

CHAPTER 2

Business Transaction Analysis and Financial Statement Effects

LEARNING OBJECTIVES

True False Questions

Item	LO	Item	LO
1.	3,6	9.	2
2.	2	10.	9
3.	2	11.	9
4.	2	12.	6
5.	4	13.	2
6.	2	14.	7
7.	2	15.	2
8.	2		

Multiple Choice Questions

Item	LO	Item	LO	Item	LO	Item	LO
1.	2	12.	3	23.	2	34.	2
2.	2	13.	6	24.	2	35.	2
3.	2	14.	3	25.	2	36.	9
4.	2	15.	4	26.	2	37.	2
5.	4	16.	7	27.	2	38.	8
6.	4	17.	2	28.	2	39.	2
7.	6	18.	2	29.	5	40.	2
8.	3	19.	2	30.	2		
9.	6	20.	2	31.	9		
10.	3	21.	2	32.	9		
11.	4	22.	2	33.	9		

Matching

1. LO 2
2. LO 2

Exercises

1. LO 5
2. LO 7
3. LO 7
4. LO 7
5. LO 7
6. LO 2
7. LO 5

Short Answer

1. LO 7
2. LO 9

Essay

1. LO 3
2. LO 6

TRUE-FALSE

- | | | |
|---|---|---|
| T | F | 1. Revenue recognition criteria are necessary to determine when to recognize revenue when using both accrual and cash accounting methods. |
| T | F | 2. The sales of merchandise on credit will cause the retained earnings and long term liabilities accounts to increase. |
| T | F | 3. The purchase of equipment costing \$8,500 for \$1,500 down and the balance on account will increase both sides of the balance sheet equation by \$7,000. |
| T | F | 4. The issuance of common shares with a value of \$5,000 to purchase land will increase the common share account. |
| T | F | 5. Beginning inventory - purchases + ending inventory = COGS. |
| T | F | 6. Accumulated amortization is deducted when calculating net income. |
| T | F | 7. Straight-line amortization = (cost + residual value) ÷ estimated useful life. |
| T | F | 8. The purchase of a three-year insurance policy should be reflected on the balance sheet under current assets. |
| T | F | 9. Dividends are an expense of doing business. |
| T | F | 10. The return on assets = net income ÷ average total assets. |
| T | F | 11. The profit margin ratio = sales ÷ net income. |

- T F 12. Amortization expense is recognized in accordance with the matching principle and reflects the fair market value of an asset.
- T F 13. A declaration of dividends results in an increase in liabilities and a decrease in shareholders' equity.
- T F 14. The unclassified balance sheet does not distinguish between current and non current assets and liabilities.
- T F 15. NBV of an asset = cost – accumulated amortization, and is equal to fair market value.

True-False Summary Table

Item	Answer	Item	Answer	Item	Answer
1.	False	7.	False	13.	True
2.	False	8.	True	14.	True
3.	True	9.	False	15.	False
4.	True	10.	True		
5.	False	11.	False		
6.	False	12.	False		

MULTIPLE CHOICE

Use the following information for questions 1 and 2.

During a recent week, Cairns Consulting received \$15,000 cash from clients for services performed with a total value of \$50,000. The balance is to be received within 30 days.

- The effect of this transaction in the accounting records would be:
 - + \$50,000 revenue = + \$15,000 cash + \$35,000 accounts receivable
 - + \$35,000 net income = + \$35,000 assets
 - + \$15,000 revenue = + \$15,000 cash
 - + \$50,000 revenue = + \$50,000 accounts receivable
- The effect on the balance sheet equation for this transaction would be:
 - + \$15,000 cash = – \$35,000 accounts payable + \$50,000 retained earnings
 - + \$15,000 cash – \$35,000 accounts receivable = \$50,000 retained earnings
 - + \$15,000 cash + \$35,000 accounts receivable = + \$50,000 retained earnings
 - + \$15,000 cash = + \$15,000 retained earnings
- On July 1, 2011 Albert Company paid \$5,200 for a 1-year insurance policy. To record this transaction Albert Company should:
 - decrease cash and increase insurance expense
 - decrease cash and increase prepaid insurance
 - increase accounts payable and increase insurance expense
 - increase cash and increase prepaid insurance

4. How is cash invested by shareholders in exchange for shares initially recorded in the accounting records?
 - a. As an increase in retained earnings, and an increase in cash.
 - b. As an increase in long-term investments, and a decrease in cash.
 - c. As an increase in common shares, and a decrease in cash.
 - d. As an increase in common shares, and an increase in cash.

