2 BASIC MANAGERIAL ACCOUNTING CONCEPTS

DISCUSSION QUESTIONS

1. Cost is the amount of cash or cash equivalent sacrificed for goods and/or services that are expected to bring a current or future benefit to the organization. An expense is an expired cost; the benefit has been used up.

2. Accumulating costs is the way that costs are measured and recorded. Assigning costs is linking costs to some cost object. For example, a company accumulates or tracks costs by entering them into the general ledger accounts. Direct materials would be entered into the materials account; direct labor would be entered into the direct labor account. Then, these costs are assigned to units of product.

3. A cost object is something for which you want to know the cost. For example, a cost object may be the human resources department of a company. The costs related to that cost object might include salaries of employees of that department, telephone costs for that department, and depreciation on office equipment. Another example is a customer group of a company. Atlantic City and Las Vegas casinos routinely treat heavy gamblers to free rooms, food, and drink. The casino owners know the benefits yielded by these high rollers and need to know the costs of keeping them happy, such as the opportunity cost of lost revenue from the rooms, the cost of the food, and so on.

4. A direct cost is one that can be traced to the cost object, typically by physical observation. An indirect cost cannot be traced easily and accurately to the cost object. The same cost can be direct

for one purpose and indirect for another. For example, the salaries paid to purchasing department employees in a factory are a direct cost to the purchasing department but an indirect cost (overhead) to units of product.

5. Allocation means that an indirect cost is assigned to a cost object using a reasonable and convenient method. Since no causal relationship exists, allocating indirect costs is based on convenience or some assumed linkage.

6. A product is tangible in that you can see, feel, and take it with you. Examples of products include a tube of toothpaste, a car, or an orange. A service is a task or an activity performed for a customer. For example, the dental hygienist who cleans your teeth provides a service.

7. Manufacturing overhead includes all product costs other than direct materials and direct labor. It is

because the remaining manufacturing (product) costs are gathered into one category that overhead is often thought of as a "catchall."

8. Direct materials purchases are first entered into the materials inventory. They may or may not be used during the month. Only when the materials are withdrawn from inventory for use in production are they known as "direct materials."

9. Prime cost is the sum of direct materials and direct labor. Conversion cost is the sum of direct labor and overhead. Total product cost consists of direct materials, direct labor, and overhead. This is not equal to the sum of prime cost and conversion cost because then direct labor would be double counted.

10. A period cost is one that is expensed immediately, rather than being inventoried like a product cost

11. Selling cost is the cost of selling and delivering products and services. Examples include free samples, advertising, sponsorship of sporting events, commissions on sales, and the depreciation on delivery trucks (such as Coca-Cola or Pepsi trucks).

12. The cost of goods manufactured is the sum of direct materials, direct labor, and overhead used in producing the units completed during the current period and transferred to finished goods inventory.

13. The cost of goods manufactured is the cost of direct materials, direct labor, and overhead for the units produced (completed) during a time period. The cost of goods sold is the cost of direct materials, direct labor, and overhead for the units sold during a time period. The number of units produced is not necessarily equal to the number of units sold during a period. For example, a company may produce 1,000 pairs of jeans in a month but sell only 900 pairs.

14. The income statement for a manufacturing firm includes the cost of goods sold, which is the sum of direct materials, direct labor, and manufacturing overhead. The income statement for a service firm contains no cost of goods sold because there is no product to purchase or to manufacture and, thus, there is no inventory account to expense as cost of goods sold. In addition, because there is no cost of goods sold on the income statement of a service firm, there is no gross margin, unlike a manufacturing firm.

15. The percentage column on the income statement gives some insight into the relative spending on the various expense categories. These percentages can then be compared with those of other firms in the same industry to see if the company's spending appears to be in line or out of line with the experiences of others.

MULTIPLE-CHOICE QUESTIONS

2-1. c

2-2. d

2-3. b Conversion Cost per Unit = $6 + $19 = $25

2-4. b Sales = $75 × 2,000 units = $150,000
Production Cost per Unit = $15 + $6 + $19 = $40
Cost of Goods Sold = $40 × 2,000 = $80,000
Gross Margin = $150,000 – $80,000 = $70,000

2-5. e

2-6. d

2-7. c

2-8. d

2-9. b

2-10. a

2-11. e Prime Cost per Unit = $8.65 + $1.10 = $9.75

2-12. b

2-13. a Total Prime Cost = $50,000 + $20,000 = $70,000
Prime Cost per Unit = $70,000/10,000 units = $7.00

2-14. c Total Conversion Cost = $20,000 + $130,000 = $150,000
Conversion Cost per Unit = $150,000/10,000 units = $15.00

2-15. b Cost of Goods Sold = $50,000 + $20,000 + $130,000 = $200,000
Cost of Goods Sold per Unit = $200,000/10,000 units = $20.00

2-16. b Sales = $31 × 10,000 = $310,000
Gross Margin = $310,000 – $200,000 = $110,000
Gross Margin per Unit = $110,000/10,000 units = $11.00

2-17. c Period Expense = $40,000 + $36,000 = $76,000

2-18. a Operating Income = $310,000 – $200,000 – $76,000 = $34,000

CORNERSTONE EXERCISES

CE 2-19

1. **Direct materials…… $ 32,000**
Direct labor…… 28,000
Manufacturing overhead…… 60,000
Total product cost…… $120,000

2. **Per-Unit Product Cost = $120,000 / 500 units = $240**

Therefore, one hockey stick costs $240 to produce.

CE 2-20

1. **Direct materials…… 32,000**
Direct labor…. 28,000
Total prime cost…. $60,000

2. **Per-Unit Prime Cost = $60,000 / 500 units = $120**

3. **Direct labor…… 28,000**
Manufacturing overhead…. 60,000
Total Conversion Cost…. $88,000

4. **Per-Unit Conversion Cost = $88,000 / 500 units = $176**

CE 2-21

Materials inventory, June 1…….	**$ 48,000**
Purchases……	**132,000**
Materials inventory, June 30……	**(45,000)**
Direct materials used in production……	**$135,000**

CE 2-22

1.	**Direct materials***	**$135,000**
	Direct labor	**113,000**
	Manufacturing overhead	**187,000**
	Total manufacturing cost for June	**$435,000**
	WIP, June 1	**65,000**
	WIP, June 30	**(63,000)**
	Cost of goods manufactured	**$437,000**

*** Direct Materials = $48,000 + $132,000 – $45,000 = $135,000**
[This was calculated in Cornerstone Exercise 2-21.]

2. Per-Unit Cost of Goods Manufactured = $437,000 / 1,900 units = $230

CE 2-23

1.

Slapshot Company Cost of Goods Sold Statement For the Month of June	
Cost of goods manufactured	**$437,000**
Finished goods inventory, June 1	**80,000**
Finished goods inventory, June 30	**(84,000)**
Cost of goods sold	**$433,000**

2.

Number of units sold:	
Finished goods inventory, June 1	**350**
Units finished during June	**1,900**
Finished goods inventory, June 30	**(370)**
Units sold during June	**1,880**

CE 2-24

Slapshot Company Income Statement For the Month of June		
Sales revenue (1,880 × $400)……		$752,000
Cost of goods sold ……..……		433,000
Gross margin……..……		$319,000
Less:		
Selling expense:		
Commissions (0.10 × $752,000)……	$75,200	
Fixed selling expense ……..……	65,000	140,200
Administrative expense ……...……		53,800
Operating income……..…		$125,000

CE 2-25

Slapshot Company Income Statement For the Month of June			
			Percent*
Sales revenue (1,880 × $400)……		$752,000	100.0
Cost of goods sold ……		433,000	57.6
Gross margin……		$319,000	42.4
Less:			
Selling expense:			
Commissions (0.10 × $752,000)……	$75,200		
Fixed selling expense……	65,000	140,200	18.6
Administrative expense……		53,800	7.2
Operating income……		$125,000	16.6

* Steps in calculating the percentages (the percentages are rounded):

1. Sales Revenue Percent = $752,000/$752,000 = 1.00, or 100% (sales revenue is always 100% of sales revenue)
2. Cost of Goods Sold Percent = $433,000/$752,000 = 0.576, or 57.6%
3. Gross Margin Percent = $319,000/$752,000 = 0.424, or 42.4%
4. Selling Expense Percent = $140,200/$752,000 = 0.186, or 18.6%
5. Administrative Expense Percent = $53,800/$752,000 = 0.072, or 7.2%
6. Operating Income Percent = $125,000/$752,000 = 0.166, or 16.6%

CE 2-26

1.

Allstar Exposure
Income Statement
For the Past Month

Sales revenues		**$410,000**
Less operating expenses:		
Sales commissions	**$ 50,000**	
Technology	**75,000**	
Research and development	**200,000**	
Selling expenses	**10,000**	
Administrative expenses	**35,000**	**370,000**
Operating income		**$ 40,000**

2. Allstar has no Cost of Goods Sold line item because the company is a service provider, rather than a manufacturer. Therefore, as a service provider, Allstar has no inventory costs (raw materials, work in process, or finished goods) to flow through to Cost of Goods Sold when it recognizes its sales revenue. Instead, all of the costs it incurs in providing advertising services appear as Operating Expenses on the income statement.

EXERCISES

E 2-27

1.

Cost	Salaries	Commissions
Derek	$25,000	$6,000
Lawanna	30,000	1,500
Total	$55,000	$7,500

2. All of Derek's time is spent selling, so all of his salary cost is selling cost. Lawanna spends two-thirds of her time selling, so $20,000 ($30,000 × 2/3) of her salary is selling cost. The remainder is administrative cost. All commissions are selling costs.

Cost	Selling Costs	Administrative Costs
Derek's salary	$25,000	—
Lawanna's salary	20,000	$10,000
Derek's commissions	6,000	—
Lawanna's commissions	1,500	—
Total	$52,500	$10,000

E 2-28

1. The two products that Holmes sells are playhouses and the installation of playhouses. The playhouse itself is a product, and the installation is a service.

2. Holmes could assign the costs to production and to installation, but if the installation is a minor part of its business, it probably does not go to the trouble.

3. The opportunity cost of the installation process is the loss of the playhouses that could have been built by the two workers who were pulled off the production line.

E 2-29

a. Salary of cell supervisor—Direct

b. Power to heat and cool the plant in which the cell is located—Indirect

c. Materials used to produce the motors—Direct

d. Maintenance for the cell's equipment—Indirect

e. Labor used to produce motors—Direct

f. Cafeteria that services the plant's employees—Indirect

g. Depreciation on the plant—Indirect

h. Depreciation on equipment used to produce the motors—Direct

i. Ordering costs for materials used in production—Indirect

j. Engineering support—Indirect

k. Cost of maintaining the plant and grounds—Indirect

l. Cost of the plant's personnel office—Indirect

m. Property tax on the plant and land—Indirect

E 2-30

1. Direct materials—Product cost
Direct labor—Product cost
Manufacturing overhead—Product cost
Selling expense—Period cost

2.

Direct materials……	**$ 7,000**
Direct labor……	**3,000**
Manufacturing overhead……	**2,000**
Total product cost……	**$12,000**

3. Unit Product Cost = $\frac{\$12,000}{4,000 \text{ units}}$ = $3.00

E 2-31

1.

Costs	Product Cost			Period Cost	
	Direct Materials	Direct Labor	Manufact. Overhead	Selling Expense	Administrative Expense
Direct materials……	$216,000				
Factory rent……			$ 24,000		
Direct labor……		$120,000			
Factory utilities……			6,300		
Supervision in the factory……			50,000		
Indirect labor in the factory……			30,000		
Depreciation on factory equipment……			9,000		
Sales commissions……				$ 27,000	
Sales salaries……				65,000	
Advertising……				37,000	
Depreciation on the headquarters building……					$ 10,000
Salary of the corporate receptionist……					30,000
Other administrative costs…					175,000
Salary of the factory receptionist……			28,000		
Totals……	$216,000	$120,000	$147,300	$129,000	$215,000

2.

