## Multiple Choice

1. d
2. a
3. b
4. b Cost of goods sold will be understated, so net income will overstated. Also, inventory should be $\$ 1,000$ less, so current assets are overstated. (Use the accounting equation to visualize.)
5. b 6. a
6. c Because when more merchandise is purchased than can be sold, the inventory increases.
7. b 9. a 10. c
8. c (Did you remember to visualize by using the accounting equation?)

Error: $\quad \downarrow \mathrm{A}=\downarrow \mathrm{L}+\mathrm{SE}$
Correct: $\uparrow \mathrm{A}=\uparrow \mathrm{L}+\mathrm{SE}$

## Discussion Questions and Brief Exercises

1. Net Sales $=$ Sales - Sales Discounts - Sales Returns and Allowances.
2. 

| A | $=$ | L | + | SE |
| :---: | :---: | :---: | :---: | :---: |
| Merchandise Inventory |  |  |  | Sales Discounts |
| Purchase Discounts |  |  |  | Sales Ret. and Allow. |
| Purchase Ret. and Allow. |  |  | Freight-Out |  |

Comment: Merchandise inventory is an asset. The cost of this asset is affected by discounts and returns and allowances (as well as freight-in cost). Sales discounts, sales returns and allowances, and freight-out all appear on an income statement, reducing net income. Any income statement item affects net income, which in turn affects retained earnings, a part of stockholders' equity.
3. a Gross Profit = Sales - Cost of Goods Sold. Gross profit represents how much dollar revenue remains after covering the cost of merchandise sold. Gross profit must be enough to cover remaining expenses and provide a net income.
b Operating Income $=$ Gross Profit - Operating Expenses. This is the recurring income that results from the business operations.
c Net Income $=$ Operating Income $+/-$ Other Revenue/Gains and Other Expenses/Losses. This is the final amount of income for the period that includes all items.
4. If the company is in the business of selling supplies, then this would be sales revenue. Otherwise, the transaction is incidental to being in business and would be reported as "other" on the income statement.
5. The balance of inventory is an asset that is part of the trial balance. In the adjustments column, the inventory balance is adjusted for shrinkage by crediting inventory and debiting an expense, usually cost of goods sold. The adjusted balance is then carried to the balance sheet column. Inventory shrinkage is an unidentified decrease in inventory causing actual inventory to be less than what is reported in the inventory records.
6. The gross profit percentage is calculated as gross profit dividend by net sales. In this example, the gross profit percentage is: $\$ 162,000 / \$ 450,000=.36$, or $36 \%$. The first important use of this calculation is to show management what percentage of each sales dollar remains after covering the cost of the merchandise that was sold. In effect, this is a measure of profitability before considering operating expenses. Because the dollar amounts are usually large, a small percentage change in the gross profit percentage can have a large dollar impact on net income.

## SOLUTIONS Learning Goal 14, continued

The second important use of this classification is to compare profitability of different companies. Because the amount being calculated is a percentage, the profitability before operating expenses of companies of all sizes and types can be compared.
7. A multiple step income statement reveals more detail about net sales and the various types of expense categories, such as cost of goods sold, operating expenses, and other expenses. Several addition and subtraction steps are necessary to arrive at net income. A single-step income statement groups all items into two categories. It shows all items that increase net income in one group and all items that decrease net income in a second group; therefore, net income is calculated in single step by subtracting one total from the other.
8. 8. Use the formula BI + net $\mathrm{P}-\mathrm{EI}=\mathrm{C}$ of GS. $\$ 175,000+\mathrm{X}-\$ 186,000=\$ 950,000$, $\mathrm{X}=\$ 961,000$
9.

| Debit | Credit |
| :---: | :---: |
| Sales | Sales Discounts |
|  | Freight-Out |
|  | Cost of Goods Sold |
|  | Sales Ret. and Allow. |

Note that the above are closing entries, which are the opposite of the account balances.
10. This is a very important and difficult decision. Gross profit is affected by both sales price and the cost of the goods sold. Gross profit could be increased in the following ways: increase sales price, decrease cost of goods sold, increase sales price and increase cost of goods sold less, and decrease sales price but decrease cost of goods sold more.

Increasing gross profit percentage is generally a good idea if an increase in sales price or a decrease in product quality does not result in a loss of customers and a decrease in total gross profit despite the increase in gross profit percentage.

An increase in the gross profit percentage would be unfavorable if the increase in the gross profit percentage drives customers away and reduces the sales volume to the point where a decrease in total gross profit dollars is the result.

## SOLUTIONS Learning Goal 14, continued

## Reinforcement Problems

LG 14-1.

