6m.
Fixed assets	<u>4m.</u>	<u>5m.</u>
Total step 2.	\$5.4m.	\$11m.

Step 1. Net working capital (book value) = Current assets (book value) - Current liabilities (book value) = \$4m. = Current assets (book value) - \$1m. => Current assets (book value) = \$4m. + \$1m. = \$1.4m. Step 2. Total assets (book value) = \$1.4m. + \$4m. = \$5.4m. Step 3. Net working capital (market value) = Current assets (market value) - Current liabilities (market value) = \$7m. = Current assets (market value) - \$1m. => Current assets (market value) = \$7m. + \$1m. = \$6m. Step 4. Total assets (market value) = \$6m. + \$5m. = \$11m.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

58. 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
Assets			
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) = \$3 m. = Current assets (book value) - \$7m. => Current assets (book value) = \$3m. + \$7m. = \$10m. 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. = Current assets (market value) - \$7m. => Current assets (market value) = \$9m. + \$7m. = \$16m. Step 4. Total assets (market value) = \$16m. + \$25m. = \$41m.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

59. 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
Assets			
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) = \$3 m. = Current assets (book value) - \$5m. => 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. = Current assets (market value) - \$5m. => Current assets (market value) = \$6m. + \$5m. = \$11m. Step 4. Total assets (market value) = \$11m. + \$17m. = \$28m.

*AACSB: Analytical
 Bloom's: Apply & Analyze
 Difficulty: Intermediate
 Learning Objective: 02-02 Differentiate between book (or accounting) value and market value.*

60. 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 \$.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 debtholders 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
<p>Return on assets funders' investment $\frac{\$.45m}{\\$1.2m} = 37.50\%$ $\frac{\$.42m}{\\$1.2m} = 35.00\%$</p>			

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

61. 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 debtholders 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. x .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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

62. 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 \$9 million. AllDebt, Inc. finances its \$18 million in assets with \$15 million in debt (on which it pays 10 percent interest annually) and \$3 million in equity. AllEquity, Inc. finances its \$18 million in assets with no debt and \$18 million in equity. Both firms pay a tax rate of 30 percent on their taxable income. What are the asset funders' (the debtholders and stockholders) resulting return on assets for the two firms?

A. 29.17%, and 35%, respectively

B. 37.5%, and 35%, respectively

C. 41.66%, and 50%, respectively

D. 50%, and 50%, respectively

	<u>AllDebt</u>	<u>AllEquity</u>
Operating income	\$ 9m.	\$ 9m.
Less: Interest (\$15m. x .1)	<u>1.5m.</u>	<u>0m.</u>
Taxable income	7.5m.	9m.
Less: Taxes (30%)	<u>2.25m.</u>	<u>2.7m.</u>
Net income	<u>\$ 5.25m.</u>	<u>\$6.3m.</u>
Income available for asset funders (= operating income - taxes)	\$ 6.75m.	\$6.3m.
		Return
on assets funders' investment	$\$6.75m/\$18m = 37.5\%$	$\$6.3m/\$18m = 35.00\%$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

63. 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 debtholders 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. x .05)	<u>.03m.</u>	<u>0m.</u>
Taxable income	.37m.	.4m.
Less: Taxes (30%)	<u>.111m.</u>	<u>.12m.</u>
Net income	<u><u>\$.259m.</u></u>	<u><u>\$.28m.</u></u>
Income available for asset funders (= operating income - taxes)	\$.289m.	\$.28m.
		Return
on assets funders' investment	$$.289m/$.8m = 36.125%$	
	$$.28m/$.8m = 35.00%$	

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

64. 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 - .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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

65. 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>\$1,400,000</u>

Less: Common and preferred stock dividends		<u>\$ 400,000</u>
Addition to retained earnings		<u>\$1,000,000</u>

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 - tax rate) = Net income => EBT = Net income / (1 - tax rate) = \$1,400,000 / (1 - .3) = \$2,000,000
 Step 3. EBIT - Interest = EBT => EBIT = EBT + Interest = \$2,000,000 + \$200,000 = \$2,200,000
 Step 4. Gross profits = Net sales - Cost of goods sold = \$5,200,000 - 2,100,000 = \$3,100,000
 Step 5. Gross profits - Depreciation = EBIT => Depreciation = Gross profits - EBIT = \$3,100,000 - \$2,200,000 = \$900,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

66. Income Statement You have been given the following information for Paige's Purses Corp.:

net sales = \$10,750,000

cost of goods sold = \$4,250,000;

addition to retained earnings = \$1,030,000;

dividends paid to preferred and common stockholders = \$2,000,000;

interest expense = \$250,000.

