SOLUTIONS Learning Goal 12

Multiple Choice

1. a
2. b
3. a
4. a Debit Income Summary and credit Inventory for the beginning inventory balance and credit Income Summary and debit inventory for the ending inventory balance.
5. b Ending inventory is an inter-column entry between the income statement and balance sheet columns.
6. d On a single-step income statement both cost of goods sold and interest expense are single-line items as part of total expenses—there is only one expense section for all expenses.
7. a This account has a debit balance, so it is credited and increases the total debit to Income Summary.
8. c
9. d See the example in the income statement column of the worksheet in this learning goal.
10. a This kind of question is a good situation to apply the formula BI + net P – EI = C of GS. Simply put some numbers into the formula so that beginning inventory is $3,000 less than ending inventory. You can also understand this intuitively without numbers by observing that cost of goods sold is equivalent to current purchases less the amount of purchases that were added to inventory. If ending inventory is greater than beginning inventory, then not all the current purchases were sold.
11. d This kind of question is a good situation to apply the formula BI + net P – EI = C of GS. Simply put some numbers into the formula so that ending inventory is $5,000 less than beginning inventory. You can also understand this intuitively without numbers by observing that cost of goods sold is equal to current purchases plus the amount of goods that had to be taken out of inventory to sell. If ending inventory is less than beginning inventory, then the current purchases were not sufficient and must have been less than cost of goods sold by the amount that had to be taken out of inventory.
12. d
13. a ($539,600 – $297,475)/$539,600 = .4487
14. $51,000. Net sales of $305,000 minus cost of goods sold of $200,000 = $105,000 gross profit. $105,000 – ($24,000 + $30,000) operating expenses = $51,000 operating income. Interest expense is not part of operating income.

Discussion Questions and Brief Exercises

1. Net Sales = Sales – Sales Discounts – Sales Returns and Allowances.
2.

Cost of goods sold			
Beginning inventory			$ 4,500
Purchases		$ 27,000	
Less: Purchase returns and allowances	$ 500		
Purchase discounts	1,800	2,300	
Net purchases		24,700	
Add: Freight-in		1,200	
Cost of goods purchased			25,900
Cost of goods available for sale			30,400
Ending inventory			6,100
Cost of goods sold			24,300

SOLUTIONS Learning Goal 12, continued

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. a) The inventory change would be reported in the adjustments column of the worksheet as follows: 1) Debit income summary $15,000 and credit inventory $15,000. 2) Debit inventory $12,000 and credit income summary $12,000.
   b) Enter beginning inventory balance of $15,000 as a debit in the income statement column. Then credit $12,000 ending inventory in the income statement column and debit $12,000 in the balance sheet column.

   In both cases the procedure removes the old (beginning inventory) balance and treats the entire amount as an expense, while recording the ending inventory as an asset that reduces expenses. If beginning inventory is greater, there will be an increase in cost of goods sold expense and a decrease in net income. If ending inventory is greater, there will be a decrease in cost of goods sold expense an increase in net income.
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. 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. Use the formula BI + net P – EI = C of GS. $175,000 + X – $186,000 = $950,000, X = $961,000
9.

Debit	Credit
Sales	Purchases
Purchase Discounts	Beginning Inventory
Ending Inventory	Freight-in
Purchase Returns/Allow.	Sales Discounts

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.

SOLUTIONS Learning Goal 12, continued

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.

Reinforcement Problems

LG 12-1.

a.

Kutztown, Inc.
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				
Inventory, January 1			15,350	
Purchases		$109,900		
Less: Purchase returns and allowances	$ 700			
Purchase discounts	3,100	3,800		
Net purchases		106,100		
Add: Freight-in		920		
Cost of goods purchased			107,020	
Cost of goods available for sale			122,370	
Inventory, December 31			9,500	
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 12, continued

LG 12-1, *continued*

b.