## Multiple-step format:

## Kutztown Company, Inc. <br> Income Statement For the Year Ended December 31, 2017

| Sales revenue |  | \$294,000 |
| :---: | :---: | :---: |
| Less: Sales returns and allowances | \$2,550 |  |
| Sales discounts | 3,900 | 6,450 |
| Net sales revenue |  | 287,550 |
| Cost of goods sold |  | 112,870 |
| Gross profit |  | 174,680 |
| Operating expenses |  |  |
| Selling expenses |  |  |
| Salaries and wages expense | \$55,500 |  |
| Advertising expense | 3,500 |  |
| Freight-out | 370 |  |
| Total selling expenses | 59,370 |  |
| Administrative expenses |  |  |
| Rent expense | 26,000 |  |
| Depreciation expense | 7,500 |  |
| Insurance expense | 5,000 |  |
| Utilities expense | 4,850 |  |
| Total administrative expenses | 43,350 |  |
| Total operating expenses |  | 102,720 |
| Operating income |  | 71,960 |
| Other income |  |  |
| Interest revenue | 300 |  |
| Other expense |  |  |
| Interest expense | 1,700 | 1,400 |
| Net income |  | \$ 70,560 |

## SOLUTIONS Learning Goal 14, continued

LG 14-1, continued
Single-step format:

Kutztown Company, Inc.
Income Statement
For the Year Ended December 31, 2017
Revenues

| Net sales | $\$ 287,550$ |
| :--- | ---: |
| Interest revenue | 300 |
|  | 287,850 |

Expenses
Cost of goods sold $\quad \$ 112,870$
Selling expenses $\quad 59,370$
Administrative expenses 43,350
Interest expense $\quad 1,700$
Total expenses
217,290
Net income $\quad \underline{\underline{\$ 70,560}}$

## SOLUTIONS

LG 14-1, continued
c. Closing entries

| Date | Account | Post. <br> Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
|  | Closing Entries |  |  |  |
| Dec. 31 | Sales Revenue |  | 294,000 |  |
|  | Interest Revenue |  | 300 |  |
|  | Income Summary |  |  | 294,300 |
|  |  |  |  |  |
| 31 | Income Summary |  | 223,740 |  |
|  | Cost of Goods Sold |  |  | 112,870 |
|  | Sales Returns and Allowances |  |  | 2,550 |
|  | Sales Discounts |  |  | 3,900 |
|  | Salaries and Wages Expense |  |  | 55,500 |
|  | Advertising Expense |  |  | 3,500 |
|  | Freight-out |  |  | 370 |
|  | Rent Expense |  |  | 26,000 |
|  | Depreciation Expense |  |  | 7,500 |
|  | Insurance Expense |  |  | 5,000 |
|  | Utilities Expense |  |  | 4,850 |
|  | Interest Expense |  |  | 1,700 |
|  |  |  |  |  |
| 30 | Income Summary |  | 70,560 |  |
|  | Retained Earnings |  |  | 70,560 |
|  |  |  |  |  |

Comment: There are no dividends to record in this problem.

## SOLUTIONS

Learning Goal 14, continued
LG 14-2.

| Northern Colorado Company, Inc. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Worksheet |  |  |  |  |  |  |  |  |  |  |
| For the Year Ended December 31, 2017 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Adj | sted |  | me |  | nce |
|  | Trial Balance |  | Adjustments |  | Trial Balance |  | Statement |  | Sheet |  |
| Account Titles | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. | Dr. | Cr. |
| Cash | 95,160 |  |  |  | 95,160 |  |  |  | 95,160 |  |
| Accounts Receivable | 15,200 |  |  |  | 15,200 |  |  |  | 15,200 |  |
| Merchandise Inventory | 13,200 |  |  | (d) 1,700 | 11,500 |  |  |  | 11,500 |  |
| Store Supplies | 1,100 |  |  | (b) 700 | 400 |  |  |  | 400 |  |
| Prepaid Insurance | 2,950 |  |  | (c) 2,000 | 950 |  |  |  | 950 |  |
| Office Equipment | 15,500 |  |  |  | 15,500 |  |  |  | 15,500 |  |
| Accum. Dephn.- |  |  |  |  |  |  |  |  |  |  |
| Office Equipment |  | 10,250 |  | (a) 500 |  | 10,750 |  |  |  | 10,750 |
| Store Equipment | 127,800 |  |  |  | 127,800 |  |  |  | 127,800 |  |
| Accum. Dep'n.- |  |  |  |  |  |  |  |  |  |  |
| Store Equipment |  | 127,800 |  |  |  | 127,800 |  |  |  | 127,800 |
| Accounts Payable |  | 51,300 |  |  |  | 51,300 |  |  |  | 51,300 |
| Sales Tax Payable |  | 750 |  |  |  | 750 |  |  |  | 750 |
| Common Stock |  | 10,000 |  |  |  | 10,000 |  |  |  | 10,000 |
| Retained Earnings |  | 57,900 |  |  |  | 57,900 |  |  |  | 57,900 |
| Dividends | 25,000 |  |  |  | 25,000 |  |  |  | 25,000 |  |
| Sales |  | 510,500 |  |  |  | 510,500 |  | 510,500 |  |  |
| Sales Returns and |  |  |  |  |  |  |  |  |  |  |
| Allowances | 2,500 |  |  |  | 2,500 |  | 2,500 |  |  |  |
| Sales Discounts | 3,250 |  |  |  | 3,250 |  | 3,250 |  |  |  |
| Cost of Goods Sold | 353,300 |  | (d) 1,700 |  | 355,000 |  | 355,000 |  |  |  |
| Insurance Expense | 1,590 |  | (c) 2,000 |  | 3,590 |  | 3,590 |  |  |  |
| Salaries and Wages Expense | 85,500 |  |  |  | 85,500 |  | 85,500 |  |  |  |
| Rent Expense | 24,000 |  |  |  | 24,000 |  | 24,000 |  |  |  |
| Utilities Expense | 2,450 |  |  |  | 2,450 |  | 2,450 |  |  |  |
| Supplies Expense |  |  | (b) 700 |  | 700 |  | 700 |  |  |  |
| Depreciation Expense |  |  | (a) 500 |  | 500 |  | 500 |  |  |  |
| Totals | $\underline{\underline{768,500}}$ | $\underline{\underline{768,500}}$ | $\underline{\underline{4,900}}$ | $\underline{\underline{4,900}}$ | $\underline{\underline{769,000}}$ | $\underline{\underline{769,000}}$ | 477,490 | 510,500 | 291,510 | 258,500 |
| Net Income |  |  |  |  |  |  | 33,010 |  |  | 33,010 |
| Totals |  |  |  |  |  |  | $\underline{\underline{510,500}}$ | 510,500 | $\underline{\underline{291,510}}$ | $\underline{\underline{291,510}}$ |