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

A. \$950,000

B. \$1,200,000

C. \$1,450,000

D. \$3,220,000

Net sales (all credit)		\$10,750,000
Less: Cost of goods sold		<u>4,250,000</u>
Gross profits	step 4.	\$ 6,500,000
Less: Depreciation	step 5.	<u>\$ 1,200,000</u>
Earnings before interest and taxes (EBIT)	step 3.	\$ 5,300,000
Less: Interest		<u>250,000</u>
Earnings before taxes (EBT)	step 2.	\$5,050,000
Less: Taxes		
Net income	step 1.	<u>\$3,030,000</u>

Less: Common and preferred stock dividends \$2,000,000

Addition to retained earnings \$1,030,000

Step 1. Net income = Common and preferred stock dividends + Addition to retained earnings = \$2,000,000 + \$1,030,000 = \$3,030,000
 Step 2. EBT (1 - tax rate) = Net income => EBT = Net income / (1 - tax rate) = \$3,030,000 / (1 - .4) = \$5,050,000
 Step 3. EBIT - Interest = EBT => EBIT = EBT + Interest = \$5,050,000 + \$250,000 = \$5,300,000
 Step 4. Gross profits = Net sales - Cost of goods sold = \$10,750,000 - 4,250,000 = \$6,500,000
 Step 5. Gross profits - Depreciation = EBIT => Depreciation = Gross profits - EBIT = \$6,500,000 - \$5,300,000 = \$1,200,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

67. 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 - tax rate) = Net income => EBT = Net income / (1 - tax rate) = \$330,000 / (1 - .4) = \$550,000
 Step 3. EBIT - Interest = EBT => EBIT = EBT + Interest = \$550,000 + \$50,000 = \$600,000
 Step 4. Gross profits = Net sales - Cost of goods sold = \$2,500,000 - 1,300,000 = \$1,200,000
 Step 5. Gross profits - Depreciation = EBIT => Depreciation = Gross profits - EBIT = \$1,200,000 - \$600,000 = \$600,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

68. 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 - .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 - Interest = EBT => Interest = EBIT - EBT = \$75,000 - \$55,000 = \$20,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

69. 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 - .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. EBIT - Interest = EBT => Interest = EBIT - EBT = \$50,000 - \$40,000 = \$10,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

70. Income Statement You have been given the following information for Amy's Armchairs Corp.:

- net sales = \$1,500,000;
- gross profit = \$1,000,000;
- addition to retained earnings = \$300,000;
- dividends paid to preferred and common stockholders = \$90,000;
- depreciation expense = \$250,000.

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

- A. \$100,000, and \$500,000, respectively
- B. \$500,000, and \$100,000, respectively**
- C. \$500,000, and \$360,000, respectively
- D. \$760,000, and \$100,000, respectively

Net sales (all credit)		\$1,500,000
Less: Cost of goods sold	step 3.	<u>500,000</u>
Gross profits		\$1,000,000
Less: Depreciation		<u>\$ 250,000</u>
Earnings before interest and taxes (EBIT)	step 4.	\$ 750,000
Less: Interest	step 5.	<u>100,000</u>
Earnings before taxes (EBT)	step 2.	\$ 650,000
Less: Taxes		
Net income	step 1.	<u>\$ 390,000</u>
Less: Common and preferred stock dividends		<u>\$ 90,000</u>
Addition to retained earnings		<u>\$300,000</u>

Step 1. Net income = Common and preferred stock dividends + Addition to retained earnings = \$90,000 + \$300,000 = \$390,000
 Step 2. EBT (1 - tax rate) = Net income => EBT = Net income / (1 - tax rate) = \$390,000 / (1 - .4) = \$650,000
 Step 3. Gross profits = Net sales - Cost of goods sold => Net Sales - Gross Profit = Cost of Goods Sold \$1,500,000 - 500,000 = \$1,000,000
 Step 4. Gross profits - Depreciation = EBIT = \$1,000,000 - \$250,000 = \$750,000
 Step 5. EBIT - Interest = EBT => Interest = EBIT - EBT = \$750,000 - \$650,000 = \$100,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

71. 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>\$ 150,000</u>

Less: Common and preferred stock dividends		<u>\$ 90,000</u>
Addition to retained earnings		<u>\$ 60,000</u>