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

Revenues		$287,550
Net sales		300
Interest revenue		287,850
Total revenues		
Expenses		
Cost of goods sold	$112,870	
Selling expenses	59,370	
Administrative expenses	43,350	
Interest expense	1,700	
Total expenses		217,290
Net income		$ 70,560

SOLUTIONS

Learning Goal 12, continued

LG 12-1, *continued*

c. Adjusting system

Date	Account	Post. Ref.	Dr.	Cr.
	Closing Entries			
Dec. 31	Sales Revenue		294,000	
	Interest Revenue		300	
	Purchase Returns and Allowances		700	
	Purchase Discounts		3,100	
	Income Summary			298,100
31	Income Summary		221,690	
	Purchases			109,900
	Sales Returns and Allowances			2,550
	Sales Discounts			3,900
	Freight-in			920
	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		76,410	
	Retained Earnings			76,410

Comments:

a. Remember that with the adjusting system, Income Summary has been adjusted for merchandise inventory as part of the adjusting entries.
b. There are no dividends to record in this problem.

SOLUTIONS Learning Goal 12, continued

LG 12-1, *continued*

c. Closing system

Date	Account	Post. Ref.	Dr.	Cr.
	Closing Entries			
Dec. 31	Sales Revenue		294,000	
	Interest Revenue		300	
	Inventory (ending)		9,500	
	Purchase Returns and Allowances		700	
	Purchase Discounts		3,100	
	Income Summary			307,600
31	Income Summary		237,040	
	Inventory (beginning)			15,350
	Purchases			109,900
	Sales Returns and Allowances			2,550
	Sales Discounts			3,900
	Freight-in			920
	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 12, continued

LG 12-2. Closing system worksheet:

Northern Colorado Company, Inc.
Worksheet
For the Year Ended December 31, 2017

	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance 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	22,100				22,100		22,100	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. Dep'n.— 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			
Merchandise Purchases	345,000				345,000		345,000			
Purchase Discounts		800				800		800		
Purchase Returns and Allowances		900				900		900		
Freight-in	1,100				1,100		1,100			
Insurance Expense	1,590		(c) 2,000		3,590		3,590			
Admin. Salaries Wages	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	770,200	770,200	3,200	3,200	770,700	770,700	490,690	523,700	291,510	258,500
Net Income							33,010			33,010
Totals							523,700	523,700	291,510	291,510

SOLUTIONS

Learning Goal 12, continued

LG 12-2, *continued*

b.

Northern Colorado Company, Inc.
Income Statement
For the Year Ended December 31, 2017

Sales revenue				$510,500
Less: Sales returns and allowances			$2,500	
Sales discounts			3,250	5,750
Net sales revenue				504,750
Cost of goods sold				
Inventory, January 1			22,100	
Purchases		$345,000		
Less: Purchase returns and allowances	$800			
Purchase discounts	900	1,700		
Net purchases		343,300		
Add: Freight-in		1,100		
Cost of goods purchased			344,400	
Cost of goods available for sale			366,500	
Inventory, December 31			11,500	
Cost of goods sold				355,000
Gross profit				149,750
Operating expenses				
Salaries and wages expense			85,500	
Rent expense			24,000	
Insurance expense			3,590	
Utilities expense			2,450	
Supplies expense			700	
Depreciation expense			500	
Total operating expenses				116,740
Net income				$ 33,010

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

SOLUTIONS

Learning Goal 12, continued

LG 12-2, *continued*

b.

Northern Colorado Company, Inc.
Income Statement
For the Year Ended December 31, 2017

Revenue		
Net sales		$504,750
Expenses		
Cost of goods sold	$355,000	
Salaries and wages expense	85,500	
Rent expense	24,000	
Insurance expense	3,590	
Utilities expense	2,450	
Supplies expense	700	
Depreciation expense	500	
Total expenses		471,740
Net income		$33,010

c. Adjusting entries

(a) Records depreciation expense in the office equipment, increasing Depreciation Expense, and increasing Accumulated Depreciation.
(b) Records decrease in Supplies, increasing Supplies Expense, and decreasing Store Supplies.
(c) Records the use of Prepaid Insurance, decreasing Prepaid Insurance, and increasing Insurance Expense.