Direct materials……	$216,000
Direct labor……	120,000
Manufacturing overhead….	147,300
Total product cost….	$483,300

3. Total Period Cost = $129,000 + $215,000 = $344,000

4. Unit Product Cost = $\frac{\$483,300}{30,000 \text{ units}}$ = $16.11

E 2-32

Costs	Direct Materials	Direct Labor	Manufact. Overhead
Jars	X		
Sugar	X		
Fruit	X		
Pectin	X		
Boxes	X		
Depreciation on the factory building			X
Cooking equipment operators' wages		X	
Filling equipment operators' wages		X	
Packers' wages		X	
Janitors' wages			X
Receptionist's wages			X
Telephone			X
Utilities			X
Rental of Santa Suit			X
Supervisory labor salaries			X
Insurance on factory building			X
Depreciation on factory equipment			X
Oil to lubricate filling equipment			X

E 2-33

1.

Direct materials	$400,000
Direct labor	80,000
Manufacturing overhead	320,000
Total product cost	$800,000

2. Product Cost per Unit $= \frac{\text{Total Product Cost}}{\text{Number of Units}}$

$= \frac{\$800,000}{4,000 \text{ units}} = \$200.00$

E 2-34

1.

Direct materials	$400,000
Direct labor	80,000
Total prime cost	$480,000

2. Prime Cost per Unit $= \frac{\text{Total Prime Cost}}{\text{Number of Units}}$

$= \frac{\$480,000}{4,000 \text{ units}}$

$= \$120.00$

3.

Direct labor	$ 80,000
Manufacturing overhead	320,000
Total conversion cost	$400,000

4. Conversion Cost per Unit $= \frac{\text{Total Conversion Cost}}{\text{Number of Units}}$

$= \frac{\$400,000}{4,000 \text{ units}}$

$= \$100.00$

E 2-35

1.

Materials inventory, June 1	$ 3,700
Materials purchases in June	15,500
Materials inventory, June 30	(1,600)
Direct materials used in June	$17,600

2. As shown in the exercise, the cost of direct materials purchased in June is $15,500. Also, as calculated in response to Requirement 1, the cost of direct materials used in production in June is $17,600. Therefore, in this case, the cost of direct materials used is greater than the cost of direct material purchased, which means that—for whatever reason—Hannah Banana Bakers decided to let its ending inventory (of $1,600) drop below its beginning inventory (of $3,700). The difference in beginning and ending inventories ($3,700 – $1,600 = $2,100) accounts for the difference between the cost of direct materials purchased and the cost of direct materials used in production (also $2,100; or $17,600 – $15,500). Hannah might have elected to let its ending materials inventory drop in order to save cash for purchases other than buying materials inventory. Also, it might have elected to do so to reduce its materials inventory holding costs (e.g., inspection, handling, insurance, etc.). Furthermore, Hannah might have reduced its ending materials inventory because it foresaw that demand in July would be lower than in June and did not want to be left holding additional inventory at the end of July. Alternately, Hannah might have experienced stronger than expected sales in June and used more direct materials in production than it had anticipated when purchasing materials. Regardless of the reason, it is helpful for students to understand the relationship between the cost of materials purchased versus the cost of materials used in production in a given period.

E 2-36

1.	Finished goods inventory, January 1	6,800
	Units completed during the year	94,000
	Finished goods inventory, December 31	(7,200)
	Units sold	93,600
2.	Units sold	93,600
	× Unit cost	× $2,200
	Cost of goods sold	$205,920,000

E 2-37

1.	Materials inventory, March 1	$14,000
	Materials purchases in March	25,000
	Materials inventory, March 31	(6,500)
	Direct materials used in March	$32,500
2.	Direct materials	$32,500
	Direct labor	10,000
	Manufacturing overhead	42,000
	Total manufacturing cost	$84,500
3.	Total manufacturing cost	$84,500
	Add: Work in process, March 1	8,000
	Less: Work in process, March 31	(4,000)
	Cost of goods manufactured	$88,500

E 2-38

Cost of goods manufactured*	$88,500
Finished goods, March 1	9,000
Finished goods, March 31	(7,000)
Cost of goods sold	$90,500

* See solution to Exercise 2-37.

E 2-39

Direct materials	$180,000
Direct labor	505,000
Manufacturing overhead	110,000
Cost of goods sold	$795,000

Note: **Because there were no beginning nor ending work-in-process or finished goods inventories, no adjustments were made for them in this statement.**

E 2-40

1. Sales revenue = Number of Units Sold × Selling Price
= 280,000 units × $12
= $3,360,000

2.

Jasper Company Income Statement For the Last Year	
Sales revenue	$3,360,000
Cost of goods sold*	795,000
Gross profit	$2,565,000
Less:	
Selling expense	437,000
Administrative expense	854,000
Operating income	$1,274,000

* Direct materials	$180,000
Direct labor	505,000
Manufacturing overhead	110,000
Cost of goods sold	$795,000

E 2-41

1.

Jasper Company Income Statement For the Last Year	Sales & Expenses	Percent of Sales
Sales revenue	$3,360,000	100.0 [a]
Cost of goods sold*	795,000	23.7 [b]
Gross profit	$2,565,000	76.3 [c]
Less:		
Selling expense	437,000	13.0 [d]
Administrative expense	854,000	25.4 [e]
Operating income	$1,274,000	37.9 [f]

*** See solution to Exercise 2-40, Requirement 2.**

[a] Sales revenue: $3,360,000/$3,360,000 = 1.00, or 100%

[b] Cost of goods sold: $795,000/$3,360,000 = 0.237, or 23.7%

[c] Gross profit: $2,565,000/$3,360,000 = 0.763, or 76.3%

[d] Selling expense: $437,000/$3,360,000 = 0.130, or 13.0%

[e] Administrative expense: $854,000/$3,360,000 = 0.254, or 25.4%

[f] Operating income: $1,274,000/$3,360,000 = 0.379, or 37.9%

E 2-41 (Concluded)

2. The income statement showing each account as a percentage of sales helps focus managerial attention on those expenses that are relatively high. For Jasper, it appears as though administrative expense is twice as large as selling expense. Perhaps management could explain ways to reduce certain administrative expenses, such as research and development or fees incurred for general counsel (e.g., size of Jasper's legal staff).

E 2-42

a (Direct Materials Used in Production) = Beginning Inventory Direct Materials + Purchases – Ending Inventory Direct Materials

a = $10,000 + $45,000 – $15,000
= $40,000

To find b, one can rearrange the Cost of Goods Manufactured equation to solve for Direct Labor Used in Production (i.e., the unknown, or b):

b (Direct Labor Used in Production) = Cost of Goods Manufactured – Direct Materials Used in Production – Manufacturing Overhead Costs Used in Production – Beginning WIP Inventory + Ending WIP Inventory

b = COGM – $40,000 (from a) – $80,000 – $17,000 + $14,000

Thus, in order to find b, we first need to calculate Cost of Goods Manufactured as follows:

Cost of Goods Manufactured = Cost of Goods Sold – Beginning Finished Goods Inventory + Ending Finished Goods Inventory

COGM = $169,000 – $8,000 + $7,000
= $168,000

Finally, inserting Cost of Goods Manufactured into the earlier equation:

b = $168,000 – $40,000 – $80,000 – $17,000 + $14,000
= $45,000

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c (Direct Materials Beginning Inventory for Year 2) = Direct Materials Ending Inventory for Year 1 = $15,000

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d (Direct Materials Purchases for Year 2) = Direct Materials Used in Production – Direct Materials Beginning Inventory + Direct Materials Ending Inventory

d = $50,000 – $15,000 + $17,000
= $52,000

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e (Cost of Goods Sold for Year 2) = Beginning Finished Goods Inventory + Cost of Goods Manufactured – Ending Finished Goods Inventory

e = $7,000 + COGM – $11,000; therefore, we must first calculate COGM to be able to calculate COGS.

E 2-42 (Concluded)

So, COGM = Direct Materials Used in Production + Direct Labor Used in Production + MOH Costs Used in Production + Beginning WIP Inventory – Ending WIP Inventory

COGM = $50,000 + $53,000 + $76,000 + $14,000 – $19,000
= $174,000

Therefore, e = $7,000 + $174,000 – $11,000
= $170,000

PROBLEMS

P 2-43

1.

Cost	Direct Materials	Direct Labor	Manufact. Overhead	Selling and Administrative
Hamburger meat	$4,500			
Buns, lettuce, pickles, and onions	800			
Frozen potato strips	1,250			
Wrappers, bags, and condiment packages	600			
Other ingredients	660			
Part-time employees' wages		$7,250		
John Peterson's salary				$3,000
Utilities			$1,500	
Rent			1,800	
Depreciation, cooking equipment and fixtures			600	
Advertising				500
Janitor's wages			520	
Janitorial supplies			150	
Accounting fees				1,500
Taxes				4,250
Totals	$7,810	$7,250	$4,570	$9,250

Explanation of Classification

Direct materials include all the food items that go into a burger bag, as well as the condiment packages and the wrappers and bags themselves. These materials go "out the door" in the final product. "Other ingredients" might include the oil to fry the potato strips and grease the frying surface for the hamburgers and the salt for the fries. They are direct materials but could also be classified as overhead because of cost and convenience.

Direct labor consists of the part-time employees who cook food and fill orders.

Manufacturing overhead consists of all indirect costs associated with the production process. These are the utilities, rent for the building, depreciation on the equipment and register, and cost of janitorial fees and supplies.

Selling and administrative expense includes John Peterson's salary, advertising, accounting fees, and taxes.

P 2-43 (Continued)

2.

Pop's Drive-Thru Burger Heaven
Income Statement
For the Month of December

Sales ($3.50 × 10,000)		$35,000
Less cost of goods sold:		
Direct materials	$7,810	
Direct labor	7,250	
Manufacturing overhead	4,570	19,630
Gross margin		$15,370
Less: Selling and administrative expense		9,250
Net income		$ 6,120

3. Elena's simplifying assumptions were:

(1) all part-time employees are production workers,

(2) John Peterson's salary is for selling and administrative functions,

(3) all building-related expense as well as depreciation on cooking equipment and fixtures are for production, and

(4) all taxes are administrative expense.

These make it easy to classify 100% of each expense as product cost or selling and administrative cost. The result is that she does not have to perform studies of the time spent by each employee on producing versus selling burger bags. In addition, it is likely that John Peterson pitches in to help fry burgers or assemble burger bags when things get hectic. Of course, during those times, he is engaged in production—not selling or administration. The cost of determining just exactly how many minutes of each employee's day is spent in production versus selling is probably not worth it. (Remember, accountants charge by the number of hours spent—the more time Elena spends separating costs into categories, the higher her fees.)

For this small business, there is little problem with misclassifying Pop's expenses. Pop's Drive-Thru Burger Heaven is not a publicly traded company, and its income statements do not have to conform to GAAP. Outside use of the statements is confined to government taxing authorities and a bank (if a loan or line of credit is necessary). Elena's accounting works well for those purposes.

P 2-44

1. Cost per Page for Black Ink = $\frac{\$25.50}{850 \text{ pages}} = \$0.03$

Total Owed to Harry by Mary = $0.03 × 500 pages = $15
Total Owed to Harry by Natalie = $0.03 × 1,000 pages = $30

2. Cost per Sheet for Paper = $\frac{\$2.50}{500 \text{ sheets}} = \$0.005$

Total Cost for Mary = 500 pages × ($0.03 + $0.005) = $17.50
Total Cost for Natalie = 1,000 pages × ($0.03 + $0.005) = $35

3. Cost per Page for Color Ink = $\frac{\$31}{310 \text{ pages}} = \$0.10$

Number of Black Ink Pages for Natalie = 1,000 × 0.80 = 800

Number of Color Ink Pages for Natalie = 1,000 × 0.20 = 200

Total Owed to Harry by Natalie = ($0.03 × 800 pages) + ($0.10 × 200) = $44

Total Cost to Natalie = [($0.03 + $0.005) × 800 pages] + [($0.10 + $0.005) × 200 pages] = $49

P 2-45

1. Direct Materials = $40,000 + $64,000 – $19,800 = $84,200

2. Direct materials used……	**$ 84,200**
Direct labor……	**43,500**
Manufacturing overhead……	**108,750**
Total manufacturing cost for July……	**$236,450**
Work in process, July 1……	**21,000**
Work in process, July 31……	**(32,500)**
Cost of goods manufactured……	**$224,950**

3. Cost of goods manufactured……	**$224,950**
Finished goods inventory, July 1……	**23,200**
Finished good inventory, July 31……	**(22,100)**
Cost of goods sold……	**$226,050**

P 2-46

1.