Step 1. Net income = Common and preferred stock dividends + Addition to retained earnings = \$90,000 + \$60,000 = \$150,000
 Step 2. EBT (1 - tax rate) = Net income => EBT = Net income / (1 - tax rate) = \$150,000 / (1 - .4) = \$250,000
 Step 3. Gross profits = Net sales - Cost of goods sold => Net Sales - Gross Profit = 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. EBIT - Interest = EBT => Interest = EBIT - EBT = \$350,000 - \$250,000 = \$100,000

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

72. Corporate Taxes The Carolina Corporation had a 2008 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, 28.5883%, 34%, respectively
B. \$875,500, 29.1833%, 34%, respectively
C. \$875,500, 34%, 34%, respectively
D. \$1,020,000, 34%, 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: Taxable income = \$3,000,000 - \$500,000 + (.3)\$75,000 = \$2,522,500 Now Carolina's Corp.'s tax liability will be: Tax liability = \$113,900 + .34 (\$2,522,500 - \$335,000) = \$857,650 Carolina Corp.'s resulting average tax rate is now: Average tax rate = \$857,650/\$3,000,000 = 28.5883% 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

73. Corporate Taxes The Ohio Corporation had a 2008 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, 12.8333%, 35%, respectively
B. \$13,829,725.45, 27.6595%, 35%, respectively
C. \$17,329,725.45, 34.6595%, 35%, respectively
D. \$17,340,750.45, 34.6815%, 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: Taxable income = \$50,000,000 - \$500,000 + (.3)\$45,000 = \$49,513,500 Now Ohio's Corp.'s tax liability will be: Tax liability = \$6,416,667 + .35 (\$49,513,500 - \$18,333,333) = \$17,329,725.45 Ohio Corp.'s resulting average tax rate is now: Average tax rate = \$17,329,725.45/\$50,000,000 = 34.6595% 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

74. Corporate Taxes The Sasnak Corporation had a 2008 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, 30.3326%, 34%, respectively
B. \$1,349,800, 34%, 34%, respectively
C. \$1,564,000, 34%, 34%, respectively
D. \$1,564,000, 35.1461%, 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: Taxable income = \$4,450,000 - \$750,000 + (.3)\$900,000 = \$3,970,000 Now Sasnak's Corp.'s tax liability will be: Tax liability = \$113,900 + .34 (\$3,970,000 - \$335,000) = \$1,349,800 Sasnak Corp.'s resulting average tax rate is now: Average tax rate = \$1,349,800/\$4,450,000 = 30.3326% 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

75. Corporate Taxes The AOK Corporation had a 2008 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: Taxable income = \$2,200,000 - \$90,000 + (.3)\$750,000 = \$2,335,000 Now AOK's Corp.'s tax liability will be: Tax liability = \$113,900 + .34 (\$2,335,000 - \$335,000) = \$793,900 AOK Corp.'s resulting average tax rate is now: 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

76. 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: Taxable income = \$5,500,000 + (.3)\$300,000 = \$5,590,000 Now Emily's tax liability will be: Tax liability = \$113,900 + .34(\$5,590,000 - \$335,000) = \$1,900,600 Emily's resulting average tax rate is now: 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

77. Corporate Taxes Suppose that in addition to the \$10 million of taxable income from operations, Jack's Hills, Inc. received \$200,000 of interest on state-issued bonds and \$600,000 of dividends on common stock it owns in Jill's Pales, Inc.

Using the tax schedule in Table 2.3 what is Jack's income tax liability.

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

- A. \$3,400,000, 35%, 35%, respectively
- B. \$3,463,000, 30.0177%, 35%, respectively**
- C. \$3,563,000, 35%, 35%, respectively
- D. \$3,680,000, 34.0741%, 35%, 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 Jill's is not taxable. Thus, only 30 percent of the dividends received are taxed, so: Taxable income = \$10,000,000 + (.3)\$600,000 = \$10,180,000 Now Jack's tax liability will be: Tax liability = \$3,400,000 + .35 (\$10,180,000 - \$10,000,000) = \$3,463,000 Jack's resulting average tax rate is now: Average tax rate = \$3,463,000/\$10,180,000 = 34.0177% Finally, if Jack 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

78. 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, 33.6825%, 39%, respectively
- B. \$122,850, 39%, 39%, respectively
- C. \$129,500, 34.5333%, 39%, respectively
- D. \$139,250, 37.1333%, 359%, 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 Soda's is not taxable. Thus, only 30 percent of the dividends received are taxed, so: Taxable income = \$300,000 + (.3)\$50,000 = \$315,000 Now Liam's tax liability will be: Tax liability = \$22,250 + .39 (\$315,000 - \$100,000) = \$106,100 Liam's resulting average tax rate is now: Average tax rate = \$106,100/\$315,000 = 33.6825% 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

79. Corporate Taxes Suppose that in addition to the \$250,000 of taxable income from operations, Tan Lines, Inc. received \$7,000 of interest on state-issued bonds and \$30,000 of dividends on common stock it owns in Sun Lotions, Inc.