## SOLUTIONS Learning Goal 14, continued

LG 14-2, continued

| Northern Colorado Company, Inc. <br> Income Statement <br> For the Year Ended December 31, 2017 |  |  |  |  |
| :--- | ---: | ---: | :---: | :---: |
| Sales revenue |  |  |  |  |
| Less:Sales returns and allowances <br> Sales discounts | $\$ 2,500$ | $\$ 510,500$ |  |  |
| Net sales revenue | 3,250 | 5,750 |  |  |
| Cost of goods sold |  | 504,750 |  |  |
| Gross profit |  | $\underline{355,000}$ |  |  |
| Operating expenses | 85,500 |  |  |  |
| Salaries and wages expense | 24,000 |  |  |  |
| Rent expense | 3,590 |  |  |  |
| Insurance expense | 2,450 |  |  |  |
| Utilities expense | 700 |  |  |  |
| Supplies expense | 500 |  |  |  |
| Depreciation expense |  | $\underline{116,740}$ |  |  |
| Total operating expenses |  | $\underline{\$ 33,010}$ |  |  |
| Net income |  |  |  |  |

Note: There are no selling expenses, so the expenses are simply operating expenses.

| Northern Colorado Company, Inc. <br> Income Statement <br> For the Year Ended December 31, 2017 |  |  |
| :--- | :--- | :--- |
| Revenue |  | $\$ 504,750$ |
| Net sales | $\$ 355,000$ |  |
| Expenses | 85,500 |  |
| $\quad$ Cost of goods sold | 24,000 |  |
| Salaries and wages expense | 3,590 |  |
| Rent expense | 2,450 |  |
| Insurance expense | 700 |  |
| Utilities expense | 500 |  |
| Supplies expense |  | $\underline{471,740}$ |
| Depreciation expense |  | $\underline{\$ 33,010}$ |
| $\quad$ Total expenses |  |  |
| Net income |  |  |
|  |  |  |

## SOLUTIONS

## LG 14-2, continued

c. Description of the purpose and effect of each adjusting entry:
(a) The purpose is to record depreciation expense for the period. The effect is to increase depreciation expense and also increase accumulated depreciation, which reduces the book value of the office equipment. The store equipment is already fully depreciated.
(b) The purpose is to record the amount of store supplies that have been used up. The effect is to decrease the asset Store Supplies and to increase Supplies Expense.
(c) The purpose is to record the amount of prepaid insurance that has been used up. The effect is to decrease the asset Prepaid Insurance and increase Insurance Expense.
d.

| Dec. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 31 | Sales |  | 510,500 |  |
|  | Income Summary |  |  | 510,500 |
| 31 | Income Summary |  | 477,490 |  |
|  | Cost of Goods Sold |  |  | 355,000 |
|  | Sales Returns and Allowances |  | 2,500 |  |
|  | Sales Discounts |  | 3,250 |  |
|  | Insurance Expense |  | 3,590 |  |
|  | Admin. Salaries and Wages |  | 85,500 |  |
|  | Rent Expense |  | 24,000 |  |
|  | Utilities Expense |  | 2,450 |  |
|  | Supplies Expense |  | 700 |  |
|  | Depreciation Expense |  | 500 |  |
| 31 | Income Summary |  |  |  |
|  | Retained Earnings |  |  |  |
|  |  |  |  | 33,010 |
| 31 | Retained Earnings |  |  |  |
|  | Dividends | 25,000 |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## SOLUTIONS

LG 14-3.
a.