Direct materials……	$18
Direct labor……	12
Manufacturing overhead….....	16
Unit product cost….....	$46

Total Product Cost = $46 × 200,000 units = $9,200,000

2.

Laworld Inc. Income Statement For Last Year	
Sales revenue ($60 × 200,000)……	$12,000,000
Cost of goods sold……	9,200,000
Gross margin……	$ 2,800,000
Less:	
Commissions ($2 × 200,000)……	$ 400,000
Fixed selling expense……	100,000
Administrative expense……	300,000
Operating income……	$ 2,000,000

No, we do not need to prepare a statement of cost of goods manufactured because there were no beginning or ending inventories of work in process. As a result, total manufacturing cost is equal to the cost of goods manufactured.

3. **The 10,000 tents in beginning finished goods inventory have a cost of $40, and that is lower than the year's unit product cost of $46. The FIFO assumption says that beginning inventory is sold before current year production. Therefore, the cost of goods sold will be lower than it would be if there were no beginning inventory. This can be seen in the following statement of cost of goods sold.**

Cost of goods manufactured ($46 × 200,000)……	$9,200,000
Beginning inventory finished goods ($40 × 10,000)……	400,000
Ending inventory finished goods ($46 × 10,000)……	(460,000)
Cost of goods sold……	$9,140,000

P 2-46 (Continued)

Laworld Inc. Revised Income Statement For Last Year	
Sales revenue ($60 × 200,000).....	$12,000,000
Cost of goods sold.....	9,140,000
Gross margin.....	$ 2,860,000
Less:	
Commissions ($2 × 200,000).....	$ 400,000
Fixed selling expense.....	100,000
Administrative expense.....	300,000
Operating income.....	$ 2,060,000

P 2-47

1. Direct Materials = $3,475 + $15,000 – $9,500 = $8,975

Hayward Company Statement of Cost of Goods Manufactured For the Month of May		
Direct materials used.....		$ 8,975
Direct labor.....		10,500
Manufacturing overhead:		
Factory supplies.....	$ 675	
Factory insurance.....	350	
Factory supervision.....	2,225	
Material handling.....	3,750	7,000
Total manufacturing cost for May.....		$ 26,475
Work in process, May 1.....		12,500
Work in process, May 31.....		(14,250)
Cost of goods manufactured.....		$ 24,725

2.

Hayward Company Statement of Cost of Goods Sold For the Month of May	
Cost of goods manufactured.....	$24,725
Finished goods inventory, May 1.....	6,685
Finished goods inventory, May 31.....	(4,250)
Cost of goods sold.....	$27,160

P 2-48

1. **c. These costs include direct materials, direct labor, and manufacturing overhead. The total of these three types of costs equals product cost.**

2. **a. If Linda returns to school, she will need to quit her job. The lost salary is the opportunity cost of returning to school.**

3. **b. If Randy were engaged in manufacturing a product, his salary would be a product cost. Instead, the product has been manufactured. It is in the finished goods warehouse waiting to be sold. This is a period cost.**

4. **j. Jamie is working at company headquarters, and her salary is part of administrative cost.**

5. **i. All factory costs other than direct materials and direct labor are, by definition, overhead.**

6. **d. The design engineer is estimating the total number of labor hours required to complete the manufacturing of a product. This total will be used to compute direct labor cost.**

7. **h. This is direct materials cost.**

8. **g. The sum of direct materials and direct labor is, by definition, prime cost.**

9. **f. The cost of converting direct materials into finished product is the sum of direct labor and manufacturing overhead. This is conversion cost.**

10. **e. The depreciation on the delivery trucks is part of selling cost, the cost of selling and delivering product.**

P 2-49

1. Before COGM can be calculated, Direct Materials Used in Production must first be calculated as:

Direct Materials Used in Production = Beginning Direct Materials Inventory + Direct Materials Purchases – Ending Direct Materials Inventory

= $20,000 + $40,000 – $10,000
= $50,000

Now,

COGM = Direct Materials Used in Production + Direct Labor Costs Used in Production + Manufacturing Overhead Costs Used in Production + Beginning WIP Inventory – Ending WIP Inventory

= $50,000 + $800,000 + $100,000 + $60,000 – $100,000
= $910,000

2. COGS = Beginning Finished Goods Inventory + COGM – Ending Finished Goods Inventory

= $300,000 + $910,000 – $280,000
= $930,000

P 2-49 (Continued)

3.

Berry Company Income Statement For Last Year	
Sales (2,100 × 700)	$1,470,000
Cost of goods sold	930,000
Gross margin	$ 540,000
Less:	
Selling expense	60,000
Administrative expense	150,000
Operating income	$ 330,000

4. **The dominant cost is direct labor cost of $800,000. Direct labor is the dominant cost because Berry's core business is creating building plans, which is a labor-intensive process requiring expensive, well-trained architects. The materials used to create building plans are relatively inexpensive.**

P 2-50

1.

W. W. Phillips Company Statement of Cost of Goods Manufactured For Last Year		
Direct materials*		$300,000
Direct labor		200,000
Manufacturing overhead:		
Indirect labor	$40,000	
Rent, factory building	42,000	
Depreciation, factory equipment	60,000	
Utilities, factory	11,900	153,900
Total cost of product		$653,900
Beginning work in process		13,040
Ending work in process		(14,940)
Cost of goods manufactured		$652,000

* Direct Materials Used = $46,800 + $320,000 – $66,800 = $300,000

P 2-50 (Continued)

2. Average Cost of One Unit of Product = $\frac{\$652,000}{4,000} = \$163$

3.

W. W. Phillips Company
Income Statement
For Last Year

Sales ($400 × 3,800*)		$1,520,000
Cost of goods sold**		617,900
Gross margin		$ 902,100
Less:		
Selling expense:		
Sales supervisor's salary	$ 90,000	
Commissions	180,000	270,000
General administration expense		300,000
Operating income		$ 332,100

* Units Sold = 4,000 + 500 – 700 = 3,800

** Cost of Goods Sold = $652,000 + $80,000 – $114,100 = $617,900

P 2-51

1. **The Internet payment of $40 is an expense that would appear on the income statement. This is because the Internet services are used up each month —Luisa cannot "save" any unused Internet time for the next month.**

2. **The opportunity cost is the $100 that Luisa would have made if she had been able to accept the movie role. It is an opportunity cost because it is the cost of the next best alternative to dog walking.**

3. **The price is $250 per month per dog. (Note: The price is charged by Luisa to her clients; it is not her cost.)**

   Total Revenue for a Month = $250 × 12 dogs = $3,000

P 2-52

1. Direct materials:

Magazine (5,000 × $0.40)……	$2,000	
Brochure (10,000 × $0.08)……	800	$2,800
Direct labor:		
Magazine (5,000/20 × $10)……	$2,500	
Brochure (10,000/100 × $10)……	1,000	3,500
Manufacturing overhead:		
Rent……..	$1,400	
Depreciation ($40,000/20,000 × 350*)……	700	
Setups……	600	
Insurance……	140	
Power……	350	3,190
Cost of goods manufactured……		$9,490

* Production is 20 units per printing hour for magazines and 100 units per printing hour for brochures, yielding monthly machine hours of 350 [(5,000/20) + (10,000/100)]. This is also monthly labor hours as machine labor only operates the presses.

2.

Direct materials….....		$2,800
Direct labor….....		3,500
Total prime costs…		$6,300
Magazine:		
Direct materials……	$2,000	
Direct labor……	2,500	
Total prime costs……	$4,500	
Brochure:		
Direct materials……	$ 800	
Direct labor……	1,000	
Total prime costs……	$1,800	

3. Total monthly conversion cost:

Direct labor……	$3,500	
Manufacturing overhead…	3,190	
Total…	$6,690	
Magazine:		
Direct labor……		$2,500
Manufacturing overhead:		
Power ($1 × 250)……	$ 250	
Depreciation ($2 × 250)……	500	
Setups (2/3 × $600)……	400	
Rent and insurance ($4.40 × 250 DLH)*……	1,100	2,250
Total ……		$4,750

P 2-52 (Continued)

Brochures:		
Direct labor		**$1,000**
Manufacturing overhead:		
Power ($1 × 100)	**$100**	
Depreciation ($2 × 100)	**200**	
Setups (1/3 × $600)	**200**	
Rent and insurance ($4.40 × 100 DLH)*	**440**	**940**
Total		**$1,940**

*** Rent and insurance cannot be traced to each product so the costs are assigned using direct labor hours: $1,540/350 DLH = $4.40 per direct labor hour. The other overhead costs are traced according to their usage. Depreciation and power are assigned by using machine hours (250 for magazines and 100 for brochures); $350/350 = $1.00 per machine hour for power and $40,000/20,000 = $2.00 per machine hour for depreciation. Setups are assigned according to the time required. Since magazines use twice as much time, they receive twice the cost: Letting X = the proportion of setup time used for brochures, 2X + X = 1 implies a cost assignment ratio of 2/3 for magazines and 1/3 for brochures.**

4.

Sales [(5,000 × $1.80) + (10,000 × $0.45)]		**$13,500**
Less cost of goods sold		**9,490**
Gross margin		**$ 4,010**
Less operating expenses:		
Selling	**$ 500 ****	
Administrative	**1,500 *****	**2,000**
Operating income		**$ 2,010**

**** Distribution of goods is a selling expense.**

***** A case could be made for assigning part of her salary to production. However, since she is responsible for coordinating and managing all business functions, an administrative classification is more convincing.**

P 2-53

1. The costs of the tent sales are accounted for as selling expense. The tent sales are designed to sell outdated or remanufactured products. They are not the main reason that Kicker is in business. In fact, an important objective is simply to increase awareness of the Kicker brand. As a result, these related costs are selling expense.

2.

Revenue……	**$ 20,000**
Cost of goods sold……	**(7,000)**
Tent sale expense…..	**(14,300)**
Tent sale loss……	**$ (1,300)**

A couple of actions could be taken. First, it could look for a more appropriate venue. The outer parking lot of a shopping center, or even a large grocery store, would enable Kicker employees to easily load purchased product into customer cars. Second, the disc jockey could be dispensed with; instead, music could be played from CDs over the audio system in the truck. Third, Kicker could spend a year or so raising brand awareness in the Austin market before attempting another tent sale.

CASES

Case 2-54

1.

Production	Selling	Administrative
(DL) Machine operators	Sales salaries	Utilities
(DL) Other direct labor	Advertising	Rent
(OH) Supervisory salaries		CPA fees
(DM) Pipe		Adm. salaries
(OH) Tires and fuel		
(OH) Depreciation, equipment		
(OH) Salaries of mechanics		

2. Traceable costs using equipment hours:

Machine operators……	$ 218,000
Other direct labor……	265,700
Pipe……	1,401,340
Tires and fuel……	418,600
Depreciation, equipment……	198,000
Salaries of mechanics……	50,000
Total….....	$2,551,640

Machine operators, tires and fuel, and depreciation are all directly caused by equipment usage, which is measured by equipment hours. One can also argue that required is also a function of equipment hours and so the salaries of mechanics can assigned using equipment hours. Pipe and other direct labor can be assigned using equipment hours because their usage should be highly correlated with equipment That is, equipment hours increase because there is more pipe being laid. As hours increase, so does the pipe usage. A similar argument can be made for other direct labor. Actually, it is not necessary to use equipment hours to assign pipe or other direct labor because these two costs are directly traceable to jobs.

$$\text{Traceable Cost per Equipment Hour} = \frac{\$2,551,640}{18,200 \text{ hours}}$$

$$= \$140.20 \text{ per hour}$$

Case 2-55

1. Leroy should politely and firmly decline the offer. The offer includes an implicit request to use confidential information to help Jean win the bid. Use of such information for personal advantage is wrong. Leroy has a professional and personal obligation to his current employer. This obligation must take precedence over the opportunity for personal financial gain.

Corporate codes of conduct emphasize honesty and integrity. Leroy has a responsibility to act on behalf of his company, and clearly, disclosing confidential information acquired in the course of his work to a competitor would be prohibited. In addition, codes of corporate conduct also require employees to avoid conflicts of interest and to refuse any gift, favor, or hospitality that would influence employee actions inappropriately.