Using the tax schedule in Table 2.3 what is Tan Lines' income tax liability.

What are Tan Lines' average and marginal tax rates on total taxable income?

- A. \$80,750, 32.3%, 39%, respectively
- B. \$84,260, 32.5328%, 39%, respectively**
- C. \$95,180, 33.1638%, 39%, respectively
- D. \$105,260, 37.5929%, 359%, 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 Sun Lotions is not taxable. Thus, only 30 percent of the dividends received are taxed, so: Taxable income = \$250,000 + (.3)\$30,000 = \$259,000 Now Liam's tax liability will be: Tax liability = \$22,250 + .39 (\$259,000 - \$100,000) = \$84,260 Tan Lines' resulting average tax rate is now: Average tax rate = \$84,260/\$259,000 = 32.5328% Finally, if Tan Lines 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

80. 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

81. 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

82. Statement of Cash Flows Cloe's Costumes, Inc. has net cash flows from operating activities for the last year of \$244 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 a decrease of \$14 million, change in accrued wages and taxes was a decrease of \$15 million and change in accounts payable was a decrease 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.
Decrease in accounts receivable	20m. (= \$244m. - \$150m. - \$85m. + \$15m. + \$10m. - \$14m.)
Decrease in inventory	14m.
Subtractions (uses of cash):	
Decrease accrued wages and taxes	- 15m.
Decrease in accounts payable	<u>- 10m.</u>

Net cash flow from operating activities: \$ 244m.

Thus, end of year balance of accounts receivable = \$45m. - \$20m. = \$25m.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

83. 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

84. **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>
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Net cash flow from financing activities: \$20m.

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

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

85. 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: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

86. Statement of Cash Flows Crax 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 a decrease 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. \$16 million
- B. \$20 million
- C. \$21 million**
- D. \$45 million

Cash Flows from Financing Activities

Additions:

Increase in long-term debt	\$ 24m. (= \$20m. + \$5m. + \$2m. - 3m)
Increase in common and preferred stock	3m.

Subtractions:

Decrease in notes payable	- 2m.
Pay stock dividends	<u>- 5m.</u>

Net cash flow from financing activities:	\$20m.
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Thus, beginning of year balance for long-term debt = \$45 - \$24m = \$21m.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

87. **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.
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Thus, beginning of year balance for long-term debt = \$40 - \$30m = \$10m.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

88. Free Cash Flow The 2008 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 (.3) = \96m. => 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 2008 was: $\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital} = \$654\text{m.} - \text{Investment in operating capital} = \630m. => Investment in operating capital = $\$654\text{m.} - \$630\text{m.} = \$24\text{m.}$ Accordingly, investment in operating capital for 2008 was: $\text{IOC} = \Delta\text{Gross fixed assets} + \Delta\text{Net operating working capital} = \$24\text{m.} = (\$2,000\text{m.} - \$1,600\text{m.}) + (\text{Ending net operating working capital} - \$640\text{m.})$ => Ending net operating working capital = $\$24\text{m.} - (\$2,000\text{m.} - \$1,600\text{m.}) + \$640\text{m.} = \$264\text{m.}$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

89. Free Cash Flow The 2008 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

Taxes = \$3m. x (.4) = \$1.2m. => Lou's operating cash flow was: $OCF = EBIT - Taxes + Depreciation = (\$5m. - \$1.2m. + \$2m.) = \$5.8m.$ Lou's free cash flow for 2008 was: $FCF = Operating\ cash\ flow - Investment\ in\ operating\ capital = \$5.8m. - \$4m. = \$1.8m.$ Accordingly, investment in operating capital for 2008 was: $IOC = \Delta Gross\ fixed\ assets + \Delta Net\ operating\ working\ capital = (\$20m. - \$16m.) + (Ending\ net\ operating\ working\ capital - \$6m.) = \$1.8m.$ => Ending net operating working capital = $\$1.8m. - (\$20m. - \$16m.) + \$6m. = \$3.8m.$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