Note: For all these items you can use the formula: BI + P - (C of GS) = EI (Learning Goal 22)
(a) (Item $b$ must be calculated first.) $\$ 25,700+a-\$ 31,280=\$ 141,850, a=\$ 147,430$
(b) $\$ 215,300-\$ 73,450=\$ 141,850$
(c) (Item d must be calculated first.) $\$ 316,310+\$ 51,540=\$ 367,850$
(d) $\$ 50,410+\$ 281,200-\$ 15,300=\$ 316,310$
(e) $e+\$ 98,320-\$ 17,600=\$ 100,330, e=\$ 19,610$
(f) $\$ 150,500-\$ 100,330=\$ 50,170$
(g) $\$ 135,150+\$ 57,900=\$ 193,050$
(h) $\$ 22,150+\$ 125,800-h=\$ 135,150, h=\$ 12,800$
b.

Company \#3
Income Statement For the Year Ended June 30, 2017

Net sales revenue
Cost of goods sold 100,330
Gross profit
50,170
Operating expenses
38,500
Net income
\$ 11,670

## SOLUTIONS

LG 14-4.
a.

| Sioux City Enterprises, Inc. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Worksheet |  |  |  |  |  |  |  |  |  |  |
| For the Month Ended June 30, 2017 |  |  |  |  |  |  |  |  |  |  |
| Account Titles |  |  |  |  | Adju | sted | Inco |  | Bala | nce |
|  | Trial Balance |  | Adjustments |  | Trial Balance |  | Statement |  | Sheet |  |
|  | Dr. | Cr . | Dr. | Cr . | Dr. | Cr . | Dr. | Cr . | Dr. | Cr . |
| Cash | 11,300 |  |  |  | 11,300 |  |  |  | 11,300 |  |
| Short-Term Investments | 28,250 |  |  |  | 28,250 |  |  |  | 28,250 |  |
| Accounts Receivable | 26,700 |  | (a) 2,750 |  | 29,450 |  |  |  | 29,450 |  |
| Merchandise Inventory | 19,950 |  |  | (e) 300 | 19,650 |  |  |  | 19,650 |  |
| Office Supplies | 920 |  |  |  | 920 |  |  |  | 920 |  |
| Office Equipment | 25,800 |  |  |  | 25,800 |  |  |  | 25,800 |  |
| Accum. Dep'n- |  |  |  |  |  |  |  |  |  |  |
| Office Equipment |  | 6,700 |  | (b) 150 |  | 6,850 |  |  |  | 6,850 |
| Store Equipment | 314,500 |  |  |  | 314,500 |  |  |  | 314,500 |  |
| Accum. Dep'n.- |  |  |  |  |  |  |  |  |  |  |
| Store Equipment |  | 91,500 |  | (b) 1,400 |  | 92,900 |  |  |  | 92,900 |
| Wages Payable |  |  |  | (d) 3,200 |  | 3,200 |  |  |  | 3,200 |
| Accounts Payable |  | 34,200 |  |  |  | 34,200 |  |  |  | 34,200 |
| Notes Payable |  | 135,000 |  |  |  | 135,000 |  |  |  | 135,000 |
| Common Stock |  | 10,000 |  |  |  | 10,000 |  |  |  | 10,000 |
| Retained Earnings |  | 110,260 |  |  |  | 110,260 |  |  |  | 110,260 |
| Dividends | 4,500 |  |  |  | 4,500 |  |  |  | 4,500 |  |
| Sales |  | 378,500 |  | (a) 2,750 |  | 381,250 |  | 381,250 |  |  |
| Sales Returns and Allow. | 8,150 |  |  |  | 8,150 |  | 8,150 |  |  |  |
| Sales Discounts | 4,200 |  |  |  | 4,200 |  | 4,200 |  |  |  |
| Cost of Goods Sold | 265,700 |  | (e) 300 |  | 266,000 |  | 266,000 |  |  |  |
| Admin. Wages Expense | 25,000 |  | (d) 2,000 |  | 27,000 |  | 27,000 |  |  |  |
| Sales Wages Expense | 17,000 |  | (d) 1,200 |  | 18,200 |  | 18,200 |  |  |  |
| Insurance Expense | 2,150 |  |  |  | 2,150 |  | 2,150 |  |  |  |
| Rent Expense | 4,000 |  |  |  | 4,000 |  | 4,000 |  |  |  |
| Advertising Expense | 3,880 |  |  |  | 3,880 |  | 3,880 |  |  |  |
| Freight-out | 2,960 |  |  |  | 2,960 |  | 2,960 |  |  |  |
| Utilities Expense | 3,200 |  |  |  | 3,200 |  | 3,200 |  |  |  |
| Depreciation Expense- |  |  |  |  |  |  |  |  |  |  |
| Office Equipment |  |  | (b) 150 |  | 150 |  | 150 |  |  |  |
| Depreciation Expense- |  |  |  |  |  |  |  |  |  |  |
| Store Equipment |  |  | (b) 1,400 |  | 1,400 |  | 1,400 |  |  |  |
| Interest Expense |  |  | (c) 1,450 |  | 1,450 |  | 1,450 |  |  |  |
| Interest Payable |  |  |  | (c) 1,450 |  | 1,450 |  |  |  | 1,450 |
| Rental income |  | 2,000 |  |  |  | 2,000 |  | 2,000 |  |  |
| Totals | $\underline{\underline{768,160}}$ | $\underline{\underline{768,160}}$ | $\underline{\underline{9,250}}$ | $\underline{\underline{9,250}}$ | $\underline{\underline{777,110}}$ | $\underline{\underline{777,110}}$ | 342,740 | 383,250 | 434,370 | 393,860 |
| Net Income |  |  |  |  |  |  | 40,510 |  |  | 40,510 |
|  |  |  |  |  |  |  | $\underline{\underline{383,250}}$ | $\underline{\underline{383,250}}$ | 434,370 | $\underline{\underline{434,370}}$ |
|  |  |  |  |  |  |  |  |  |  |  |