2. If Leroy agrees to review the bid, he will likely use his knowledge of his current employer's position to help Jean win the bid. In fact, agreement to help probably would reflect a desire for the bonus and new job with the associated salary increase. Helping would likely ensure that Jean would win the bid. Leroy was concerned about the political fallout and subsequent investigation revealing his involvement—especially if he sent up a red flag by switching to his friend's firm. An investigation may reveal the up-front bonus and increase the suspicion about Leroy's involvement. There is a real possibility that Leroy could be implicated. Whether this would lead to any legal difficulties is another issue. At the very least, some tarnishing of his professional reputation and personal character is possible. Some risk to Leroy exists. The amount of risk, though, should not be a factor in Leroy's decision. What is right should be the central issue, not the likelihood of getting caught.

CHAPTER 2

Basic Managerial Accounting Concepts

This chapter introduces basic terminology that is used throughout the text. Accounting is sometimes called the language of business and learning accounting terminology is similar to learning a foreign language. Understanding the accounting terminology presented in Chapter 2 is crucial to students understanding topics covered later.

LEARNING OBJECTIVES

LO1. Explain the meaning of cost and how costs are assigned to products and services.

- Cost is the cash or cash-equivalent value sacrificed for goods and services that are expected to bring a current or future benefit to the organization.
- Managers use cost information to determine the cost of objects such as products, projects, plants, and customers.
- Direct costs are traced to cost objects based on cause-and-effect relationships.
- Indirect (i.e., overhead) costs are allocated to cost objects based on assumed relationships and convenience.

LO2. Define the various costs of manufacturing products and providing services as well as the costs of selling and administration.

- Products are goods that either are purchased or produced by converting raw materials through the use of labor and indirect manufacturing resources, such as plants, land, and machinery. Services are tasks performed for a customer or activities performed by a customer using an organization's products or facilities.
- Product costs are those costs, both direct and indirect, of acquiring a product in a merchandising business and preparing it for sale or of producing a product in a manufacturing business. Product costs are classified as inventory on the balance sheet and then expensed as cost of goods sold on the income statement when the inventory is sold.
- Selling costs are the costs of marketing and distributing goods and services and administrative costs are the costs of organizing and running a company.
- Both selling and administrative costs are period costs.

LO3. Prepare income statements for manufacturing and service organizations.

- The cost of goods manufactured (COGM) represents the total product cost of goods completed during the period and transferred to finished goods inventory. The cost of goods sold (COGS) represents the cost of goods that were sold during the period and, therefore, transferred from finished goods inventory to cost of goods sold. For a retailer, there is no COGM, and COGS equals the beginning inventory plus net purchases minus ending inventory.
- For manufacturing and merchandising firms, cost of goods sold is subtracted from sales revenue to arrive at gross margin. In addition, for manufacturing firms, cost of goods manufactured must first be calculated before calculating cost of goods sold.

- Service firms do not calculate gross margin because they do not purchase or produce inventory for sale and, as a result, do not have a cost of goods sold (i.e., inventory expense).
- All firms next subtract selling and administrative expense to arrive at net income.

CORNERSTONES

Cornerstone 2.1	*Calculate Product Cost in Total and Per Unit*
Cornerstone 2.2	*Calculate Prime Cost and Conversion Cost in Total and Per Unit*
Cornerstone 2.3	*Calculate the Cost of Direct Materials Used in Production*
Cornerstone 2.4	*Calculate the Cost of Goods Manufactured*
Cornerstone 2.5	*Calculate the Cost of Goods Sold*
Cornerstone 2.6	*Prepare an Income Statement for a Manufacturing Firm*
Cornerstone 2.7	*Calculate the Percentage of Sales Revenue for Each Line on the Income Statement*
Cornerstone 2.8	*Prepare an Income Statement for a Service Organization*

CHAPTER OUTLINE

Discussion Question: After students read the opening "Little Guys Home Electronics," ask them to select what they considered to be the most important point in the opening scenario.

After students have viewed the video, ask them to answer questions listed within video integration guide at the end of this section.

1. THE MEANING AND USES OF COST

One objective of management accounting is to determine the cost of products, services, and customers.

A. Cost

Cost is the cash (or cash equivalent) sacrificed for goods or services that are expected to produce current or future benefits.

Expenses are *expired* costs.

Accumulating costs is a way that costs are measured and recorded.

A **cost object** is any item such as products, departments, customers, and activities for which costs are measured and assigned.

B. Tracing Direct Costs

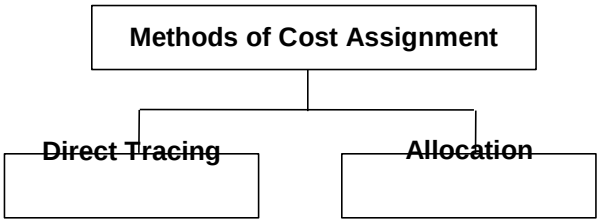
Direct costs can be easily and accurately traced to a cost object. The more costs that can be traced to a cost object, the more accurate are the cost assignments.

Indirect costs cannot be easily and accurately traced to a cost object.

C. Assigning Indirect Costs

Allocation is used to assign indirect costs to a cost object, such as a product or department, using a reasonable and convenient method.

Methods of cost assignment are summarized below:



Description:	identifying and assigning costs to a cost object that are specifically or physically associated with the cost object relies on physical observation	assignment of indirect costs to cost objects based on convenience or an assumed linkage
Cost assignment accuracy:	more precise	less accurate

Ethics: Tracking costs can also detect unauthorized activity and possible ethical problems.

D. Other Categories of Cost

Other categories of costs include:

- Variable cost: a cost that increases **in total** as product output increases. For example, the number and cost of bicycle tires will increase as the number of bicycles produced increases.
- Fixed cost: a cost that does not increase as output increases. For example, the cost of insurance for the factory will not increase as the number of bicycles produced increases, but stays the same.

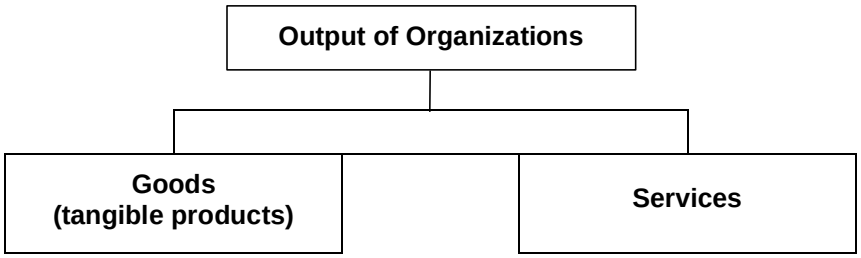
Discussion Question: Ask students to consider their mobile phone bill. What portion would be considered a variable cost? What portion would be fixed?

Discussion Question: Ask students if they can think of any other examples of variable costs and fixed costs.

Opportunity costs: the benefit given up or sacrificed when one alternative is chosen over another. Opportunity costs are not usually recorded in the accounting system; however, opportunity costs should be considered when evaluating alternatives for decision making.

2. PRODUCT AND SERVICE COSTS

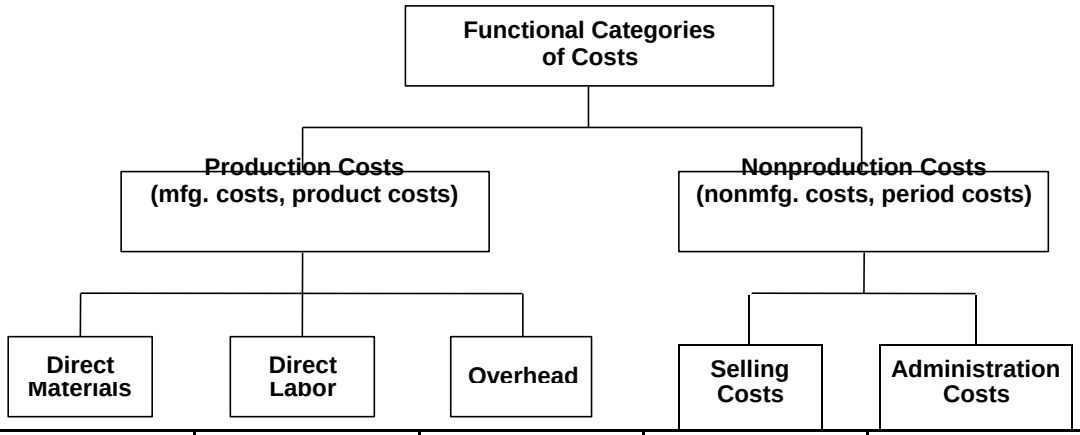
Two types of output of organizations are summarized below:



Definition:	goods produced by converting raw materials using labor and capital (plant, land, and machinery)	(1) activities performed for a customer or (2) activity performed by a customer using the organization's products or facilities
Examples:	laundry detergent television bicycles	accounting services dry cleaning services video rental
Organization:	Manufacturing organizations produce tangible products.	Service organizations produce intangible products.

A. Determining Product Costs

For external product costing, costs are classified by the function they serve, as summarized below:



Definition:	materials traceable to goods or services produced become part of product	labor traceable to goods or services produced	all product costs other than direct materials and direct labor	costs to market, distribute, and service a product order-getting and order-filling costs	costs of research, development, and general administration
Examples:	wood in furniture	chef in restaurant, machine operator on assembly line	supervision, utilities, indirect materials, indirect labor	advertising, customer service	executive salaries, accounting, research and development

Product costs, for external financial reports, are manufacturing costs (direct materials, direct labor, and manufacturing overhead) that are first added to an inventory account and remain in inventory until sold. The costs are expensed when the product is sold.

Period costs are nonproduction costs (selling and administrative) and are expensed when incurred.

Cornerstone 2.1: How to Calculate Product Cost in Total and Per Unit

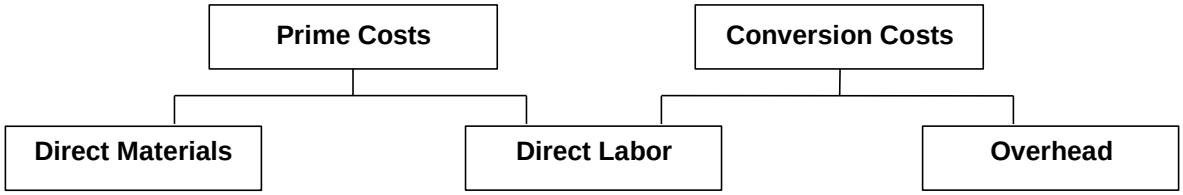
The Cornerstones can be implemented in your classes in several different ways:

1. Demonstrate Cornerstone 2.1 in the *Cornerstones* text as an example in class.
2. Use Exercise 2-19 as a demo, in-class exercise. Students can work the exercise individually or in teams.
3. Discuss the Concept Q&A. Make a list of the costs that you are incurring for your classes this term. Which costs are direct costs for your college courses? Which are indirect costs?
4. Discuss the Concept Q&A. Focus on any object in the room. What do you think the direct materials for that object might include? What kind of direct labor might have worked on that object? What types of overhead costs might have been incurred by the company that produced it?

B. Prime Costs and Conversion Costs

Prime costs are direct materials costs and direct labor costs.

Conversion costs are the costs of converting raw materials into a final product (direct labor costs and overhead costs).



Cornerstone 2.2: How to Calculate Prime Cost and Conversion Cost in Total and Per Unit

The Cornerstones can be implemented in your classes in several different ways:

1. Demonstrate Cornerstone 2-2 in the *Cornerstones* text as an example in class.
2. Use Exercise 2-20 as a demo, in-class exercise. Students can work the exercise individually or in teams.

C. Period Costs

Period costs are all costs that are not product costs.

1. **Selling costs** are costs to market, distribute, and service a product or service.
2. **Administrative costs** are costs associated with research, development, and general administration of the organization that cannot be assigned to either selling or production.

3. PREPARING INCOME STATEMENTS

For income statements for external users, the two major functional categories of expenses are:

1. cost of goods sold (production costs), and
2. operating expenses (nonproduction costs).

Production costs (direct materials, direct labor, and overhead) are product costs because these costs attach to the product.

If the product is in inventory, the product cost is reported as inventory on the balance sheet.

If the product has been sold, the product costs are recognized as an expense (cost of goods sold) on the income statement.

Nonproduction costs (selling and administrative costs) are period costs that are expensed each period.