5. Which of the following represents the cost of goods sold calculation?
 - a. Beginning inventory + ending inventory – purchases
 - b. Beginning inventory + purchases – ending inventory
 - c. Purchases + ending inventory – beginning inventory
 - d. Purchases – beginning inventory – ending inventory

6. The COGS calculation is used to determine inventory expense in relation to sales revenue, in accordance with:
 - a. Revenue recognition criteria
 - b. Matching principle
 - c. Transaction analysis
 - d. Timeliness

7. The accounting basis that attempts to measure performance in the period in which it occurred is the:
 - a. Approval basis
 - b. Cash basis
 - c. Matching basis
 - d. Accrual basis

8. A company received a \$6,500 deposit from a customer for goods to be delivered the following month. Under the accrual and cash basis of accounting respectively the deposit would be recorded as:

	Accrual basis	Cash basis
a.	a liability.	a liability.
b.	a liability.	income.
c.	income.	a liability
d.	income.	income.

9. Which of the following is a revenue recognition criterion?
 - a. All amounts have been collected.
 - b. All expenses have been paid.
 - c. There is reasonable assurance that recorded revenues and expenses will ultimately be received or paid.
 - d. There is a high probability that company will perform the major things associated with the sale.

10. Cost of goods sold should be matched up with the revenue generated on each year's income statement because of the:
 - a. Revenue recognition criteria
 - b. Cash basis of accounting

- c. Actual basis of accounting
 - d. Accrual basis of accounting
11. If a company had \$3,500 in inventory on hand at the end of the month, and made purchases of \$7,500 during the month, the Cost of Goods Sold they should record on their Income Statement for the month would be:
- a. \$ 7,500
 - b. \$ 4,000
 - c. \$ 3,500
 - d. \$11,000
12. The following costs are initially expressed as assets but are then reclassified as expenses when they are used up, *except* for the following:
- a. Inventory
 - b. Prepaid insurance
 - c. Prepaid rent
 - d. Short term investments
13. In which of the following situations can a company recognize revenue under GAAP?
- a. A contract is signed for goods to be delivered next week.
 - b. Cash is received for goods to be delivered next week.
 - c. A company completes the production of goods for inventory and knows the costs incurred with certainty.
 - d. A company ships the goods that it received a deposit for the previous week.
14. A new company signed a lease for office space during their first month of business. At that time they paid a total of \$12,000 for first and last months' rent. At the end of the first month, the effect on the financial statements would be:
- a. \$12,000 rent expense
 - b. \$6,000 rent expense and \$6,000 prepaid rent on the balance sheet
 - c. \$12,000 prepaid rent on the balance sheet
 - d. Nothing recorded because the company has not made any sales yet
15. How are goods purchased for sale at a later date recorded in the financial statements?
- a. As inventory.
 - b. As prepaid expenses.
 - c. As cost of goods sold.
 - d. As operating expenses.
16. Under GAAP long term investments are valued at:
- a. historical cost
 - b. market value
 - c. current replacement cost
 - d. inflation adjusted historical cost
17. A company paid \$4,000 for goods it had purchased last month for resale. What is the effect of the payment?
- a. A decrease in inventory.
 - b. A decrease in accounts payable.

- c. An increase in cost of goods sold.
 - d. An increase in inventory.
18. A company sold available for resale inventory for cash. What is the effect of this sale?
- a. increase in revenue, increase in COGS, decrease in inventory
 - b. increase in revenue, decrease in COGS, increase in inventory
 - c. increase in revenue, increase in COGS, increase in inventory
 - d. increase in revenue, decrease in COGS, decrease in inventory
19. A piece of equipment was recently purchased for \$10,600 on June 30. It is estimated that it will last for 10 years and have a residual value of \$400. The amortization expense to be recognized in the year of acquisition, assuming a December year-end, would be:
- a. \$1,020.00
 - b. \$510.00
 - c. \$318.75
 - d. \$637.50
20. If a vehicle was purchased for \$6,500 and has a residual value of \$500, the annual amortization expense will be \$1,000 if the estimated useful life is:
- a. 6 years
 - b. 6.5 years
 - c. 7 years
 - d. 13 years
21. Which of the following is an example of a non-monetary transaction?
- a. The purchase of inventory on account.
 - b. The recording of amortization expense.
 - c. The expiry of prepaid insurance.
 - d. The purchase of land by issuing shares.
22. When \$10,000 of inventory is purchased with a six-month note payable bearing 4% interest, the inventory has a total cost of:
- a. \$10,400
 - b. \$10,000
 - c. \$10,200
 - d. \$9,800
23. Which of the following expenses has NO effect on the cash flow of a firm?
- a. Salaries expense
 - b. Interest expense
 - c. Amortization expense
 - d. Cost of goods sold
24. The asset that results when a customer buys goods or services on credit is:
- a. Accounts receivable
 - b. Accounts payable
 - c. Notes receivable