## SOLUTIONS Learning Goal 14, continued

## LG 14-4, continued

b.

Multiple-step income statement:

## Sioux City Enterprises, Inc. <br> Income Statement For the Month Ended June 30, 2017

| Sales revenue |  | $\$ 381,250$ |
| :--- | ---: | :---: |
| Less: $\quad$ Sales returns and allowances | $\$ 8,150$ |  |
| $\quad$ Sales discounts | 4,200 | $\frac{12,350}{368,900}$ |
| Net sales revenue |  | $\underline{266,000}$ |
| Cost of goods sold |  | 102,900 |

Operating expenses Selling expenses
Salaries and wages expense $\quad \$ 18,200$
Advertising expense 3,880
Freight-out $\quad \underline{2,960}$
Total selling expenses
25,040
Administrative expenses
Salaries and wages expense 27,000
Rent expense 4,000
Utilities expense 3,200
Insurance expense 2,150
Depreciation expense $\quad \underline{1,550}$
Total administrative expense $\quad \underline{37,900}$
Total operating expenses
$\frac{62,940}{39,960}$
Operating income
Other revenues
Rental income 2,000
Other expenses
Interest expense 1,450
550
Net income
\$ 40,510

## SOLUTIONS Learning Goal 14, continued

LG 14-4, continued

## Single-step income statement:

## Sioux City Enterprises, Inc. <br> Income Statement <br> For the Month Ended June 30, 2017

Revenue

| Net sales |  | $\$ 368,900$ |
| :--- | ---: | ---: |
| Rental income |  | 3,000 |
| $\quad$ Total revenue |  |  |
| Expenses | $\$ 266,000$ |  |
| Cost of goods sold | 45,200 |  |
| Salaries and wages expense | 4,000 |  |
| Rent expense | 3,880 |  |
| Advertising expense | 3,200 |  |
| Utilities expense | 2,960 |  |
| Freight-out expense | 2,150 |  |
| Insurance expense | 1,550 |  |
| Depreciation expense | 1,450 |  |
| Interest expense |  | $\underline{\$ 30,390}$ |
| $\quad$ Total expenses |  | $\underline{\$ 40,510}$ |

Statement of owner's equity:

## Sioux City Enterprises, Inc. <br> Statement of Retained Earnings <br> For the Month Ended June 30, 2017

| Retained Earnings June 1 | $\$ 110,260$ |
| :--- | ---: |
| Add: Net income | 40,510 |
| Less: Dividends | $\underline{150,770}$ |
| Retained Earnings June 30 | $\underline{\underline{\$ 146,270}}$ |

## SOLUTIONS Learning Goal 14, continued

LG 14-4, continued

## Balance Sheet

## SOLUTIONS

## Learning Goal 14, continued

## LG 14-4, continued

c. Description of the purpose and the effect of the adjusting entries:
(a) The purpose is to record revenue that has been earned but not yet received (accrued revenue). The effect is to increase Accounts Receivable and increase Sales revenue.
(b) The purpose is to record depreciation expense for the period for the store equipment and the office equipment. The effect is to increase depreciation expense and to increase the accumulated depreciation for the store equipment and the office equipment. This reduces the book value of each asset.
(c) The purpose is to record interest expense that has been incurred but not yet paid (accrued expense). The effect is to increase Interest Expense and to increase Interest Payable.
(d) The purpose is to record wages expense that has been incurred but not yet paid (accrued expense). The effect is to increase Wages Expense and to increase Wages Payable.
(e) The $\$ 300$ adjustment is to record inventory shrinkage; the effect is to reduce merchandise inventory on the books to the balance of the physical count and to increase cost of goods sold.