A. Income Statement: Manufacturing Firm

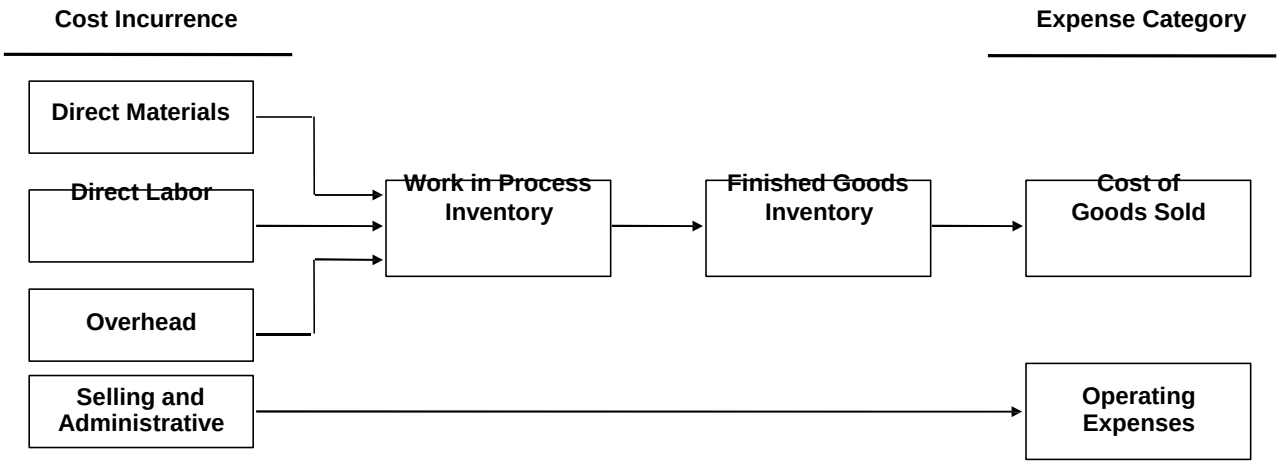
Cost of goods sold consists of the cost of direct materials, direct labor, and overhead attached to the units *sold* during a period.

The **cost of goods manufactured** is the cost of direct materials, direct labor, and overhead attached to the units *produced* during a period.

Work in process consists of all partially completed units in production.

Finished goods are goods that are complete and ready for sale.

Cost flows for a manufacturer are diagramed below:



As direct materials, direct labor, and manufacturing overhead are used in the production process, the associated costs are transferred to the Work-in-Process inventory account.

As the goods in process are completed, the associated costs are transferred to the Finished Goods inventory account.

As the goods are sold, the associated costs are transferred to the Cost of Goods Sold account. Thus, the product costs of direct materials, direct labor, and manufacturing overhead are not expensed until the goods are sold.

Gross margin is the difference between sales revenue and cost of goods sold.

A manufacturing firm might have three inventory accounts on the balance sheet:

1. Raw Materials
2. Work in Process
3. Finished Goods

Cornerstone 2.3: How to Calculate the Direct Materials Used in Production

The Cornerstones can be implemented in your classes in several different ways:

1. Demonstrate Cornerstone 2.3 in the *Cornerstones* text as an example in class.
2. Use Exercise 2-21 as a demo, in-class exercise. Students can work the exercise individually or in teams.

Cornerstone 2.4: How to Calculate Cost of Goods Manufactured

The Cornerstones can be implemented in your classes in several different ways:

1. Demonstrate Cornerstone 2.4 in the *Cornerstones* text as an example in class.
2. Use Exercise 2-22 as a demo, in-class exercise. Students can work the exercise individually or in teams.

Cornerstone 2.5: How to Calculate Cost of Goods Sold

The Cornerstones can be implemented in your classes in several different ways:

1. Demonstrate Cornerstone 2.5 in the *Cornerstones* text as an example in class.
2. Use Exercise 2-23 as a demo, in-class exercise. Students can work the exercise individually or in teams.

Cornerstone 2.6: How to Prepare an Income Statement for a Manufacturing Firm

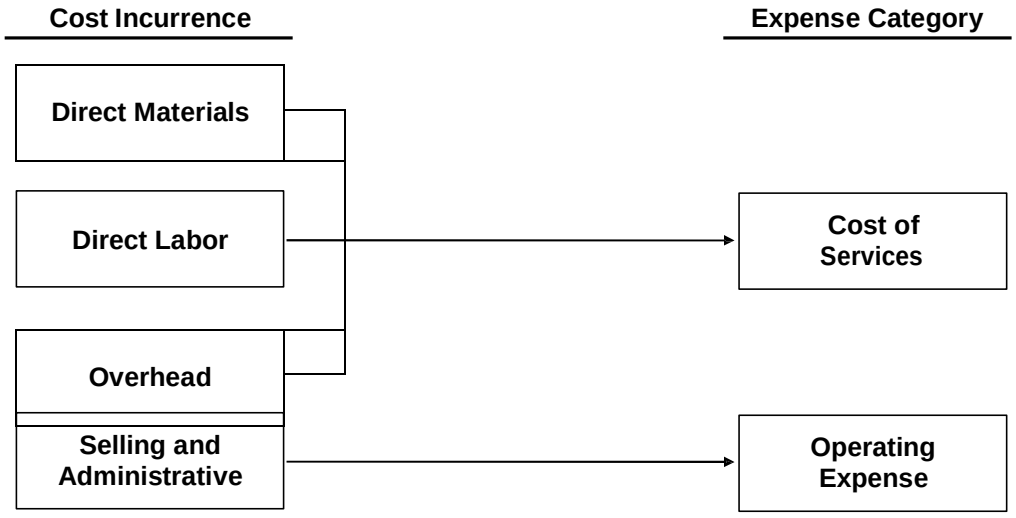
Cornerstone 2.7: How to Calculate the Percentage of Sales Revenue for Each Line on the Income Statement

The Cornerstones can be implemented in your classes in several different ways:

1. Demonstrate Cornerstones 2.6 and 2.7 in the *Cornerstones* text as an example in class.
2. Use Exercises 2-24 and 2-25 as demo, in-class exercises. Students can work the exercises individually or in teams.

B. Income Statement: Service Organization

Cost flows for a service firm are diagramed below:



Cornerstone 2.8: How to Prepare an Income Statement for a Service Organization

The Cornerstones can be implemented in your classes in several different ways:

1. Use Cornerstone 2.8 in the *Cornerstones* text as an example in class.
2. Use Problem 2-26 as a demo, in-class problem. Students can work the problem individually or in teams.

APPLICATIONS

Applications for the chapter include the following:

A. *In-class Group Practice Tests.* See the end-of-chapter multiple-choice questions provided in the text for an in-class, group test or for use with a personal response system. With a group test, each student takes the quiz or test individually. Then ask students to break into teams of four or five to grade the test and discuss answers.

B. *Video Integration.* See the guide at the end of this chapter for a description of video and additional discussion questions and demonstration problems.

VIDEO INTEGRATION GUIDE

Video Case: Experience Accounting with The Little Guys: Priced to Sell

Video Running Time: 6:10 minutes

Organization Discussed: Little Guys Electronics

Video Case Learning Goals

- Explains how a home electronic retail store, a service organization, uses cost-plus pricing and excellent customer service in the competitive electronics market
- Provides examples of overhead costs and labor; and explains their effects on the price of products
- Discusses competitive pricing strategies and how prices relate to manufacturer's prices
- Explains different prices (dealer cost, retail price, list price) its costs relating to purchasing electronic products and deduct from invoice (DFI) discounts

Chapter Concepts Spotlighted in Video

- Cost
- Expenses
- Manufacturer
- Margin
- Markup
- Overhead
- Price
- Profit
- Sale
- Service organization
- Services
- Value-added

Video Case Synopsis

The video describes how the Little Guys, a South Chicago home electronic retail store, determines its prices to maintain competitive with major retailers such as Best Buy. Company employees explain how (1) the organization uses cost-plus pricing, (2) implements other competitive pricing strategies, and (3) overhead (delivery trucks, gas, insurance, insurance, heat, electricity, and warehousing), and (4) labor (installation crew) costs affect the price of products. This company remains competitive with large discount retailers such as Best Buy, Circuit City, Walmart, and Target through its fair prices and excellent service. Their emphasis on customer service and installation of products achieves success and generates profits.

Video Case Discussion Questions and Suggested Answers

1. Explain the difference between a service organization and a manufacturing organization. How does the income statement differ?

The Little Guys is a service organization that purchases its electronic products from a manufacturing organization. An income statement for a service organization includes the cost of services sold: electronic products (materials), installation costs (labor), and overhead. A manufacturing income statement includes the cost of goods manufactured that represents costs assigned to completed goods—direct material, direct labor, and overhead.

2. Give examples of overhead that The Little Guys incurs.

Costs associated with the deliver trucks (gas, insurance), selling expenses relating to its stores (insurance, heat, electricity), warehousing expenses

3. Provide examples of period costs and product costs. When are these items reported on the income statement?

The cost of its inventory (Invoice price less DFI) are product costs. The overhead costs associated with the deliver trucks (gas, insurance), selling expenses relating to its stores (insurance, heat, electricity), warehousing expenses are examples of period costs. Period costs are expensed immediately whereas product costs are expensed when the goods are sold.

4. Does The Little Guys sell tangible or intangible products?

Both are sold. The electronic goods are an example of tangible products whereas the installation services are an example of intangible products.

5. Go to: http://www.thelittleguys.com/news/3_1_news.asp and find the current sales prices of electronic products.

Answers will vary depending on posting on the website. As of November 1, 2006, an Apple Ipod was on sale for $199.

6. Assume that The Little Guys sold 500 Ipods at $200 each. If they had paid $160 for each Ipod, what is their gross margin on each Ipod and what is the total gross margin? What is their mark-up percentage.

Sale price $200 less $160 is equal to $40 margin Mark-up is 25% (160/40). The total gross margin is $20,000 ($40 each times 500 OR Total sales of $100,000 less cost of goods sold of $80,000.

Follow-up Experiential Exercises

1. Obtain published financial statements of a manufacturing and a service organization. Compare and contrast their income statements and balance sheets. Provide examples of product costs and period costs.

2. Obtain published financial statements of two manufacturing companies within the same industry. Compare and contrast their income statements and balance sheets. How does the cost of goods sold vary for the two companies? What are the gross margin percentages for the companies? How would manufacturing companies determine the price to charge their customers? How does this compare to a service organization? Provide examples of product costs and period costs?

CORNERSTONES

of Managerial Accounting, 6e

CHAPTER 2: BASIC MANAGERIAL ACCOUNTING CONCEPTS

Cornerstones of Managerial Accounting, 6e

Learning Objectives

1. Explain the meaning of cost and how costs are assigned to products and services.
2. Define the various costs of manufacturing products and providing services as well as the costs of selling and administration.
3. Prepare income statements for manufacturing and service organizations.

The Meaning and Uses of Cost

- Determine the cost of products, services, customers, and other items to managers.
- **Cost** is the amount of cash or cash equivalent sacrificed for goods and/or services that bring a current or future benefit to the organization.