90. Free Cash Flow The 2008 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

Taxes = \$15m. x (.3) = \$4.5m. => Paige's operating cash flow was: $OCF = EBIT - Taxes + Depreciation = (\$25m. - \$4.5m. + \$10m.) = \$30.5m.$ Paige's free cash flow for 2008 was: $FCF = Operating\ cash\ flow - Investment\ in\ operating\ capital = \$30.5m. - Investment\ in\ operating\ capital = \$20m. = \$10.5m.$ Accordingly, investment in operating capital for 2008 was: $IOC = \Delta Gross\ fixed\ assets + \Delta Net\ operating\ working\ capital = \$10.5m. = (\$100m. - \$80m.) + (Ending\ net\ operating\ working\ capital - \$30m.) = \$10.5m. - (\$100m. - \$80m.) + 30m. = \$20.5m.$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

91. Free Cash Flow The 2008 income statement for Louis Lumberyard shows that depreciation expense is \$500 million, EBIT is \$1,000 million, EBT is \$600 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$2,000 million and net operating working capital was \$1,500 million. At the end of the year gross fixed assets was \$4,000 million. Louis's free cash flow for the year was \$1,240 million. What is their end of year balance for net operating working capital?

- A.** \$-420 million
- B. \$80 million
- C. \$420 million
- D. \$1,320 million

Taxes = \$600m. x (.3) = \$180m. => Louis's operating cash flow was: $OCF = EBIT - Taxes + Depreciation = (\$1,000m. - \$180m. + \$500m.) = \$1,320m.$ Louis's free cash flow for 2008 was: $FCF = Operating\ cash\ flow - Investment\ in\ operating\ capital$ $\$1,240m. = \$1,320m. - Investment\ in\ operating\ capital$ => $Investment\ in\ operating\ capital = \$1,320m. - \$1,240m. = \$80m.$ Accordingly, investment in operating capital for 2008 was: $IOC = \Delta Gross\ fixed\ assets + \Delta Net\ operating\ working\ capital$ $\$80m. = (\$4,000m. - \$2,000m.) + (Ending\ net\ operating\ working\ capital - \$1,500m.)$ => $Ending\ net\ operating\ working\ capital = \$80m. - (\$4,000m. - \$2,000m.) + 1,500m. = \$-420m.$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

92. **Free Cash Flow** The 2008 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 change 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: $OCF = EBIT - Taxes + Depreciation = (\$400m. - \$120m + \$100m) = \$380m.$ Betty's free cash flow for 2008 was: $FCF = Operating\ cash\ flow - Investment\ in\ operating\ capital = \$625m. - \$380m. = \$-245m.$ Accordingly, investment in operating capital for 2008 was: $IOC = \Delta Gross\ fixed\ assets + \Delta Net\ operating\ working\ capital = \$-245m. = (\$510m. - Beginning\ of\ year\ gross\ fixed\ assets) + \$94m. \Rightarrow Beginning\ of\ year\ gross\ fixed\ assets = 510m. - (\$-245m). + \$94m. = \$849m.$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

93. **Free Cash Flow** The 2008 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 change 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. \$77 million**
 - C. \$84 million
 - D. \$163 million

John's operating cash flow was: $OCF = EBIT - Taxes + Depreciation = (\$80m. - \$24m + \$20m) = \$84m.$ John's free cash flow for 2008 was: $FCF = Operating\ cash\ flow - Investment\ in\ operating\ capital = \$84m. - \$41m. = \$43m.$ Accordingly, investment in operating capital for 2008 was: $IOC = \Delta Gross\ fixed\ assets + \Delta Net\ operating\ working\ capital = (\$102m. - Beginning\ of\ year\ gross\ fixed\ assets) + \$18m. \Rightarrow Beginning\ of\ year\ gross\ fixed\ assets = 102m. - \$43m + \$18m. = \$77m.$

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

94. **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, 2008
(in millions of dollars)

2008	
Balance of Retained Earnings, December 31, 2007	\$100m.
Plus: Net Income for 2008	59m. (= \$128m. + \$31m. - \$100m.)
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, 2008	<u>\$128m.</u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

95. 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, 2008
(in millions of dollars)

	2008
Balance of Retained Earnings, December 31, 2007	\$ 25m.
Plus: Net Income for 2008	15m. (= \$32m. + \$8m. - \$25m.)
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, 2008	<u>\$ 32m.</u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

96. 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, 2008
(in millions of dollars)

		<u>2008</u>
Balance of Retained Earnings, December 31, 2007		\$100m.
Plus: Net Income for 2008		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, 2008		<u>\$ 128m. (= \$100m + \$45m - \$2m - \$15m)</u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

97. Statement of Retained Earnings Water Adventures Corp. started the year with a balance of retained earnings of \$50 million. The company reported net income for the year of \$12 million, paid dividends of \$1 million to the preferred stock holders and \$30 million to common stock holders. What is Water Adventure's end of year balance in retained earnings?