Closing entry

| Date | Account | Post. Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2008 |  |  |  |  |
| June 30 | Sales |  | 381,250 |  |
|  | Rental Income |  | 2,000 |  |
|  | Income Summary |  |  | 383,250 |
|  |  |  |  |  |
| 30 | Income Summary |  | 342,740 |  |
|  | Cost of Goods Sold |  |  | 266,000 |
|  | Sales Returns and Allowances |  |  | 8,150 |
|  | Sales Discounts |  |  | 4,200 |
|  | Administrative Wages Expense |  |  | 27,000 |
|  | Sales Wages Expense |  |  | 18,200 |
|  | Insurance Expense |  |  | 2,150 |
|  | Rent Expense |  |  | 4,000 |
|  | Advertising Expense |  |  | 3,880 |
|  | Freight-out |  |  | 2,960 |
|  | Utilities Expense |  |  | 3,200 |
|  | Depreciation Expense-Office Equipment |  |  | 150 |
|  | Depreciation Expense-Store Equipment |  |  | 1,400 |
|  | Interest Expense |  |  | 1,450 |
|  |  |  |  |  |

SOLUTIONS
LG 14-4, continued

| Date | Account | Post. <br> Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| June 30 | Income Summary |  | 40,510 |  |
|  | Retained Earnings |  |  | 40,510 |
|  |  |  |  | 4,500 |
|  | Retained Earnings |  |  | 4,500 |
|  | Dividends |  |  |  |
|  |  |  |  |  |

d. The current assets substantially exceed the current liabilities; however, the following payables will require a cash payment in July: Wages Payable $\$ 3,200$, Accounts Payable $\$ 34,200$, and Interest Payable $\$ 1,450$. This is a definite July cash requirement of $\$ 38,850$. (Some part of the current portion of long-term debt may also need to be paid in July, but that is not disclosed on the balance sheet.)

What liquid resources are available to meet the $\$ 38,850$ cash requirement? Accounts Receivable will provide some amount close to $\$ 29,000$, if most of the existing receivables are collected in July. (New receivables will be created from July sales.) The rest of the cash (about $\$ 10,000$ ) will come from the Cash or Short-Term Investments account. Therefore, it is likely that there may be a decrease of about $\$ 10,000$ in the liquid assets during July. What could change this? Borrowing money or substantial cash inflow from July operations would add liquid assets. Estimating the "liquidity" situation is always important.

LG 14-5.
a. Adjustments:
(a) The purpose is to record the using up of $\$ 2,500$ of Prepaid Rent. The effect is to reduce the asset Prepaid Rent and increase Rent Expense.
(b) The purpose is to record $\$ 1,500$ of sales that have been earned but not yet received (accrued revenue). The effect is to increase Accounts Receivable and increase Sales.
(c) The purpose is to record $\$ 6,400$ of unearned revenue that has been earned during the period. The effect is to decrease Unearned Revenue and increase Sales.
(d) The purpose is to record that $\$ 350$ of office supplies have been consumed during the period. The effect is to decrease Office Supplies and increase Supplies Expense.
(e) The purpose is to record $\$ 550$ of Advertising expense that has been incurred but not yet paid (accrued expense). The effect is to increase Advertising Expense and increase Accounts Payable.
(f) The purpose is to record $\$ 1,200$ of inventory shrinkage. The effect is to reduce the Merchandise Inventory account and to increase the Cost of Goods Sold account.

## LG 14-5, continued

b.

| Date | Account | Post. Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| $20 x x$ | Closing Entries |  |  |  |
|  |  |  |  |  |
| Dec. 31 | Sales |  | 268,400 |  |
|  | Interest Revenue |  | 750 |  |
|  | Income Summary |  |  | 269,150 |
|  |  |  |  |  |
| 31 | Income Summary |  | 209,850 |  |
|  | Sales Returns and Allowances |  |  | 1,500 |
|  | Sales Discounts |  |  | 1,200 |
|  | Cost of Goods Sold |  |  | 190,100 |
|  | Supplies Expense |  |  | 800 |
|  | Insurance Expense |  |  | 250 |
|  | Advertising Expense |  |  | 550 |
|  | Rent Expense |  |  | 2,500 |
|  | Wages Expense |  |  | 12,950 |
|  |  |  |  |  |
| 31 | Income Summary |  | 59,300 |  |
|  | Retained Earnings |  |  | 59,300 |
|  |  |  |  |  |
| 31 | Retained Earnings |  | 4,700 |  |
|  | Dividends |  |  | 4,700 |
|  |  |  |  |  |

c. The business has a net income for the period of $\$ 59,300$ because the credits to Income Summary of 269,150 exceed the debits to Income Summary 209,850. (A net loss would occur if the debits to Income Summary exceeded the credits to Income Summary.)