SOLUTIONS Learning Goal 12, continued

LG 12-2, *continued*

Closing system closing entry:

Dec.				
31	Merchandise Inventory		11,500	
	Sales		510,500	
	Purchase Discounts		800	
	Purchase Returns and Allowances		900	
	Income Summary			523,700
31	Income Summary		490,690	
	Merchandise Inventory			22,100
	Sales Returns and Allowances			2,500
	Sales Discounts			3,250
	Merchandise Purchases			345,000
	Freight-in			1,100
	Insurance Expense			3,590
	Admin. Salaries Wages			85,500
	Rent Expense			24,000
	Utilities Expense			2,450
	Supplies Expense			700
	Depreciation Expense			500
31	Income Summary		33,010	
	Retained Earnings			33,010
31	Retained Earnings		25,000	
	Dividends			25,000

SOLUTIONS

Learning Goal 12, continued

LG 12-2, *continued*

Adjusting system worksheet:

Northern Colorado Company, Inc.										
Worksheet										
For the Year Ended December 31, 2017										
	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance 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	22,100		(e) 11,500	(d) 22,100	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. Dep'n.—										
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			
Merchandise Purchases	345,000				345,000		345,000			
Purchase Discounts		800				800		800		
Purchase Returns and										
Allowances		900				900		900		
Freight-in	1,100				1,100		1,100			
Insurance Expense	1,590		(c) 2,000		3,590		3,590			
Admin. Salaries Wages	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			
Income Summary			(d) 22,100	(e) 11,500	22,100	11,500	22,100	11,500		
Totals	770,200	770,200	36,800	36,800	782,200	782,200	490,690	523,700	291,510	258,500
Net Income							33,010			33,010
Totals							523,700	523,700	291,510	291,510

SOLUTIONS Learning Goal 12, continued

LG 12-2, *continued*

Adjusting system closing entry:

The income statement is the same as the income statement answer for the closing system. The method used has no effect whatsoever on the financial statements.

Closing entry:

Dec.				
31	Sales		510,500	
	Purchase Discounts		800	
	Purchase Returns and Allowances		900	
	Income Summary			512,200
31	Income Summary		468,590	
	Sales Returns and Allowances			2,500
	Sales Discounts			3,250
	Merchandise Purchases			345,000
	Freight-in			1,100
	Insurance Expense			3,590
	Admin. Salaries Wages			85,500
	Rent Expense			24,000
	Utilities Expense			2,450
	Supplies Expense			700
	Depreciation Expense			500
31	Income Summary		33,010	
	Retained Earnings			33,010
31	Retained Earnings		25,000	
	Dividends			25,000

Don't forget that Income Summary was also debited $22,100 and credited $11,500 in the adjusting entries. This makes the balance in Income Summary $33,010.

SOLUTIONS

Learning Goal 12, continued

LG 12-3.

a.

Worksheet: Closing Procedure for Inventory

Sioux City Enterprises Worksheet For the Month Ended June 30, 2017										
Account Titles	Trial Balance		Adjustments		Adjusted Trial Balance		Income Statement		Balance 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	34,020				34,020		34,020	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		15,000				15,000				15,000
Retained Earnings		105,260				105,260				105,260
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			
Purchases	258,000				258,000		258,000			
Purchase Discounts		5,720				5,720		5,720		
Purchase Returns and										
Allowances		2,500				2,500		2,500		
Freight-in	1,850				1,850		1,850			
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	776,380	776,380	8,950	8,950	785,330	785,330	370,610	411,120	434,370	393,860
Net Income							40,510			40,510
							411,120	411,120	434,370	434,370

SOLUTIONS

Learning Goal 12, continued

LG 12-3, *continued*

a.