- A. \$19 million
- B. \$31 million**
- C. \$43 million
- D. \$62 million

Statement of Retained Earnings as of December 31, 2008
(in millions of dollars)

	2008
Balance of Retained Earnings, December 31, 2007	\$ 50m.
Plus: Net Income for 2008	12m.
Less: Cash Dividends Paid	
Preferred Stock	\$ 1m.
Common Stock	<u>30m.</u>
Total Cash Dividends Paid	<u>31m.</u>
Balance of Retained Earnings, December 31, 2008	<u>\$ 31m. (= \$50m + \$12m - \$1m - \$30m)</u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Intermediate

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

98. **Income Statement** Listed below is the 2008 income statement for Lamps, Inc.

Lamps, Inc.	
Income Statement for Year Ending December 31, 2008	
(in millions of dollars)	
	<u>2008</u>
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 Lamp's wants the company to earn a net income of \$12 million in 2009. 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 firms 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, 2009	
(in millions of dollars)	
2009	
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>4</u>
Earnings before taxes (EBT)	Step 1. 20
Less: Taxes	
Net income	<u>\$ 12</u>

Step 1.

EBT (1 - t) = Net income = \$12m = EBT (1 - .4) => EBT = \$12m./(.6) = \$20m. Step 2.
 EBIT = EBT + Interest = \$20m. + \$4m. = \$24m. Step 3. Gross profits = EBIT + Depreciation
 = \$24m. + \$5m. = \$29m. Step 4. Net sales = Gross profits/(1 - Cost of goods sold percent) =
 \$29m./(.75) = \$116m. Step 5. Cost of goods sold = Sales - Gross profits = \$116m. - \$29 =
 \$87m.

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Advanced

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

99. **Income Statement** You have been given the following information for Halle's Holiday Store Corp. for the year 2008:

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 2009, 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 2008,

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 2009?

A. \$2,000,000

B. \$5,447,500

C. \$8,447,500

D. \$10,304,643

Income Statement for Year Ending December 31, 2008
(in millions of dollars)

	2008
Net sales (all credit)	\$50,000,000
Less: Cost of goods sold	<u>35,000,000</u>
Gross profits	15,000,000
Less: Depreciation	<u>4,857,143</u>
Earnings before interest and taxes (EBIT)	\$7,142,857 + \$3,000,000
Less: Interest	<u>3,000,000</u>
Earnings before taxes (EBT)	\$5,000,000/(1-.3)
Less: Taxes	7,142,857
Net income	<u>\$5,000,000</u>
Less: Preferred and common stock dividends	
	\$3,000,000
Addition to retained earnings	<u>\$2,000,000</u>

Income Statement for Year Ending December 31, 2009
(in millions of dollars)

	2009
Net sales (all credit)	\$50,000,000 + \$5,000,000
Less: Cost of goods sold	<u>36,075,000</u>
Gross profits	19,425,000
Less: Depreciation	<u>4,857,143</u>
Earnings before interest and taxes (EBIT)	14,567,857
Less: Interest	<u>2,500,000</u>
Earnings before taxes (EBT)	12,067,857
Less: Taxes (30%)	<u>3,620,357</u>
Net income	<u>\$8,447,500</u>
Less: Preferred and common stock dividends	
	\$3,000,000
Addition to retained earnings	<u>\$5,447,500</u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Advanced

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

100. **Free Cash Flow** Martha's Moving Van 4U, Inc. had free cash flow during 2008 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 2008?

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

Martha's operating cash flow for 2008 was: $OCF = EBIT - Taxes + Depreciation = (\$30m. - \$8m. + \$4m.) = \$26m.$ Martha's free cash flow was: $FCF = Operating\ cash\ flow - Investment\ in\ operating\ capital = \$26m. - \$1m. = \$25m.$ $IOC = \Delta Gross\ fixed\ assets + \Delta Net\ operating\ working\ capital = \$25m. = (\$40m. - \$30m.) + \Delta Net\ operating\ working\ capital \Rightarrow \Delta Net\ operating\ working\ capital = \$25m. - (\$40m. - \$30m.) = \$15m.$ $\Delta Net\ operating\ working\ capital = \$15m. = \Delta Current\ assets - \Delta Current\ liabilities = \$15m. = (\$130m. - \$110m.) - \Delta Current\ liabilities \Rightarrow \Delta Current\ liabilities = (\$130m. - \$110m.) - \$15m. = \$5m. \Rightarrow 2008\ Current\ liabilities = \$85m. + \$5m. = \$90m. = \$20m. + Accounts\ payable + \$35m. \Rightarrow Accounts\ payable = \$90m. - \$20m. - \$35m. = \$35m.$