- d. Cash
25. The asset that results from the payment of expenses in advance is:
- Accounts receivable
 - Short term investments
 - Inventory
 - Prepays
26. Which of the following assets is never expensed on the income statement?
- Land
 - Building
 - Inventory
 - Equipment
27. On Oct. 1, 2011 Bonita, Inc. signed a 1-year \$75,000 note payable from First National Bank. The loan plus 6% interest is to be repaid on Sept. 30, 2012. Bonita's year-end is December 31. In its 2011 financial statements Bonita will record interest expense of:
- \$375
 - \$1,125
 - \$4,500
 - \$75,000
28. Dividends are declared by a vote of a company's:
- Management
 - Shareholders
 - Board of directors
 - Creditors
29. Which of the following will *not* appear on the income statement?
- Amortization
 - Interest
 - Cost of goods sold
 - Dividends
30. If dividends are declared and paid in the same accounting period, what is the net effect on the accounting equation?
- A decrease in retained earnings and an increase in expenses.
 - A decrease in cash and an increase expenses.
 - A decrease in cash and an increase in retained earnings.
 - A decrease in cash and a decrease in retained earnings.

Use the following information for questions 31-33:

Revenues	\$ 50,000	Beginning liabilities	\$245,000
Cost of goods sold	35,000	Ending assets	450,000
Operating expenses	5,500	Ending liabilities	255,000
Beginning assets	350,000		

31. The profit margin is closest to:
- 2%

- b. 19%
 - c. 30%
 - d. 89%
32. The return on assets is closest to:
- a. 2.1%
 - b. 2.4%
 - c. 3.75%
 - d. 11.13%
33. The return on equity is:
- a. 1.0%
 - b. 6.3%
 - c. 7.6%
 - d. 9.0%
34. The purchase of land for a combination of cash and issuance of shares would require which of the following?
- a. Increase in Land, Increase in Common shares, Increase in Cash
 - b. Increase in Cash, Decrease in Common shares, Decrease in Land
 - c. Increase in Land, Increase in Common shares
 - d. Increase in Land, Increase in Common shares, Decrease in Cash
35. The sale of merchandise to a customer partly for cash and partly on account would require which of the following?
- a. Increase in Accounts receivable, Increase in Cash, Increase in Sales revenue
 - b. Increase in Cash, Decrease in Accounts payable, Increase in Sales revenue
 - c. Increase in Cash, Increase in Sales revenue
 - d. Decrease in Accounts payable, Increase in Accounts receivable, Increase in Sales revenue
36. Which of the following would be the most useful in determining if a company has sufficient resources to continue operations in the short-term?
- a. The profit margin ratio.
 - b. The return on assets ratio.
 - c. The cash from operating activities.
 - d. The cash from financing activities.
37. When the board of directors declares a \$500 dividend, which of the following would be included in recording the transaction?
- a. Increase in retained earnings, increase in dividends declared
 - b. Decrease in cash, decrease in dividends payable
 - c. Increase in dividends declared, increase in dividends payable
 - d. Decrease in dividends payable, increase in cash
38. Which of the following transactions would decrease the cash from operating activities?
- a. The payment of dividends.
 - b. The sale of goods on account.
 - c. The purchase of goods on account.
 - d. The payment of wages.