Worksheet: Adjusting Procedure for Inventory

Sioux City Enterprises Worksheet For the Month Ended June 30, 2017										
					Adjusted		Income		Balance	
Account Titles	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	34,020		**(f) 19,650**	**(e) 34,020**	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 (10 year)		135,000				135,000				135,000
Common Stock		15,000				15,000				15,000
Retained Earnings		105,260				105,260				105,260
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			
Purchases	258,000				258,000		258,000			
Purchase Discounts		5,720				5,720		5,720		
Purchase Returns and										
Allowances		2,500				2,500		2,500		
Freight-in	1,850				1,850		1,850			
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		
Income Summary			**(e) 34,020**	**(f) 19,650**	34,020	19,650	34,020	19,650		
Totals	776,380	776,380	62,620	62,620	804,980	804,980	370,610	411,120	434,370	393,860
Net Income							40,510			40,510
							411,120	411,120	434,370	434,370

SOLUTIONS

Learning Goal 12, continued

LG 12-3, *continued*

b.

Multiple-step income statement:

Sioux City Enterprises
Income Statement
For the Month Ended June 30, 2017

Sales revenue				$381,250
Less: Sales returns and allowances			$8,150	
Sales discounts			4,200	12,350
Net sales revenue				368,900
Cost of goods sold				
Inventory, June 1			34,020	
Purchases		$258,000		
Less: Purchase returns and allowances	$2,500			
Purchase discounts	5,720	8,220		
Net purchases		249,780		
Add: Freight-in		1,850		
Cost of goods purchased			251,630	
Cost of goods available for sale			285,650	
Inventory, June 30			19,650	
Cost of goods sold				266,000
Gross profit				102,900
Operating expenses				
Selling expenses				
Salaries and wages expense		18,200		
Advertising expense		3,880		
Freight-out		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		1,550		
Total administrative expense			37,900	
Total operating expenses				62,940
Operating income				39,960
Other revenues				
Rental income			2,000	
Other expenses				
Interest expense			1,450	550
Net income				$40,510

SOLUTIONS

Learning Goal 12, continued

LG 12-3, *continued*

Single-step income statement:

Sioux City Enterprises
Income Statement
For the Month Ended June 30, 2017

Revenues		
Net sales		$368,900
Rental income		2,000
Total revenue		370,900
Expenses		
Cost of goods sold	$266,000	
Salaries and wages expense	45,200	
Rent expense	4,000	
Advertising expense	3,880	
Utilities expense	3,200	
Freight-out expense	2,960	
Insurance expense	2,150	
Depreciation expense	1,550	
Interest expense	1,450	
Total expenses		330,390
Net income		$40,510

Statement of owner's equity:

Sioux City Enterprises
Statement of Retained Earnings
For the Month Ended June 30, 2017

Retained Earnings June 1	$105,260
Add: Net income	40,510
	145,770
Less: Dividends	4,500
Retained Earnings June 30	$141,270

SOLUTIONS

Learning Goal 12, continued

LG 12-3, *continued*

Balance sheet

Sioux City Enterprises
Balance Sheet
June 30, 2017

Assets		
Current Assets		
Cash	$ 11,300	
Short-term investments	28,250	
Accounts receivable	29,450	
Merchandise inventory	19,650	
Office supplies	920	
Total current assets		$89,570
Property, Plant, and Equipment		
Office equipment	25,800	
Less: Accumulated depreciation	6,850	18,950
Store equipment	314,500	
Less: Accumulated depreciation	92,900	221,600
Total assets		$ 330,120
Liabilities and Stockholders' Equity		
Current liabilities:		
Wages payable	$ 3,200	
Accounts payable	34,200	
Interest payable	1,450	
Current portion of long-term debt	3,200	
Total current liabilities		$42,050
Long-term liabilities		
Notes payable	135,000	
Less: current portion (above)	3,200	
Total long-term liabilities		131,800
Total liabilities		173,850
Stockholders' equity:		
Paid in capital		
Common stock	15,000	
Retained earnings	141,270	
Total stockholder's equity		156,270
Total liabilities and owner's equity		$ 330,120

SOLUTIONS

Learning Goal 12, continued

LG 12-3, *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.