Martha's Moving Van 4U, Inc.					
Balance Sheet as of December 31, 2007 and 2008					
(in millions of dollars)					
	2007	2008		2007	2008
Assets			Liabilities & Equity		
Current assets:			Current liabilities :		
Cash and marketable securities	\$ 10	\$ 15	Accrued wages and taxes	\$ 10	\$ 20
Accounts receivable	20	25	Accounts payable	40	\$35m.
Inventory	<u>80</u>	<u>90</u>	Notes payable	<u>30</u>	<u>35</u>
Total	\$110	\$130	Total	\$ 85	\$90m.
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 (5 million shares)	\$ 5	\$ 5
Net plant and equipment	\$ 20	\$ 28	Common stock and paid-in surplus (20 million shares)	10	10
Other long-term assets	<u>30</u>	<u>30</u>	Retained earnings	<u>40</u>	<u>58</u>
Total	\$ 50	\$ 58	Total	\$55	\$73
Total assets	<u>\$160</u>	<u>\$188</u>	Total liabilities and equity	<u>\$160</u>	<u>\$188</u>

Chapter 02 - Reviewing Financial Statements

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Advanced

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

101. **Free Cash Flow** Windy City Designs had free cash flow during 2008 of \$1 million. The change in gross fixed assets on Windy's balance sheet during 2008 was \$25 million and the change in net operating working capital was \$37 million. Using this information, what will Windy's taxes be?

- A. \$20 million
- B. \$25 million
- C. \$32 million
- D. \$36 million

IOC = Δ Gross fixed assets + Δ Net operating working capital \Rightarrow IOC = \$25m. + \$37m. = \$62m.
 FCF = Operating cash flow - Investment in operating capital \Rightarrow \$1m. = Operating cash flow - \$62m. \Rightarrow Investment in operating capital = \$62m. + \$1m. = \$63m.
 OCF = EBIT - Taxes + Depreciation
 Using the numbers below: \$63m. = \$60m. - Taxes + \$20m. \Rightarrow Taxes = \$60m. + \$20m. - \$63m. = \$17m.

Windy's City Designs, Corp.		
Income Statement for Year Ending December 31, 2008		
(in millions of dollars)		
	<u>2008</u>	
Net sales	\$ 200	Step 1. (= \$120m. + \$80m.)
Less: Cost of goods sold	<u>120</u>	
Gross profits	80	
Less: Depreciation	<u>20</u>	
Earnings before interest and taxes (EBIT)	60	Step 2. (= \$80m. - \$20m.)
Less: Interest	<u>10</u>	Step 5. (= \$60m. - \$50m.)
Earnings before taxes (EBT)	50	Step 4. (= \$30m. + \$20m.)
Less: Taxes (40%)	<u>20</u>	Step 3. (from above)
Net income	<u>\$ 30</u>	

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Advanced

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

Essay Questions

102. LG 5 2-21 **Statement of Cash Flows** Use the balance sheet and income statement below to construct a statement of cash flows for Betty's Bakery Corp.

Betty's Bakery Corporation					
Balance Sheet as of December 31, 2007 and 2008					
(in millions of dollars)					
Assets	2007	2008	Liabilities & Equity	2007	2008
Current assets:			Current liabilities :		
Cash and marketable securities	\$ 12	\$ 5	Accrued wages and taxes	\$ 5	\$ 4
Accounts receivable	21	15	Accounts payable	18	16
Inventory	<u>25</u>	<u>30</u>	Notes payable	<u>35</u>	<u>30</u>
Total	\$ 58	\$ 50	Total	\$ 58	\$ 50
Fixed assets:			Long-term debt:	\$ 40	\$ 45
Gross plant and equipment	\$ 60	\$ 80	Stockholders' equity:		
Less: Depreciation	<u>10</u>	<u>15</u>	Preferred stock (1 million shares)	\$ 1	\$ 1
Net plant and equipment	\$ 50	\$ 65	Common stock and paid-in surplus (4 million shares)	4	4
Other long-term 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 and equity	<u>\$128</u>	<u>\$140</u>

Betty's Bakery Corporation
Income Statement for Years Ending December 31, 2007 and 2008
(in millions of dollars)

	2007	2008
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 (price) per share (MV)	\$24.00	\$24.25

Statement of Cash Flows for Year Ending December 31, 2008
(in millions of dollars)

	2008
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	-5
Net cash flow from operating activities:	\$ 16
B. Cash Flows from Investing Activities	
Subtractions:	
Increase fixed assets	-\$20
Increase in other long-term assets	0
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	-2
Net cash flow from financing activities:	\$-3
D. Net Change in Cash and Marketable Securities	-\$7

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Advanced

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

103. **Statement of Cash Flows** Use the balance sheet and income statement below to construct a statement of cash flows for Val's Vegetable Corp.