39. If the company had a loan outstanding, which of the following would be used to record accrued interest at the end of the accounting period?
- Increase interest expense, decrease cash
 - Increase interest expense, increase interest payable
 - Decrease interest payable, increase interest income
 - Decrease interest payable, decrease cash
40. Which of the following would be the effect of a transaction to expense prepaid rent for the period?
- Increase prepaid rent, decrease rent expense
 - Increase rent expense, decrease cash
 - Increase prepaid rent, decrease cash
 - Increase rent expense, decrease prepaid rent

Multiple Choice Summary Table

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	A	9.	C	17.	B	25.	D	33.	B
2.	C	10.	D	18.	A	26.	A	34.	D
3.	B	11.	B	19.	B	27.	B	35.	A
4.	D	12.	D	20.	A	28.	C	36.	C
5.	B	13.	D	21.	D	29.	D	37.	C
6.	B	14.	B	22.	B	30.	D	38.	D
7.	D	15.	A	23.	C	31.	B	39.	B
8.	B	16.	A	24.	A	32.	B	40.	D

MATCHING

1. For each of the following transactions, indicate if total assets would increase I, Decrease D or NE for no effect.

- _____ 1. Sale of common shares for cash
- _____ 2. Purchase of inventory for cash
- _____ 3. Collection of accounts receivable
- _____ 4. Payment of dividends
- _____ 5. Sale of merchandise to customers on account
- _____ 6. Recording of amortization expense
- _____ 7. Payment of accounts payable
- _____ 8. Recording the cost of goods sold
- _____ 9. Receipt of cash and signed long-term note payable
- _____ 10. Purchase of machinery for cash

Solution: (7 min.)

1-I, 2-NE, 3-NE, 4-D, 5-I, 6-D, 7-D, 8-D, 9-I, 10-NE

2. For each of the following transactions, indicate the effect on shareholders' equity. Use I to indicate an increase, D to indicate a decrease, or NE for no effect.

- _____ 1. Sale of goods for cash
- _____ 2. Payment of operating expenses
- _____ 3. Sale of goods on credit
- _____ 4. Payment of dividends previously declared
- _____ 5. Payment of accounts payable
- _____ 6. Non monetary exchange of shares for assets.
- _____ 7. Payment of income taxes.
- _____ 8. Prepayment of expenses.
- _____ 9. Repurchase of shares.

____10. Recognizing amortization expense.

Solution: (5 min.)

1-I, 2-D, 3-I, 4-NE, 5-NE, 6-I, 7-D, 8-NE, 9-D, 10-D

EXERCISES

1. Analyze the effect of the following transactions using the basic accounting equation:
 - a. Bought land with an estimated fair value of \$250,000 by issuing 100,000 shares.
 - b. Issued 10,000 common shares for \$25,000 cash
 - c. Purchased a 2-year insurance policy for \$4,800.
 - d. Bought a building for \$100,000. Paid one-fourth in cash and the balance on a 10-year, 10% interest note payable.
 - e. Purchased \$9,000 of merchandise inventory on credit.
 - f. Paid utilities bill for \$750.
 - g. Sold \$8,000 of merchandise inventory for \$16,000 cash.
 - h. Paid \$2,500 on merchandise inventory previously purchased.
 - i. Declared a \$1,000 dividend.
 - j. Recognized that 1 month of the insurance coverage had expired.

Solution: (12 min.)

ASSETS =							LIABILITIES +			SHAREHOLDERS' EQUITY	
Trans.	Cash	A/R	Inv.	Prepaid expense	Land	Building	A/P	Dividend Payable	Long-term debt	CS	R/E
a.					+250,000					+250,000	
b.	+25,000									+25,000	
c.	-4,800			+4,800							
d.	-25,000					+100,000			+75,000		
e.			+9,000				+9,000				
f.	-750										-750
g.	+16,000		-8,000								+8,000
h.	-2,500						-2,500				
i.								+1,000			-1,000
j.				-200							-200
	+7,950		+1,000	+4,600	+250,000	+100,000	+6,500	+1,000	+75,000	+275,000	+6,050
	=363,550						= 363,550				

2. Shown below are the account balances for Barnie Corp. for their year-end December 31, 2011:

Cash	\$ 10,475
Accounts receivable	16,640
Inventory	98,220
Building	188,600
Accumulated amortization—building	72,600
Accounts payable	9,400
Income taxes payable	5,450
Common shares	154,525
Retained earnings, beginning	40,720
Dividends declared	7,500
Sales revenue	265,000
Cost of goods sold	143,600
Salaries and wages expense	56,900
Amortization expense	12,850
Utilities expense	3,300
Supplies expense	1,970

Income taxes expense	7,640
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Required:

Given the above information, prepare the:

- the income statement,
- the statement of retained earnings, and
- the classified balance sheet for Bernie Corporation.

Solution: (20 min.)