LO-1

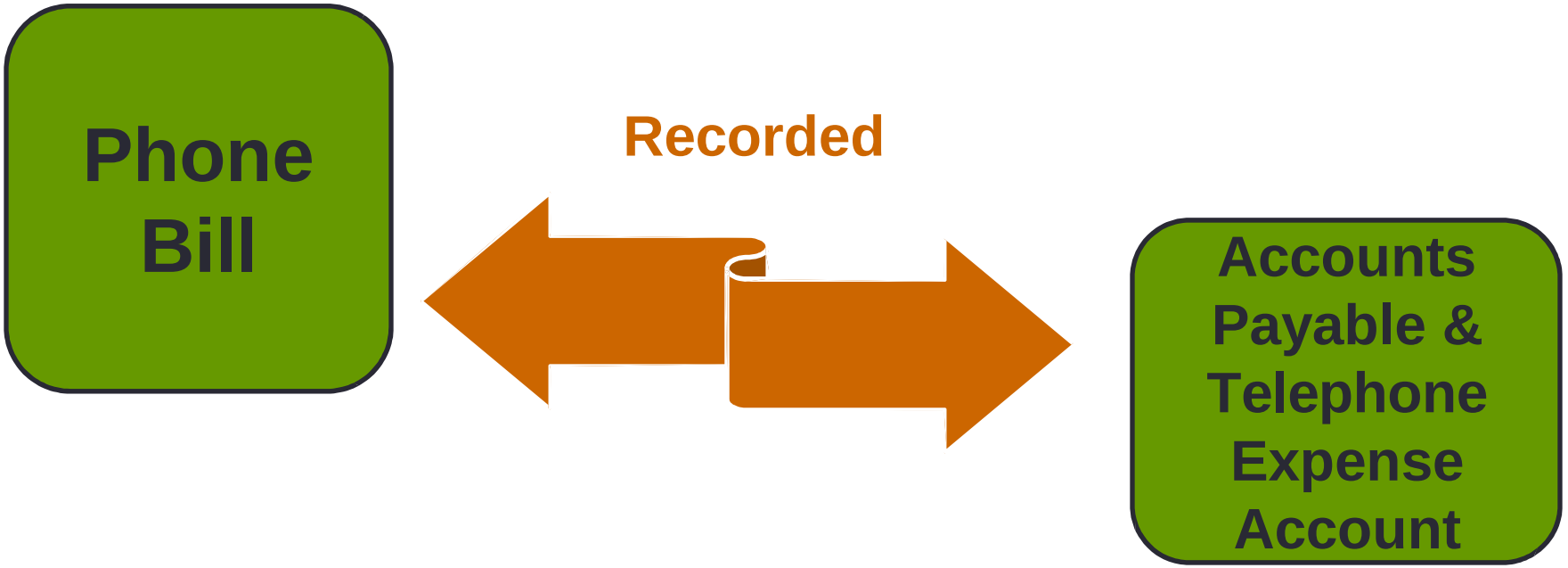
The Meaning and Uses of Cost (cont.)

- As costs are used up in the production of revenues, they are said to expire. Expired costs are called **expenses**.
- On the income statement, expenses are deducted from revenues to determine income (profit).
- We can look more closely at the relationship between cost and revenue by focusing on the units sold. The revenue per unit is called **price**.

LO-1

Accumulating Costs

- **Accumulating costs** is the way that costs are measured and recorded.



LO-1

Assigning Costs

Assigning costs is the way that a cost is linked to some cost object.

What is the cost object for the phone call?

????
????
??

To support Manufacturing?

To support Selling the Product?

LO-1

Cost Objects

- Managerial accounting systems are structured to measure and assign costs.
- A **cost object** is any item such as a product, customer, department, project, geographic region or plant, for which costs are measured and assigned.

LO-1

Assigning Costs to Cost Objects

- Costs can be assigned to cost objects in a number of ways.
- The choice of a method depends on a number of factors, such as the need for accuracy.
- The objective is to measure and assign costs as well as possible, given management objectives.

LO-1

YOU DECIDE

For Which Business Activities Do We Need an Estimate of Cost?

You are the Chief Financial Officer for a major airline company. Managing the company's numerous costs is critically important in this fiercely competitive industry. Therefore, one of your major tasks is deciding which costs to manage in order to achieve the company's profitability targets. In other words, you must identify the airline's most important cost objects to track, measure, and control.

Which cost objects would you select as critical to the company's success?

Certain airline cost objects are obvious, such as the cost of operating a flight, which includes jet fuel (**Delta** spends over $8 billion annually for jet fuel)[2] and labor costs for pilots, flight crews, and maintenance staffs. However, even the costs of these obvious cost objects can become challenging. For example, when an airline operates multiple types of aircraft, it incurs additional costs to train workers and store spare parts for each aircraft type (i.e., the total cost of training and maintaining 100 aircraft of two different types is greater than the same number of aircraft all of one type). Airlines might be even more specific with certain cost objects, such as when they focus on the cost per available seat mile (or CASM as industry experts refer to it), which typically falls in the 6 to 10 cent range for most airlines.

Other airline cost objects are even more challenging. For example, you likely did not include the cost of managing crises as an important cost object. However, according to the International Air Transit Association, the airline industry took an estimated $1.7 billion hit from disrupted airline travel resulting from the volcanic ash cloud caused by the eruption of the Icelandic volcano Eyjafjallajokull.[3]

Finally, you might consider the cost object of processing customers, such as loading and unloading passengers and their baggage on and off of flights. For example, airlines have charged fees for using curbside check-in services, consuming soft drinks during flight, using pillows and blanks while onboard, selecting seats prior to the day of the flight, and checking bags. **Spirit Airlines** raised many customer (and even regulator) eyebrows by being the first airline to charge passengers ($45) for their carry-on bags.[4]

Like any company, an airline can identify and manage any cost objects it so desires. Sometimes the most difficult part of effective cost management is the first step—deciding on the exact items for which one needs to understand the cost. Mistakes in selecting the cost objects almost always lead to poor decisions and subpar performance.

LO-1

Direct Costs

- **Direct costs** are costs that can be easily and accurately traced to a cost object.
- When a cost is easy to trace, we mean that the relationship between the cost and the object can be physically observed, is easy to track, and results in more accurate cost assignments.

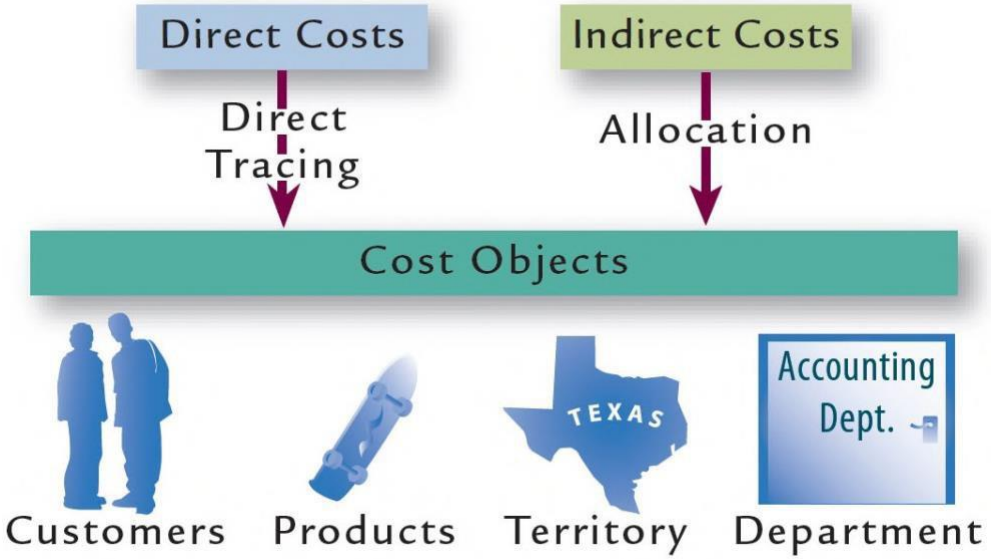
LO-1

Indirect Costs

- **Indirect costs** are costs that cannot be easily and accurately traced to a cost object.
- **Allocation** means that an indirect cost is assigned to a cost object by using a reasonable and convenient method.
- Allocating indirect costs is based on convenience.

Object Costing

- Direct and indirect costs occur in service businesses as well.
  - Some businesses refer to indirect costs as overhead costs or support costs.



LO-1

Other Categories of Cost

- Costs can be direct or indirect, and are analyzed by their behavior patterns, or the way in which a cost changes when the level of the output changes.
  - **Variable cost**: A variable cost is one that increases in total as output increases and decreases in total as output decreases.

LO-1

Other Categories of Cost (cont.)

- **Fixed cost**: A fixed cost is a cost that does not increase in total as output increases and does not decrease in total as output decreases.
- **Opportunity cost**: An opportunity cost is the benefit given up or sacrificed when one alternative is chosen over another.

Product Costs

- Output represents one of the most important cost objects.
- There are two types of output: products and services.
- **Products** are goods produced by converting raw materials through the use of labor and indirect manufacturing resources, such as the manufacturing plant, land, and machinery.
  - Televisions, hamburgers, automobiles, computers, clothes, and furniture are examples of products.

LO-1

Service Costs

- **Services** are tasks or activities performed for a customer or an activity performed using an organization's products or facilities.
  - Insurance coverage, medical care, dental care, funeral care, and accounting are examples of service activities.
  - Car rental, video rental, and skiing are examples of services where the customer uses an organization's products or facilities.

LO-2

Service Costs (cont.)

- Services differ from products in many ways.

1. Services are intangible
2. Services are perishable
3. Services require direct contact between providers and buyers

LO-2

Providing Cost Information

- Managerial accountants must decide:
  - what types of managerial accounting information to provide to managers,
  - how to measure such information, and
  - when and to whom to communicate the information.
- Managers rely on managerial accounting information that is prepared and provides the best analysis for the decision at hand.

LO-2

Providing Cost Information (cont.)

- There is one major exception.
- Managerial accountants must follow specific external reporting rules (i.e., generally accepted accounting principles)
  - When providing outside parties with cost information about the amount of ending inventory on the balance sheet and the cost of goods sold on the income statement.
  - To calculate these two amounts, managerial accountants must subdivide costs into functional categories: production and period (i.e., nonproduction).

LO-2

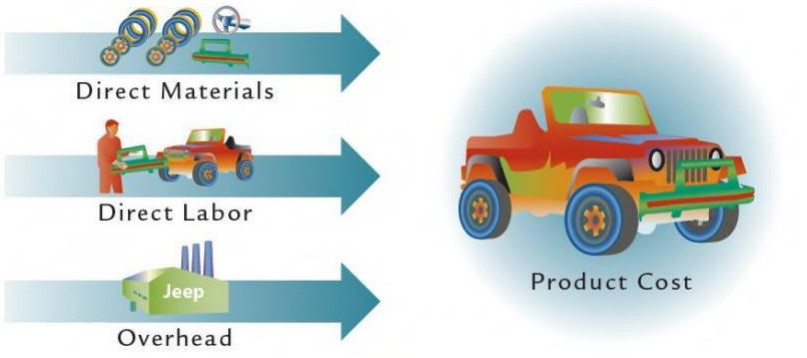
Determining Product Cost

- **Product (manufacturing) costs** are costs, both direct and indirect, of producing a product in a manufacturing firm or of acquiring a product in a merchandising firm and preparing it for sale.
  - Only costs in the **production** section of the value chain are included in product costs.

LO-2

Determining Product Cost (cont.)

- Product costs are inventoried.
- Product costs are first added to an inventory account and remain in inventory until sold, at which time they are transferred to cost of goods.
- Product costs are classified as direct materials, direct labor, and manufacturing overhead.



LO-2

Direct Materials

- **Direct materials** are materials that are a part of the final product and can be directly traced to the goods being produced.
- Materials cost can be directly charged to products because physical observation can be used to measure the quantity used by each product.
- Materials that become part of a product usually are classified as direct materials.

LO-2

Direct Labor

- **Direct labor** is the labor that can be directly traced to the goods being produced.
  - Physical observation can be used to measure the amount of labor used to produce a product.
  - Those employees who convert direct materials into a product are classified as direct labor.
- A company can also have indirect labor costs.
  - Indirect labor is included in overhead and, therefore, is an indirect cost rather than a direct cost.

LO-2

Manufacturing Overhead

- All product costs other than direct materials and direct labor are considered **manufacturing overhead.**
- **Manufacturing overhead** also is known as **factory burden** or **indirect manufacturing costs**.
- Costs are included as manufacturing overhead if they cannot be traced to the cost object of interest (e.g., unit of product).

LO-2

Manufacturing Overhead (cont.)

- Costs are included as manufacturing overhead if they cannot be traced to the cost object of interest (e.g., unit of product).
- Manufacturing overhead cost category includes a variety of items.
  - Examples: depreciation on plant buildings and equipment, janitorial and maintenance labor, plant supervision, materials handling, power for plant utilities, and plant property taxes.

LO-2

Calculating Total Product Cost

- The total product cost equals the sum of direct materials, direct labor, and manufacturing overhead:

Total product post = Direct materials cost + Direct labor cost + Manufacturing overhead cost

- The unit product cost equals total product cost divided by the number of units produced:

Per-unit Cost = Total Product Cost ÷ Number of Units Produced

LO-2

Cornerstone 2.1
Calculating Product Cost in Total and Per Unit

Calculating Product Cost in Total and Per Unit

Why:

Product costs are essential to management control and decision making. Managers use product costs to create budgets and analyses. Product costs within manufacturing can then be contrasted with period costs incurred outside of manufacturing.