Val's Vegetable Corporation					
Balance Sheet as of December 31, 2007 and 2008					
(in millions of dollars)					
Assets	2007	2008	Liabilities & Equity	2007	2008
Current assets:			Current liabilities:		
Cash and marketable securities	\$ 12	\$ 12	Accrued wages and taxes	\$ 6	\$ 9
Accounts receivable	31	39	Accounts payable	26	27
Inventory	<u>44</u>	<u>58</u>	Notes payable	<u>22</u>	<u>29</u>
Total	\$ 87	\$109	Total	\$ 54	\$ 65
Fixed assets:			Long-term debt:	\$ 36	\$ 45
Gross plant and equipment	\$107	\$116	Stockholders' equity:		
Less: Depreciation	<u>17</u>	<u>21</u>	Preferred stock (1 million shares)	\$ 1	\$ 1
Net plant and equipment	\$ 90	\$ 95	Common stock and paid-in surplus (10 million shares)	20	20
Other long-term assets	<u>22</u>	<u>20</u>	Retained earnings	<u>88</u>	<u>93</u>
Total	\$112	\$115	Total	\$ 109	\$114
Total assets	<u>\$199</u>	<u>\$224</u>	Total liabilities and equity	<u>\$199</u>	<u>\$224</u>

Val's Vegetable Corporation
Income Statement for Years Ending December 31, 2007 and 2008
(in millions of dollars)

	2007	2008
Net sales	\$ 150	\$ 195
Less: Cost of goods sold	<u>60</u>	<u>152</u>
Gross profits	90	43
Less: Depreciation	<u>2</u>	<u>3</u>
Earnings before interest and taxes (EBIT)	88	40
Less: Interest	<u>4</u>	<u>5</u>
Earnings before taxes (EBT)	84	35
Less: Taxes	<u>34</u>	<u>14</u>
Net income	<u>\$ 50</u>	<u>\$ 21</u>
Less: Preferred stock dividends	<u>\$ 1</u>	<u>\$ 1</u>
Net income available to common stockholders	\$ 49	\$ 20
Less: Common stock dividends	<u>\$ 10</u>	<u>\$ 12</u>
Addition to retained earnings	\$ 39	\$ 8
Per (common) share data:		
Earnings per share (EPS)	\$ 5.00	\$ 2.10
Dividends per share (DPS)	\$ 1.00	\$ 1.20
Book value per share (BV)	\$ 10.90	\$ 11.40
Market value (price) per share (MV)	\$ 18.50	\$ 19.55

Statement of Cash Flows for Year Ending December 31, 2008
(in millions of dollars)

	<u>2008</u>
A. Cash Flows from Operating Activities	
Net income	\$21
Additions (sources of cash):	
Depreciation	3
Increase accrued wages and taxes	3
Increase in accounts payable	1
Subtractions (uses of cash):	
Increase in accounts receivable	-8
Increase in inventory	<u>-14</u>
Net cash flow from operating activities:	\$ 6
B. Cash Flows from Investing Activities	
Additions	
Decrease other long-term assets	\$2
Subtractions:	
Increase fixed assets	-\$9
Increase in other long-term assets	<u>0</u>
Net cash flow from investing activities:	-\$7
C. Cash Flows from Financing Activities	
Additions:	
Increase in notes payable	\$ 7
Increase in long-term debt	9
Increase in common and preferred stock	0
Subtractions:	
Pay preferred stock dividends	-1
Pay common stock dividends	<u>-12</u>
Net cash flow from financing activities:	\$ 3
D. Net Change in Cash and Marketable Securities	<u>\$ 2</u>

AACSB: Analytical

Bloom's: Apply & Analyze

Difficulty: Advanced

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

104. 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 mentioned above.

AACSB: Ethics

Bloom's: Create and Evaluate

Difficulty: Intermediate

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

105. 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

Bloom's: Create and Evaluate

Difficulty: Intermediate

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

106. 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

Bloom's: Remember & Understand

Difficulty: Intermediate

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