- Bernie Corporation
Income Statement
For the year ended December 31, 2011

Sales revenue		\$265,000
Expenses		
Cost of goods sold	143,600	
Salaries and wage expense	56,900	
Amortization expense	12,850	
Utilities expense	3,300	
Supplies expense	<u>1,970</u>	
Total operating expense		<u>218,620</u>
Earnings before taxes		46,380
Income taxes expense		<u>7,640</u>
Net income		<u>\$ 38,740</u>

- Bernie Corporation
Statement of Retained Earnings
December 31, 2011

Retained earnings, January 1, 2011	\$ 40,720
Add: Net income	38,740
Deduct: Dividends declared	<u>(7,500)</u>
Retained earnings, December 31, 2011	<u>\$71,960</u>

- Bernie Corporation
Balance Sheet
As at December 31, 2011

<u>Assets</u>		<u>Liabilities</u>	
Cash	\$ 10,475	Accounts payable	\$ 9,400
Accounts receivable	16,640	Income taxes payable	<u>5,450</u>
Inventory	<u>98,220</u>		<u>14,850</u>
	<u>125,335</u>	<u>Shareholders' Equity</u>	
Building	188,600	Common shares	154,525
Accumulated amortization	<u>(72,600)</u>	Retained earnings	<u>71,960</u>
	<u>116,000</u>	Total shareholders' equity	<u>226,485</u>
Total Assets	<u>\$241,335</u>	Total Liabilities and Shareholders' Equity	<u>\$241,335</u>

3. Zimmerman Electronics has the following balances in the company ledgers for the year ending 2011:

Mortgage	\$80,000	Interest Charges	\$10,000
Prepaid Insurance	\$ 2,000	Land	\$25,000
Short-term invest.	\$ 5,000	Office salaries	\$70,000
Common Shares	\$15,000	Sales Salaries	\$100,000
Cash	\$ 5,000	Supplies	\$20,000
Advertising	\$50,000	Insurance	\$10,000
Accounts Receivable	\$15,000	Amortization	\$20,000
Sales	\$600,000	Income Tax	\$10,000
Accounts Payable	\$12,000	Dividend Payments	\$10,000
Buildings (Net)	\$100,000	Interest Income	\$15,000
Cost of Sales	\$300,000	Inventory	\$20,000
Note Payable (due in 9 months)	\$10,000		
Retained Earnings (December 31, 2010)	\$40,000		

Using the above information prepare the following:

- An income statement
- Statement of retained earnings
- Classified balance sheet

Solution: (20 min)

Zimmerman Electronics
Income Statement
For the year ended December 31, 2011

Sales revenue		\$600,000
Expenses		
Cost of goods sold	300,000	
Advertising	50,000	
Office salaries	70,000	
Sales salaries	100,000	
Insurance	10,000	
Amortization expense	20,000	
Supplies expense	20,000	
Interest expense	<u>10,000</u>	
Total operating expense		<u>580,000</u>
Net operating income		20,000
Other Income – Interest		<u>15,000</u>
Earnings before taxes		35,000
Income tax expense		<u>10,000</u>
Net income		<u>\$ 25,000</u>

ii)

Zimmerman Electronics
Statement of Retained Earnings
December 31, 2011

Retained earnings, January 1, 2011	\$ 40,000
Add: Net income	25,000
Deduct: Dividends declared	<u>(10,000)</u>
Retained earnings, December 31, 2011	<u>\$55,000</u>

iii)

Zimmerman Electronics
Balance Sheet
December 31, 2011

<u>Assets</u>		<u>Liabilities</u>	
Cash	\$ 5,000	Accounts payable	\$ 12,000
Short-term investments	5,000	Note payable	<u>10,000</u>
Accounts receivable	15,000		
Prepaid insurance	2,000		
Inventory	<u>20,000</u>		
Total Current Assets	<u>47,000</u>	Total Current Liabilities	<u>22,000</u>
Long Term Assets		Long Term Liabilities	
Land	25,000	Mortgage	<u>80,000</u>
Buildings(net)	<u>100,000</u>		
Total Long term Assets	<u>125,000</u>	Total Liabilities	<u>102,000</u>
—		<u>Shareholders' Equity</u>	
		Common shares	15,000
		Retained earnings	<u>55,000</u>
		Total shareholders' equity	<u>70,000</u>
Total Assets	<u>\$172,000</u>	Total Liabilities and Shareholders' Equity	<u>\$172,000</u>

4. Harden Corporation had the following transactions during 2011:
- Purchased inventory costing \$325,000 on account.
 - Sold inventory to customers for \$725,000; of these sales, \$125,000 were cash sales.
 - Borrowed \$90,000 from the bank on July 1 at 6% interest payable annually at year-end.
 - Paid employees \$110,000 in cash.
 - Purchased equipment costing \$225,000 in cash.
 - Collected \$520,000 from customers on account.
 - Purchased \$55,000 of another company's shares as an investment.
 - Issued 50,000 common shares for \$3.75 per share.
 - Paid suppliers \$340,000.