Information:

BlueDenim Company makes blue jeans. Last week, direct materials (denim, thread, zippers, and rivets) costing $48,000 were put into production. Direct labor of $30,000 (50 workers × 40 hours × $15 per hour) was incurred. Manufacturing overhead equaled $72,000. By the end of the week, BlueDenium had manufactured 30,000 pairs of jeans.

Required:

1. Calculate the total product cost for last week.
2. Calculate the cost of one pair of jeans that was produced last week.

Solution:

1.

Direct materials	$ 48,000
Direct labor	30,000
Manufacturing overhead	72,000
Total product cost	$150,000

2. Per-Unit Product Cost = $150,000/30,000 = $5

Prime and Conversion Costs

- Product costs of direct materials, direct labor, and manufacturing overhead can be grouped into **prime cost** and **conversion cost**:
  - Prime cost is the sum of direct materials cost and direct labor cost.

    Prime cost = Direct materials + Direct labor
  - Conversion cost is the sum of direct labor cost and manufacturing overhead cost.

Conversion cost = Direct labor + Manufacturing Overhead

LO-2

Cornerstone 2.2
Calculating Prime Cost and Conversion Cost in Total Per Unit

Why:

Managers often categorize product costs into either prime or conversion in nature to compare the relative cost of manufacturing inputs (i.e., direct materials and direct labor) versus processing (i.e., direct labor and manufacturing overhead).

Information:

Refer to the information in Cornerstone 2.1 (p. 35) for BlueDenim Company.

Required:

1. Calculate the total prime cost for last week.
2. Calculate the per-unit prime cost.
3. Calculate the total conversion cost for last week.
4. Calculate the per-unit conversion cost.

LO-2

Cornerstone 2.2
Calculating Prime Cost and Conversion Cost in Total Per Unit (cont.)

Solution:

1.

Direct materials	$48,000
Direct labor	30,000
Total prime cost	$78,000

2. Per-Unit Prime Cost = $78,000/30,000 = $2.60

3.

Direct labor	$ 30,000
Manufacturing overhead	72,000
Total conversion cost	$102,000

4. Per-Unit Conversion Cost = $102,000/30,000 units = $3.40

Note: Remember that prime cost and conversion cost do NOT equal total product cost. This is because direct labor is part of BOTH prime cost and conversion cost.

LO-2

Period Costs

- Costs of production are assets that are carried in inventories until the goods are sold.
- Other costs, such as **period costs**, are not carried in inventory.
  - Period costs are all costs that are not product costs (i.e., all areas of the value chain except for production).

LO-2

Period Costs (cont.)

- Examples of period costs: Office supplies, research and development activities, the CEO's salary, and advertising.
- The level of period costs can be significant and controlling them may bring greater cost savings than the same effort exercised in controlling production costs.

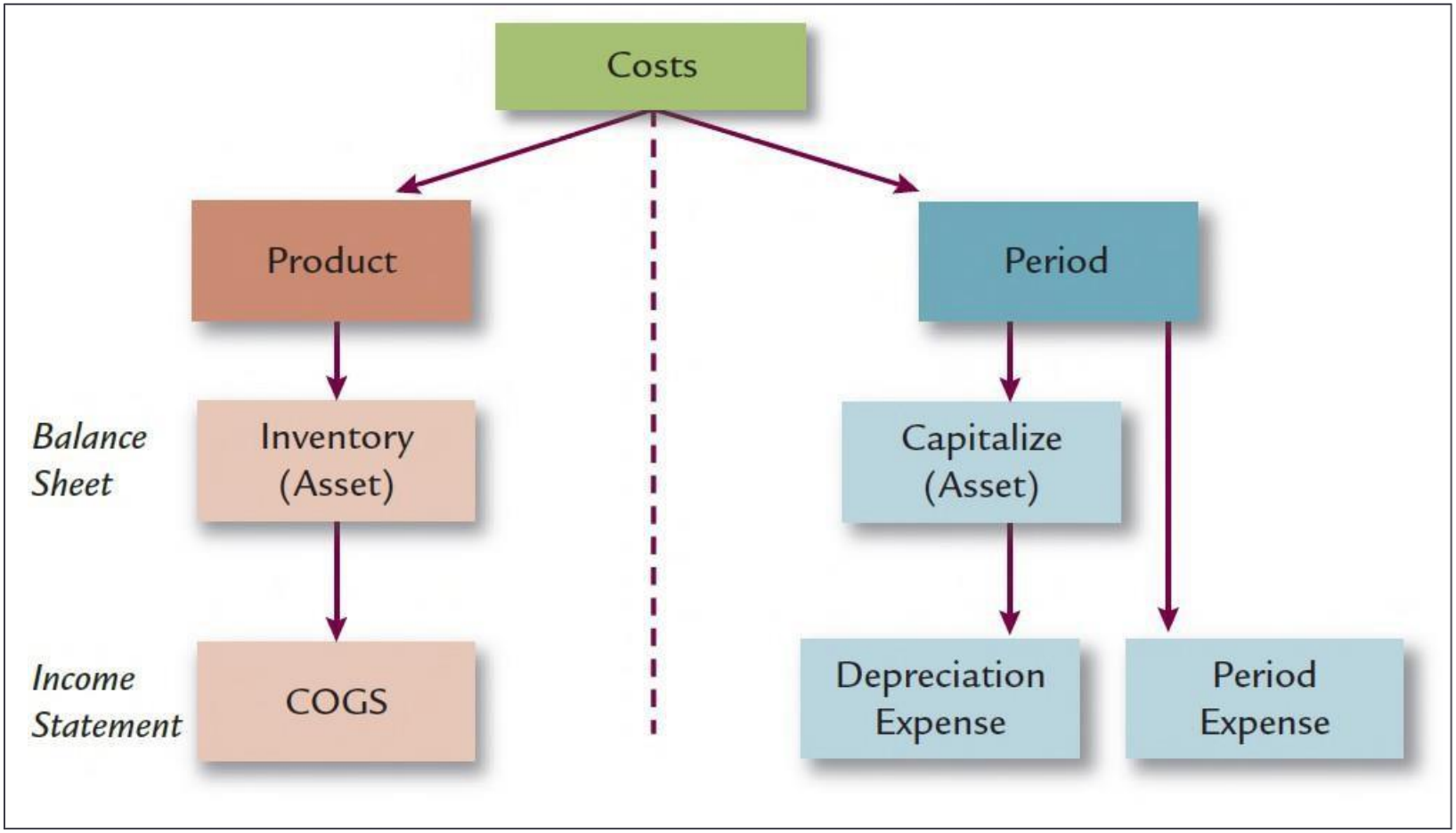
LO-2

Period Costs (cont.)

- Period costs typically are expensed in the period in which they are incurred.
- If a period cost is expected to provide an economic benefit (i.e., revenues) beyond the next year, then it is recorded as an asset (i.e., capitalized) and allocated to expense through depreciation throughout its useful life.

LO-2

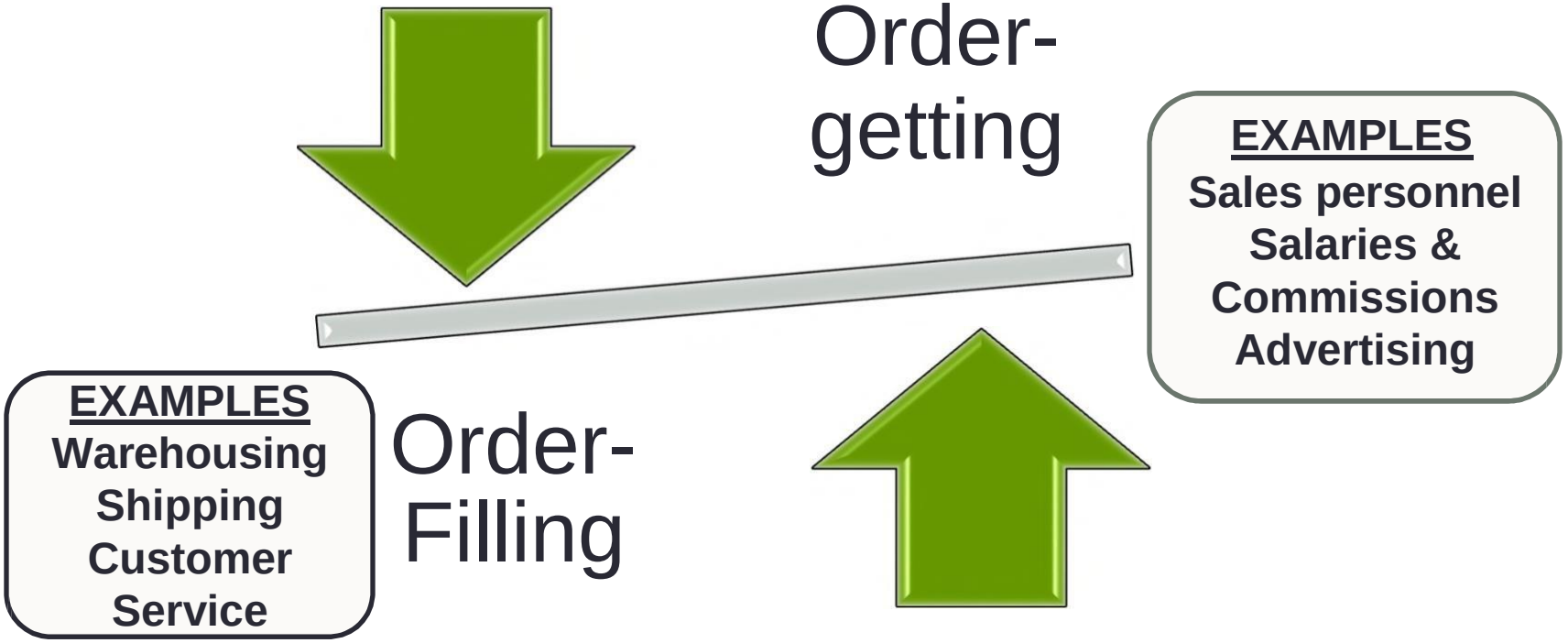
Period Costs (cont.)



LO-2

Selling Costs

- Those costs necessary to market, distribute, and service a product or service are **selling costs**.



LO-2

Administrative Costs

- **Administrative costs** include research, development, and general administration of the organization and cannot be assigned to either selling or production.
- General administration ensures that the various activities of the organization are integrated so that the overall mission of the firm is realized.

LO-2

Administrative Costs (cont.)

- Examples of general administrative costs are executive salaries, legal fees, printing the annual report, and general accounting.
- Research and development costs are the costs associated with designing and developing new products and must be expensed in the period incurred.

LO-2

Direct and Indirect Period Costs

- Distinguishing between direct period costs and indirect period costs.
- Indirect labor is included in overhead.
- **Service companies**: distinguishing between direct period costs and indirect period costs.
- These costs do not affect the calculation of inventories or COGS for service companies.
- Correct classification affects decisions, planning and control activities for managers.

LO-2

Direct and Indirect Period Costs

EXAMPLE: Restaurant

Direct Period Cost: Chef Salary

Indirect Period Cost: Disposable Napkins

LO-2

Preparing Income Statements: Cost of Goods Manufactured

- The **cost of goods manufactured** represents the total product cost of goods completed during the current period and transferred to finished goods inventory.
- The cost of direct materials used in production can be derived using the following formula:

$$\text{Beginning inventory of materials} + \text{Purchases} - \text{Direct materials used in production} = \text{Ending inventory of materials}$$

LO-3

Preparing Income Statements: Cost of Goods Manufactured (cont.)

- The direct materials is then used to calculate the cost of goods manufactured as follows:

+ Direct materials
+ Direct labor
+ Manufacturing overhead costs
+ Beginning WIP inventory
- Ending WIP inventory
= Cost of goods manufactured

Cornerstone 2.3
Calculating Direct Materials Used in Production

Calculating the Direct Materials Used in Production

Why:

The primary use of calculating the direct materials used in production, is to serve as the first number in calculating the cost of goods manufactured. Direct materials used in production also show managers the difference between the amount of materials purchased, and the amount of materials used in manufacturing for the period.

Information:

BlueDenim Company makes blue jeans. On May 1, BlueDenim had $68,000 of materials in inventory. During the month of May, BlueDenim purchased $210,000 of materials. On May 31, materials inventory equaled $22,000.

Required:

Calculate the cost of direct materials used in production for the month of May.