Closing procedure entry

Date	Account	Post. Ref.	Dr.	Cr.
2017				
June 30	Merchandise Inventory		19,650	
	Sales		381,250	
	Purchase Discounts		5,720	
	Purchase Returns and Allowances		2,500	
	Rental Income		2,000	
	Income Summary			411,120
30	Income Summary		370,610	
	Merchandise Inventory			34,020
	Sales Returns and Allowances			8,150
	Sales Discounts			4,200
	Purchases			258,000
	Freight-in			1,850
	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

Learning Goal 12, continued

LG 12-3, *continued*

Date	Account	Post. Ref.	Dr.	Cr.
2017				
June 30	Income Summary		40,510	
	Retained Earnings			40,510
30	Retained Earnings		4,500	
	Dividends			4,500

Adjusting procedure closing entry

Date	Account	Post. Ref.	Dr.	Cr.
2017	*Closing Entries*			
June 30	Sales		381,250	
	Purchase Discounts		5,720	
	Purchase Returns and Allowances		2,500	
	Rental Income		2,000	
	Income Summary			391,470
30	Income Summary		336,590	
	Sales Returns and Allowances			8,150
	Sales Discounts			4,200
	Purchases			258,000
	Freight-in			1,850
	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

Learning Goal 12, continued

LG 12-3, *continued*

Date	Account	Post. Ref.	Dr.	Cr.
June 30	Income Summary		54,880	
	Retained Earnings			54,880
30	Retained Earnings		4,500	
	Dividends			4,500

Comment: Notice that the Merchandise Inventory is not part of the closing entry when using the adjusting procedure. The Merchandise Inventory is included in the adjusting entries. This results in a credit to Income Summary of $19,650 for the ending inventory and a debit to Income Summary of $34,020 for the beginning inventory. Combining this net debit balance in Income Summary of $14,370 with the $54,880 credit balance in Income Summary from the closing entry results in net income of $40,510.

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 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 accounts. 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.

SOLUTIONS Learning Goal 12, continued

LG 12-4.

Adjusting System

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
30	Income Summary		25,420	
	Merchandise Inventory, June 1			25,420
30	Merchandise Inventory, June 30		17,800	
	Income Summary			17,800
	Closing Entries			
June 30	Sales Revenue		204,200	
	Interest Revenue		300	
	Purchase Discounts		2,950	
	Purchase Returns and Allowances		3,400	
	Income Summary			210,850
June 30	Income Summary		145,110	
	Sales Returns and Allowances			1,700
	Sales Discounts			3,500
	Purchases			114,700
	Rent Expense			4,500
	Wages Expense			14,700
	Freight-in Expense			560
	Freight-out Expense			700
	Utilities Expense			1,600
	Advertising Expense			1,900
	Supplies Expense			600
	Depreciation Expense			650

SOLUTIONS Learning Goal 12, continued

LG 12-4, *continued*

Date	Account	Post. Ref.	Dr.	Cr.
	Adjusting Entries			
June 30	Income Summary		65,740	
	Retained Earnings			65,740
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 on the account balances before you do the closing.

Closing System

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	
	Merchandise Inventory, June 30		17,800	
	Purchase Discounts		2,950	
	Purchase Returns and Allowances		3,400	
	Income Summary			228,650

SOLUTIONS Learning Goal 12, continued

LG 12-4, *continued*

Date	Account	Post. Ref.	Dr.	Cr.
	Adjusting Entries			
June 30	Income Summary		170,530	
	Merchandise Inventory, June 1			25,420
	Sales Returns and Allowances			1,700
	Sales Discounts			3,500
	Purchases			114,700
	Rent Expense			4,500
	Wages Expense			14,700
	Freight-in Expense			560
	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 on the account balances before you do the closing.