## SOLUTIONS

LG 14-6.

| Date | Account | Post. Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
|  | Adjusting Entries |  |  |  |
| June 30 | Supplies Expense |  | 600 |  |
|  | Office Supplies |  |  | 600 |
|  |  |  |  |  |
| 30 | Wages Expense |  | 2,600 |  |
|  | Wages Payable |  |  | 2,600 |
|  |  |  |  |  |
| 30 | Depreciation Expense |  | 650 |  |
|  | Accumulated Depreciation |  |  | 650 |
|  |  |  |  |  |
|  | Closing Entries |  |  |  |
|  | Sales Revenue |  | 204,200 |  |
|  | Interest Revenue |  | 300 |  |
|  | Income Summary |  |  | 204,500 |
|  |  |  | 146,380 |  |
|  | Income Summary |  |  |  |
|  | Cost of Goods Sold |  |  | 116,530 |
|  | Sales Returns and Allowances |  |  | 1,700 |
|  | Sales Discounts |  |  | 3,500 |
|  | Rent Expense |  |  | 4,500 |
|  | Wages Expense |  |  | 14,700 |
|  | Freight-out Expense |  |  | 700 |
|  | Utilities Expense |  |  | 1,600 |
|  | Advertising Expense |  |  | 1,900 |
|  | Supplies Expense |  |  | 600 |
|  | Depreciation Expense |  |  | 650 |
|  |  |  |  |  |
| 30 | Income Summary |  | 58,120 |  |
|  | Retained Earnings |  |  | 58,120 |
|  |  |  |  |  |
| 30 | Retained Earnings |  | 5,000 |  |
|  | Dividends |  |  | 5,000 |
|  |  |  |  |  |

Comment: Don't forget to include the effects of the adjusting entries for Supplies Expense, Wages
Expense, and Depreciation Expense into the account balances before you do the closing.

LG 14-7.
a.

| Date | Account | Post. Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2017 |  |  |  |  |
| Dec. 31 | Sales |  | 892,450 |  |
|  | Other Income-Rental |  | 9,500 |  |
|  | Interest Earned |  | 3,360 |  |
|  | Income Summary |  |  | 905,310 |
|  |  |  |  |  |
| 30 | Income Summary |  | 779,650 |  |
|  | Sales Returns and Allowances |  |  | 5,200 |
|  | Sales Discounts |  |  | 15,730 |
|  | Cost of Goods Sold |  |  | 570,100 |
|  | Salaries Expense-Administrative |  |  | 94,700 |
|  | Salaries Expense-Sales and Marketing |  |  | 25,600 |
|  | Insurance Expense |  |  | 7,500 |
|  | Rent Expense |  |  | 24,850 |
|  | Utilities Expense |  |  | 2,480 |
|  | Advertising Expense |  |  | 11,300 |
|  | Customer Delivery Expense |  |  | 2,400 |
|  | Depreciation Expense-Office Equipment |  |  | 2,200 |
|  | Depreciation Expense-Store Equipment |  |  | 12,590 |
|  | Interest Expense |  |  | 5,000 |
|  |  |  |  |  |
| 30 | Income Summary |  | 125,660 |  |
|  | Retained Earnings |  |  | 125,660 |
|  |  |  |  |  |
| 30 | Retained Earnings |  | 69,500 |  |
|  | Dividends |  |  | 69,500 |
|  |  |  |  |  |
|  |  |  |  |  |

## SOLUTIONS Learning Goal 14, continued

## LG 14-7, continued

b.

Income statement

## McGuire Company, Inc.

Income Statement For the Year Ended December 31, 2017

| Sales revenue |  |  | \$892,450 |
| :---: | :---: | :---: | :---: |
| Less: Sales returns and allowances |  | \$5,200 |  |
| Sales discounts |  | 15,730 | 20,930 |
| Net sales revenue |  |  | 871,520 |
| Cost of goods sold |  |  | 570,100 |
| Gross profit |  |  | 301,420 |
| Operating expenses |  |  |  |
| Selling expenses |  |  |  |
| Salaries expense | \$25,600 |  |  |
| Advertising expense | 11,300 |  |  |
| Customer delivery expense | 2,400 |  |  |
| Total selling expenses |  | 39,300 |  |
| Administrative expenses |  |  |  |
| Salaries expense | 94,700 |  |  |
| Rent expense | 24,850 |  |  |
| Depreciation expense | 14,790 |  |  |
| Insurance expense | 7,500 |  |  |
| Utilities expense | 2,480 |  |  |
| Total administrative expense |  | 144,320 |  |
| Total operating expenses |  |  | 183,620 |
| Operating income |  |  | 117,800 |
| Other revenues |  |  |  |
| Interest revenue | 3,360 |  |  |
| Rental income | 9,500 |  |  |
| Other expenses |  |  |  |
| Interest expense | 5,000 |  | 7,860 |
| Net income |  |  | \$125,660 |

## SOLUTIONS Learning Goal 14, continued

LG 14-7, continued
b.