Solution:

Materials inventory, May 1	$ 68,000
Purchases	210,000
Materials inventory, May 31	(22,000)
Direct materials used in production	$256,000

LO-3

Work-in-Process

- Once the direct materials are calculated, the direct labor and manufacturing overhead for the period are added to get the total manufacturing cost for the period.
- The second type of **inventory—work in process (WIP)** is the cost of the partially completed goods that are still on the factory floor at the end of a time period.

LO-3

Work-in-Process (cont.)

- WIP units have been started, but not finished; they have some value, but not as much as they will when they are completed; and there are beginning and ending inventories of WIP.
- We must adjust the total manufacturing cost for the time period for the inventories of WIP.
- When that is done, we will have the total cost of the goods that were completed and transferred from work-in-process inventory to finished goods inventory during the time period.

LO-3

Cornerstone 2.4
Calculating Cost of Goods Manufactured

Why:

The primary use for the statement of cost of goods manufactured is for external financial reporting.

Information:

BlueDenim Company makes blue jeans. During the month of May, BlueDenim purchased $210,000 of materials and incurred direct labor cost of $135,000 and manufacturing overhead of $150,000. On May 31, materials inventory equaled $22,000. Inventory information is as follows:

	May 1	May 31
Materials	$68,000	$22,000
Work in process	50,000	16,000

Required:

Calculate the cost of goods manufactured for the month of May.

LO-3

Cornerstone 2.4
Calculating Cost of Goods Manufactured (cont.)

Solution:

Direct materials used in production*	$256,000
Direct labor	135,000
Manufacturing overhead	150,000
Total manufacturing cost for May	$541,000
WIP, May 1	50,000
WIP, May 31	(16,000)
Cost of goods manufactured	$575,000

* Direct Materials = $68,000 + $210,000 − $22,000 = $256,000

LO-3

Cost of Goods Sold

- To meet external reporting requirements, costs must be classified into three categories:
  - Production
  - Selling
  - Administration

LO-3

Cost of Goods Sold (cont.)

- **Cost of goods** sold represents the cost of goods that were sold during the period and then transferred from finished goods inventory on the balance sheet to cost of goods sold on the income statement (i.e., as an inventory expense). Cost of goods sold is calculated as:

+ Beginning finished goods inventory

+ Cost of goods manufactured

- Ending finished goods inventory

= Cost of goods sold

LO-3

Cornerstone 2.5
Calculating Cost of Goods Sold

Why:

The primary use for the statement of cost of goods sold is for external financial reporting. It is a critical input to the income statement.

Information:

BlueDenim Company makes blue jeans. During the month of May, 115,000 pairs of jeans were completed at a cost of goods manufactured of $575,000. Suppose that on May 1, BlueDenim had 10,000 units in the finished goods inventory costing $50,000 and on May 31, the company had 26,000 units in the finished goods inventory costing $130,000.

Required:

1. Prepare a cost of goods sold statement for the month of May.
2. Calculate the number of pairs of jeans that were sold during May.

Cornerstone 2.5
Calculating Cost of Goods Sold (cont.)

Solution:

1.

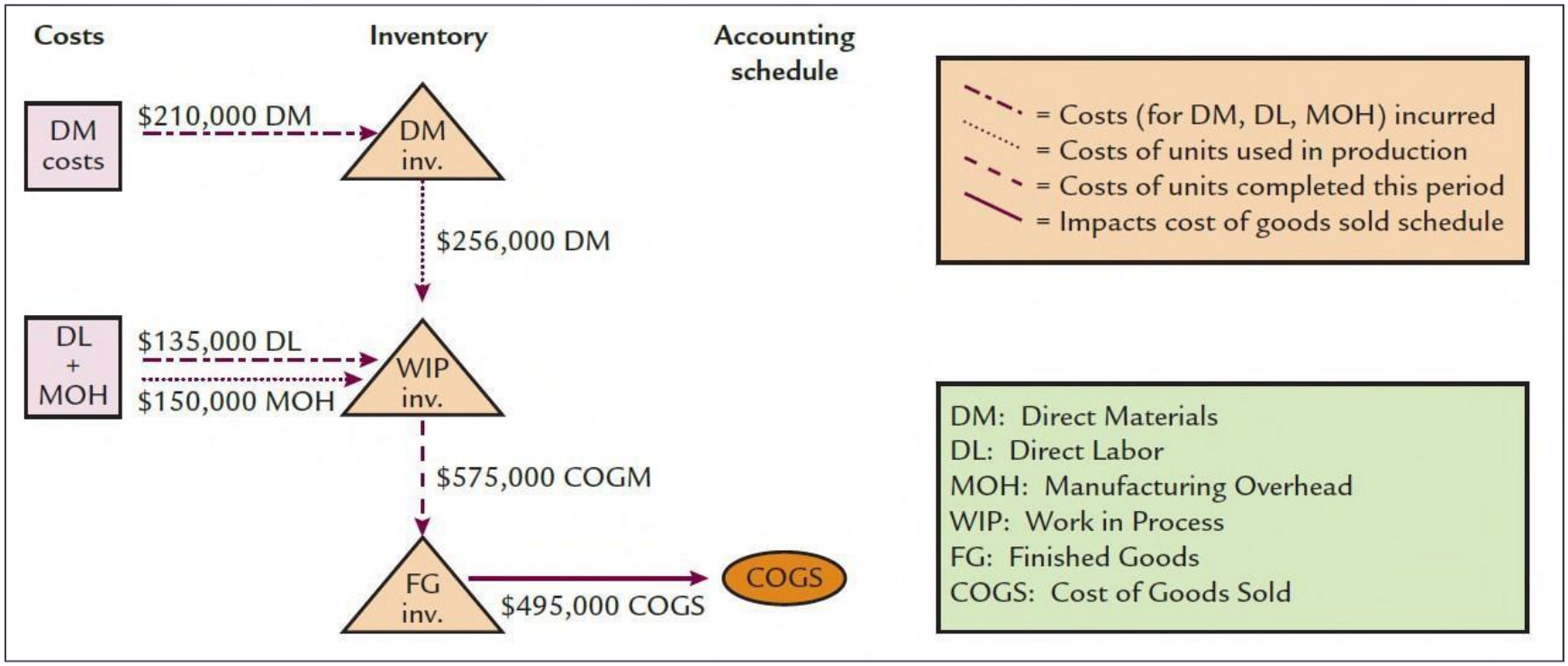
BlueDenim Company
Cost of Goods Sold Statement
For the Month of May

Cost of goods manufactured	$ 575,000
Finished goods inventory, May 1	50,000
Finished good inventory, May 31	(130,000)
Cost of goods sold	$ 495,000

2. Number of units sold:

Finished goods inventory, May 1	10,000
Units finished during May	115,000
Finished goods inventory, May 31	(26,000)
Units sold during May	99,000

Relationship Between Flow of Costs, Inventories, and Cost of Goods Sold



LO-3

Income Statement: Manufacturing Firm

- It is important that all sales revenue and expenses attached to a time period appear on the income statement.
- In the following Cornerstone example 2.6, notice that the heading of the financial statement tells us what type of statement it is – Income Statement; for what firm- BlueDenim Company; and for what period of time- For the Month of May.

LO-3

Income Statement: Manufacturing Firm (cont.)

- Also note that in the income statement, expenses are separated into three categories: production (cost of goods sold), selling, and administrative.
- Sales revenue is calculated as:

Sales revenue = Price x Units sold

LO-3

Cornerstone 2.6
Preparing an Income Statement for a Manufacturing Firm

Why:

The primary use for the income statement is for external financial reporting. Investors and outside parties use it to determine the financial health of a firm.

Information:

Recall that BlueDenim Company sold 99,000 pairs of jeans during the month of May at a total cost of $495,000. Each pair sold at a price of $8. BlueDenim also incurred two types of selling costs: commissions equal to 10% of the sales price, and fixed selling expense of $120,000. Administrative expense totaled $85,000.

Required:

Prepare an income statement for BlueDenim for the month of May.

LO-3

Cornerstone 2.6
Preparing an Income Statement for a Manufacturing Firm (cont.)

Solution:

BlueDenim Company
Income Statement
For the Month of May

Sales revenue (99,000 × $8)		$792,000
Cost of goods sold		495,000
Gross margin		$297,000
Less:		
Selling expenses		
Commissions ($792,000 × 0.10)	$ 79,200	
Fixed selling expenses	120,000	199,200
Administrative expenses		85,000
Operating income		$ 12,800

LO-3

Income Statement: Manufacturing Firm

- **Gross margin** is the difference between sales revenue and cost of goods sold:

Sales Revenue

– Cost of Goods Sold

= Gross Margin

- It shows how much the firm is making over and above the cost of the units sold.

LO-3

Income Statement: Manufacturing Firm (cont.)

- Gross margin does not equal operating income or profit as it is computed without subtracting selling and administrative expenses.
- If gross margin is positive, the firm is charging prices that cover the product cost.

LO-3

Gross Margin Percentage

- A company can compare gross margin percentage with the average for its industry to see if its experience is within the ballpark range for other firms in the industry.
- Gross margin percentage varies significantly by industry.
- Gross margin percentage is calculated as:

Gross Margin Percentage

= Gross Margin ÷ Sales Revenue

LO-3

Cornerstone 2.7
Calculating the Percentage of Sales Revenue for Each Line: Income Statement

Why:

Calculating the percentage of revenue informs managers of the size of each income statement line item relative to sales revenue. This calculation also enables comparisons between fiscal periods and with other firms in the industry.

Information:

Refer to the income statement for BlueDenim Company in Cornerstone 2.6.

Required:

Calculate the percentage of sales revenue represented by each line of the income statement.

LO-3

Cornerstone 2.7
Calculating the Percentage of Sales Revenue for Each Line: Income Statement

Solution:

BlueDenim Company
Income Statement
For the Month of May

			Percent*
Sales revenue (99,000 × $8)		$792,000	100.0
Cost of goods sold		495,000	62.5
Gross margin		$297,000	37.5
Less:			
Selling expenses			
Commissions ($792,000 × 0.10)	$ 79,200		
Fixed selling expenses	120,000	199,200	25.2
Administrative expenses		85,000	10.7
Operating income		$ 12,800	1.6

* Steps in calculating the percentages:

1. Sales Revenue Percent = $792,000/$792,000 = 1.00 or 100% (sales revenue is always 100% of itself)
2. Cost of Goods Sold Percent = $495,000/$792,000 = 0.625, or 62.5%
3. Gross Margin Percent = $297,000/$792,000 = 0.375, or 37.5%
4. Selling Expense Percent = $199,200/$792,000 = 0.252, or 25.2% (rounded)
5. Administrative Expense Percent = $85,000/$792,000 = 0.107, or 10.7% (rounded)
6. Operating Income Percent = $12,800/$792,000 = 0.016, or 1.6% (rounded)

LO-3

Operating Income

- As you saw in Cornerstone 2.7, selling and administrative expenses for the period are subtracted from gross margin to arrive at operating income.

Operating income = Gross margin - Selling and administrative expenses

- Operating income is the key figure from the income statement; it is profit, and shows how much the owners are actually earning from the company.

LO-3

Income Statement: Service Firm

- In a **service organization**, there is no product to purchase, like in a merchandising or manufacturing operation.
- There are no beginning or ending inventories and no cost of goods sold and gross margin on the income statement.
- The cost of providing services appears along with the other operating expenses of the company.

LO-3

Cornerstone 2.8
Preparing and Income Statement for a Service Organization

Why:

The primary use for the income statement is for external financial reporting. Investors and outside parties use it to determine the financial health of a firm. Cost of goods sold typically does not exist on the income statement because service organizations generate sales by providing services rather than selling products.

Information:

Komala Information Systems designs and installs human resources software for small companies. Last month, Komala had software licensing costs of $5,000, service technicians' costs of $35,000, and research and development costs of $55,000. Selling expenses were $5,000, and administrative expenses equaled $7,000. Sales totaled $130,000.

Required:

Prepare an income statement for Komala Information Systems for the past month.

LO-3

Cornerstone 2.8
Preparing and Income Statement for a Service Organization (cont.)

Solution:

Komala Information Systems
Income Statement
For the Past Month

Sales revenues:		$130,000
Less operating expenses:		
Software licensing	$ 5,000	
Service technicians	35,000	
Research and development	55,000	
Selling expenses	5,000	
Administrative expenses	7,000	107,000
Operating income		$ 23,000

LO-3