LG 12-5.

a. On this type of worksheet (closing system), cost of goods sold is not one single account, but rather consists of several accounts that together make up the cost of goods sold calculation. The account balances are located in the income statement column:

Merchandise Inventory (beginning)	$ 8,100	(debit balance)
Merchandise Inventory (ending)	16,350	(credit balance)
Purchases	161,000	(debit balance)
Purchase Returns and Allowances	5,300	(credit balance)
Purchase Discounts.	2,750	(credit balance)
Freight-in	800	(debit balance)

SOLUTIONS

Learning Goal 12, continued

LG 12-5, *continued*

b. Notice that because all the items appear on the income statement, stockholders' equity is always affected. Cash or accounts receivable is the asset usually affected.

Item	A	=	L	+	SE
1) Sales discounts	↓				↓
2) Sales returns and allowances	↓				↓
3) Freight-in	↓				↓
4) Freight-out	↓				↓
5) Purchases	↓				↓
6) Purchase discounts	↑				↑
7) Purchase returns and allowances			↓		↑

1) Less cash is received. 2) Accounts receivable is reduced. 3) Cash is paid for the freight-bill (to pay the accounts payable to the shipper). 4) Cash is paid for the freight bill (to pay the accounts payable to the shipper). 5) Cash is paid for merchandise (to pay the accounts payable to the seller. Purchases increases cost of goods sold). 6) The merchandise is cheaper so cost of goods sold will be less. 7) Accounts payable decreases and purchase returns/allowances reduces cost of goods sold.

LG 12-6.

a.

(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 Freight-in Expense that has been incurred but not yet paid (accrued expense). The effect is to increase Freight-in Expense and increase Accounts Payable.

SOLUTIONS

Learning Goal 12, continued

LG 12-6, *continued*

b.

Date	Account	Post. Ref.	Dr.	Cr.
20*xx*	*Closing Entries*			
Dec. 31	Sales		268,400	
	Purchase Returns and Allowances		4,100	
	Purchase Discounts		3,600	
	Merchandise Inventory (ending)		64,000	
	Income Summary			340,100
31	Income Summary		269,850	
	Merchandise Inventory (beginning)			59,800
	Sales Returns and Allowances			1,500
	Sales Discounts			1,200
	Purchases			188,900
	Freight-in Expense			1,950
	Rent Expense			2,500
	Wages Expense			13,200
	Supplies Expense			800
31	Income Summary		70,250	
	Retained Earnings			70,250
31	Retained Earnings		4,700	
	Dividends			4,700

c. The business has a net income for the period of 70,250 because the credits to Income Summary of 340,100 exceed the debits to Income Summary of 269,850. (A net loss would occur if the debits to Income Summary exceeded the credits to Income Summary.)

SOLUTIONS Learning Goal 12, continued

LG 12-7.

a.

(a) (Item *b* must be calculated first.) \$25,700 + *a* – \$31,280 = \$151,850, *a* = \$157,430 (See item *b* below.)
(b) \$215,300 – \$63,450 = \$151,850
(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
(i) 29.5%
(j) 14%
(k) 33.3%
(l) 30%

b.

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

Net Sales Revenue		\$150,500
Cost of goods sold		
Beginning inventory	\$19,610	
Net purchases	98,320	
Cost of goods available for sale	117,930	
Less: Ending inventory	17,600	
Cost of goods sold		100,330
Gross profit		50,170
Operating expenses		38,500
Net income		\$11,670

c. Company #1 is the most profitable in terms of total dollars at \$63,450 gross profit. Company #3 is the most profitable in terms of gross profit percentage at 33.3%, which means that about 33% of every sales dollar becomes gross profit.