- j. Collected a \$7,500 cash dividend on the share investment.
- k. Declared and paid a \$13,500 dividend during the year.
- l. Sold a piece of land for proceeds of \$150,000
- m. Paid the interest due on the loan from the bank in part c.

Required:

Prepare a cash flow statement for 2011.

Solution: (20 min.)

Harden Corporation
Cash Flow Statement
For the Year Ended December 31, 2011

Cash from operating activities:		
Receipts from customers (\$125,000 + \$520,000)	\$645,000	
Dividend from investment	7,500	
Payments to suppliers	(340,000)	
Payments to employees	(110,000)	
Payments for interest (.06 x \$90,000 x .5)	<u>(2,700)</u>	
Net cash inflow from operations		\$ 199,800
Cash from investing activities:		
Purchase of equipment	(225,000)	
Proceeds on sale of land	150,000	
Purchase of long-term investment	(55,000)	
Net cash outflow from investing		(130,000)
Cash from financing activities:		
Proceeds from bank loan	90,000	
Issued common shares	187,500	
Dividends paid	<u>(13,500)</u>	
Net cash flow from financing		<u>264,000</u>
Net cash inflow		<u>\$ 333,800</u>

5. Due to the sudden resignation of the accountant at City Autobody Inc., the sales manager had prepared the annual financial statements, shown below.

City Autobody Inc.
Income Statement
December 31, 2011

Sales Revenue	\$326,000
Costs and expenses:	
Cost of goods sold	\$ 182,000
Salaries & Wages expense	24,600
Rent expense	24,000
Prepaid rent	3,600

Dividends	5,000	
Accumulated Amortization	28,400	
Supplies expense	<u>2,100</u>	<u>269,700</u>
Earnings before taxes		\$56,300
Income tax expense		<u>26,000</u>
Net income		<u>\$30,300</u>

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City Autobody Inc.
Statement of Retained Earnings
For the Year Ended December 31, 2011

Retained earnings, January 1, 2011	\$138,200
Add: Net income	<u>30,300</u>
Retained earnings, December 31, 2011	<u>\$168,500</u>

City Autobody Inc.
Balance Sheet
For Year Ended December 31, 2011

<u>Assets</u>		<u>Liabilities</u>	
Assets		Liabilities	
Cash	\$ 22,450	Accounts payable	\$ 9,600
Accounts receivable	11,250	Long-term debt	<u>32,000</u>
Inventory	<u>92,000</u>	Total Liabilities	41,600
	<u>125,700</u>	<u>Shareholders' Equity</u>	
Building	172,000	Common shares	\$45,000
		Retained earnings	<u>168,500</u>
Less amortization expense	<u>(14,200)</u>		
	<u>157,800</u>	Total shareholders' equity	213,500
		Total liabilities and	
Total assets	<u>\$283,500</u>	shareholders' equity	<u>\$255,100</u>

Required:

- a. Identify the errors in the financial statements.
- b. Prepare corrected financial statements for City Autobody Inc..

Solution: (25 min.)

- a. The errors are:
 - The balance sheet is not classified.
 - The balance sheet is not balanced (Total Assets do not equal Liabilities + Shareholders' Equity).
 - Prepaid rent is recorded on the income statement; it should be a current asset.
 - Dividends are recorded on the income statement; they should be deducted and shown in the statement of retained earnings. (This is just a presentation error and would not affect the balance sheet from balancing).
 - Amortization expense should be recorded on the income statement and not deducted from the asset and accumulated amortization should be reflected on the balance sheet and deducted from the assets.

b.