Single-step income statement

| $\begin{array}{c}\text { McGuire Company, Inc. } \\ \text { Income Statement }\end{array}$ |  |
| :--- | ---: | ---: |
| For the Year Ended December 31, 2017 |  |$]$.

## Statement of retained earnings

## McGuire Company, Inc. <br> Statement of Retained Earnings For the Year Ended December 31, 2017

| Retained Earnings, January 1 | $\$ 195,170$ |
| :--- | ---: |
| $\quad$ Net income | $\underline{125,660}$ |
|  | 320,380 |
| Less: Dividends | $\underline{69,500}$ |
| Retained Earnings, December 31 | $\underline{\underline{\$ 251,330}}$ |

Note that in a corporation an owner (stockholder) investment would increase the common stock account, and not affect retained earnings.

## SOLUTIONS Learning Goal 14, continued

## LG 14-7, continued

## Balance Sheet

| McGuire Company, Inc. Balance Sheet December 31, 2017 |  |  |
| :---: | :---: | :---: |
| Assets |  |  |
| Current assets |  |  |
| Cash | \$ 16,850 |  |
| Short-term investments | 8,100 |  |
| Accounts receivable | 42,700 |  |
| Merchandise inventory | 164,200 |  |
| Prepaid travel | 2,500 |  |
| Total current assets |  | \$234,350 |
| Property, plant, and equipment |  |  |
| Office equipment | 29,200 |  |
| Less: Accumulated depreciation | 15,300 | 13,900 |
| Store equipment | 125,300 |  |
| Less: Accumulated depreciation | 75,900 | 49,400 |
| Land |  | 75,000 |
| Total assets |  | \$372,650 |
| Liabilities and Stockholders' Equity |  |  |
| Current liabilities: |  |  |
| Accounts payable | \$38,600 |  |
| Sales tax payable | 17,220 |  |
| Unearned revenue | 3,500 |  |
| Total current liabilities |  | \$59,320 |
| Long-term liabilities |  |  |
| Notes payable |  | 50,000 |
| Total liabilities |  | 109,320 |
| Stockholders' equity |  |  |
| Paid-in capital |  |  |
| Common stock | 12,000 |  |
| Retained earnings | 251,330 | 263,330 |
| Total stockholders' equity |  | \$ 372,650 |
| Total liabilities and owner's equity |  |  |

c. The total current assets are significantly greater than total current liabilities, and this generally is a good situation. However, in this situation, most of the current asset value consists of inventory. The current sources of cash are Cash, Short-Term Investments, and Accounts Receivable, which total $\$ 67,650$. The combination of Accounts Payable and Sales Tax Payable will require cash of $\$ 55,820$ to be paid in January. It appears that in January almost all the current sources of cash will be used up and the liquidity situation will become difficult. What could change this? If the business borrows cash or has especially good cash inflows from January operations, the situation could improve.

## SOLUTIONS

## LG 14-8.

a.
a. $\$ 2,000+\$ 111,400=\$ 113,400$
b. $\$ 111,400-\$ 50,160=\$ 61,240$
c. $\$ 212,500-\$ 201,600=\$ 10,900$
d. $\$ 201,600-\$ 128,700=\$ 72,900$
e. First, $f$ must be calculated: $\$ 414,400+\$ 7,500=\$ 421,900$
f. $\$ 99,200+\$ 315,200=\$ 414,400$
g. $\$ 117,350-\$ 2,500=\$ 114,850$
h. $\$ 114,850-\$ 71,000=\$ 43,850$
i. $\$ 314,850-\$ 312,000=\$ 2,850$
j. $\$ 312,000-\$ 95,900=\$ 216,100$
b. Gross profit percentages:
\#1 \$50,160/\$111,400 = . 45
\#2 $\$ 72,900 / \$ 201,600=.362$
\#3 \$99,200/\$414,400 = . 239
\#4 \$43,850/\$114,850 = . 382
\#5 \$95,900/\$312,000 = . 307
c. Company \#5 shows the greatest profit in total dollars; however, Company \#1 has the highest gross profit percentage with $\$ .45$ of each sales dollar retained as gross profit.