City Autobody Inc..
Income Statement
For the Year Ended December 31, 2011

Sales Revenue		\$326,000
Costs and expenses:		
Cost of goods sold	\$ 182,000	
Salaries & Wages expense	24,600	
Amortization expense	14,200	
Rent expense	24,000	
Supplies expense	<u>2,100</u>	<u>246,900</u>
Earnings before taxes		\$79,100
Income tax expense		<u>26,000</u>
Net income		<u>\$53,100</u>

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City Autobody Inc..
Statement of Retained Earnings
For the Year Ended December 31, 2011

Retained earnings, January 1, 2011	\$138,200
Add: Net income	<u>53,100</u>
	191,300
Deduct: Dividends declared	<u>(5,000)</u>
Retained earnings, December 31, 2011	<u>\$186,300</u>

City Autobody Inc..
Balance Sheet
December 31, 2011

<u>Assets</u>		<u>Liabilities</u>	
Current Assets		Current Liabilities	
Cash	\$ 22,450	Accounts payable	\$ 9,600
Accounts receivable	11,250	Long-term debt	<u>32,000</u>
Inventory	92,000	Total Liabilities	<u>41,600</u>
Prepaid rent	<u>3,600</u>		
Total Current Assets	<u>129,300</u>	Shareholders' Equity	
Building	172,000	Common shares	\$45,000
Less: Accumulated amortization	<u>(28,400)</u>	Retained earnings	<u>186,300</u>
	<u>143,600</u>	Total shareholders' equity	<u>231,300</u>
Total assets	<u>\$272,900</u>	Total liabilities and shareholders' equity	<u>\$272,900</u>

6. Consider the following independent transactions:
- On January 1, paid, in advance, \$6,000 for first and last month's rent.
 - On January 1, paid, in advance, \$3,000 for 12 months insurance.
 - Bought a truck to use for delivery purposes for \$45,000 and paid for it with \$10,000 cash and with a loan from the bank of \$35,000 at 8%. The company

- expects to use the truck for 7 years after which they estimate the residual value will be \$3,000.
- d. Sold goods worth \$25,000 for cash, that had an inventory cost \$15,000. The company provides a warranty on the product and estimates the total warranty costs of these goods will be equal to 2% of the sales price.
 - e. Bought \$5,000 of inventory on account.

Required:

For each transaction indicate:

- i) which accounts are immediately affected and how they are affected,
- ii) which accounts will be affected in the future as a result of the transaction.

Solution: (15 min.)

- a. i) Immediate: Increase in prepaid rent of \$6,000 and decrease in cash of \$6,000.
ii) Future effect: At the end of the month \$3,000 in rent expense will be recognized, decreasing prepaid rent expense and retained earnings by the same value.
 - b. i) Immediate: Increase in prepaid insurance of \$3,000 and decrease in cash of \$3,000.
ii) Future effect: Every month a portion of the prepaid expense will need to be recognized as insurance expense. Prepaid insurance will decrease \$250/month and insurance expense will increase which decreases retained earnings.
 - c. i) Immediate: Increase in capital assets, truck of \$45,000 and decrease in cash of \$10,000 and increase in loan payable by \$35,000.
ii) Future: The truck will need to be amortized at a rate of $(\$45,000 - \$3,000)/7 = \$6,000$ per year. The truck account will decrease (or accumulated amortization will increase) and amortization expense will increase which decreases retained earnings. Increase in interest expense and decrease in cash. Interest expense is $(\$35,000 * .08) = \$2,800$ annually. (Answers may vary if students make assumptions about when the interest is paid). The increase in interest expense will decrease retained earnings.
 - d. i) Immediate: Cash increases \$25,000 and sales increase \$25,000 which increases retained earnings. Increase in cost of goods sold expense of \$15,000 and decrease in inventory of \$15,000. The increase in cost of goods sold decreases retained earnings \$15,000. The warranty expense will increase \$500 which decreases retained earnings. The other side of the warranty expense is an increase in warranty liability of \$500.
ii) Future: When the warranty services are provided the liability will decrease and cash or inventory, whichever is used to satisfy the warranty, will also decrease.
 - e. i) Immediate: Inventory increases by \$5,000 and accounts payable increases by \$5,000.
ii) Future: When the inventory is sold the inventory account will decrease and the cost of goods sold account will increase which will decrease retained earnings, all by \$5,000.
7. Wavers, Inc. began operations in September of the current year with the following transactions occurring during the month:

- Sept 1 Sold 15,000 common shares for \$13 per share.
 2 Paid \$6,300 for three months' rent in advance.
 5 Purchased \$25,000 of equipment paying 25% down and agreeing to pay the balance in two years.
 6 Purchased inventory for \$19,000 on credit.
 10 Sold on account \$16,000 of inventory for \$23,000.
 15 Paid wages of \$1,200.
 20 Collected \$8,000 from customers on account.
 25 Paid suppliers \$3,000 on account.
 31 Paid wages of \$1,100.
 31 Recognized one month's rent expense.
 31 Recognized one month's equipment amortization expense. The estimated salvage value is \$4,000 and the estimated useful life is 5 years.

Required:

Indicate the effects of these transactions on the balance sheet equation.

Solution: (20 min.)

Assets =							Liabilities +		Shareholders' Equity	
Date	Cash	+A/R	+Inv	+Prepaid Rent	+Equip-ment	=	A/P	+N/P	+CS	+R/E
1	+195,000								+195,000	
2	-6,300			+6,300						
5	-6,250				+25,000			+18,750		
6			+19,000				+19,000			
10		+23,000								+23,000
10			-16,000							-16,000
15	-1,200									-1,200
20	+8,000	- 8,000								
25	-3,000						-3,000			
31	-1,100									-1,100
31				-2,100						-2,100
31					-350					-350
Total	+185,150	+15,000	+3,000	+4,200	+24,650	=	+16,000	+18,750	+195,000	+2,250
	232,000						232,000			

SHORT ANSWER

1. Identify which statements dividends declared and paid affect and explain why.

Solution: (5 min.)

Dividends paid are a distribution of a portion of the company's earnings to the shareholders of the company. As such they are not an expense but are deducted from retained earnings when declared. When declared, a liability for dividends payable (on the balance sheet) is created and it is reduced when the dividends are paid, a short time later. The payment of the dividends reduces cash on the balance sheet. Dividends paid appear in the financing activities section of the cash flow statement as a cash outflow representing a return on the amount invested by shareholders.

2. Blythe Industries' accounting system provided the following data for the last two years:

	<u>2011</u>	<u>2010</u>
Revenues	\$ 40,000	\$ 25,000
Cost of goods sold	22,500	6,000
Operating expenses	10,000	5,000
Interest expense	1,500	750
Income tax	2,500	1,500
Total assets	150,000	120,000
Total liabilities	80,000	60,000
Total equity	70,000	60,000

Required:

Calculate the profit margin, return on assets, and return on equity for 2011. Explain what each ratio measures in general, and what each specifically indicates for Blythe Industries.

Solution: (15 min.)

- a. Profit margin = Net income ÷ Sales = $\$3,500 \div \$40,000 = 8.75\%$
Net income = $40,000 - 22,500 - 10,000 - 1,500 - 2,500 = 3,500$

This ratio measures how much profit is made on each sales dollar. For Blythe Industries, this means 8.75 cents of every sales dollar is profit.

- b. Return on assets = Net income ÷ Average total assets
= $\$3,500 \div [(120,000 + 150,000)/2]$
= 2.6%

This ratio measures the profit earned on the average amount invested in the company's assets. For Blythe Industries, each dollar invested in assets earns 2.6 cents.

- c. Return on equity = Net income ÷ Average total equity
= $\$3,500 \div [(60,000 + 70,000) \div 2]$
= 5.4%

This ratio measures the profit earned on the average shareholders' investment. For Blythe Industries each dollar invested by the shareholders earns 5.4 cents.

ESSAY

1. Explain both the accrual basis and the cash basis of accounting and indicate why most companies use the accrual basis.

Solution: (8 min.)

The accrual basis of accounting recognizes revenues in the period in which they are earned and expenses in the period in which they are incurred. This basis, coupled with the matching concept, provides a meaningful measure of performance (net income) for each period. It is meaningful because all of the profit generating activity incurred during a period is captured on the income statement.

The cash basis of accounting only recognizes revenues when the related cash is received. Expenses are only recognized when the related cash is paid out. With this basis, if a revenue or expense transaction is incurred in one period, but the relating revenue or expense transaction is not recognized until a later period, then each period's performance is distorted.

2. Why under accrual accounting is it necessary for GAAP to have revenue recognition criteria and use the matching principle? Identify the revenue recognition criteria and explain why and how the matching principle is used. Provide an example.

Solution: (12 min.)

The accrual basis of accounting attempts to measure performance in the period in which the performance takes place and not when the cash is received or paid. In order to know in which period the performance should be recognized, GAAP has developed revenue recognition criteria to allow preparers to decide when the revenue should be recognized.

The revenue recognition criteria include:

- the company had performed the major things it had to do associated with the sale.
- the amount that had been earned is known, and
- there is reasonable assurance that the amount will be collected.

The marching principle requires that all the costs / expenses incurred and associated with generating sales revenue should be matched on the income statement with the revenue that has been earned, regardless of when those expenses are paid for. Examples of where the matching principle is used include amortization and COGS.