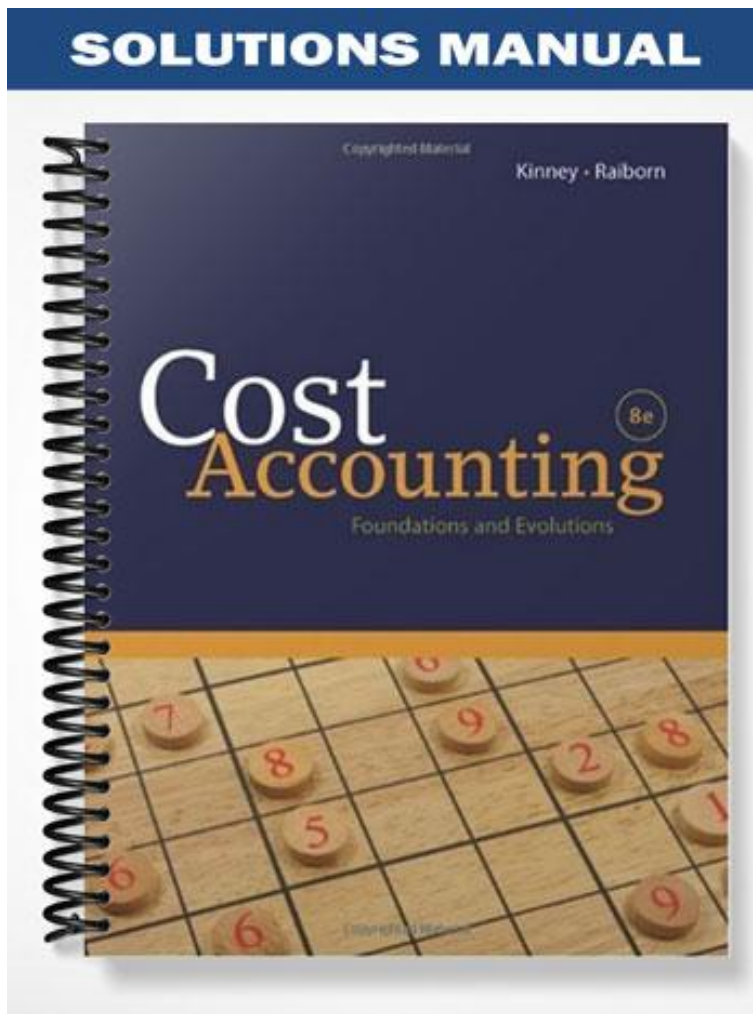


SOLUTIONS MANUAL



COST TERMINOLOGY AND COST BEHAVIORS

Learning Objectives

After reading and studying Chapter 2, you should be able to answer the following questions:

1. Why are costs associated with a cost object?
2. What assumptions do accountants make about cost behavior, and why are these assumptions necessary?
3. How are costs classified on the financial statements, and why are such classifications useful?
4. How does the conversion process occur in manufacturing and service companies?
5. What are the product cost categories, and what items comprise those categories?
6. How and why does overhead need to be allocated to products?
7. How is cost of goods manufactured calculated and used in preparing an income statement?

Terminology

Actual cost system: A costing system that charges Work in Process Inventory with the actual direct material, direct labor, and overhead costs of producing a product

Appraisal costs: Costs incurred to find mistakes not eliminated through prevention

Conversion costs: The costs (direct labor and overhead) required to convert direct material into a finished good or service

Cost: The monetary measure of resources given up to attain an objective such as producing a product or providing a service

Cost allocation: The assignment of an indirect cost to one or more cost objects using some reasonable allocation base or driver

Cost driver: A factor that has an absolute cause-effect relationship to a cost

Cost management system (CMS): A set of formal methods developed for planning and controlling an organization's cost-generating activities relative to its strategy, goals, and objectives

Cost object: Anything for which management wants to collect or accumulate costs

Cost of goods manufactured (CGM): The total cost of the goods completed and transferred to Finished Goods Inventory during the period

Direct costs: Costs which are conveniently and economically traceable to a particular cost object

Direct labor: Labor costs of individuals who work specifically on manufacturing a product or performing a service

Direct material: Material costs that can be easily and economically traced to a product

Distribution cost: Any cost incurred to warehouse, transport, or deliver a product or service

Expired cost: The portion of an asset's value that has been consumed or sacrificed during the period and which is reported as an expense or loss on the income statement

Failure costs: Internal costs (e.g., scrap and rework) and external costs (e.g., product returns, warranty costs, complaints to customer service) caused by quality problems

Finished goods: The costs of units of inventory that have been fully completed

Fixed cost: A cost that remains constant in total within the relevant range of activity but varies on a unit basis

Indirect costs: Costs that cannot be economically traced to a particular cost object and therefore must be allocated to the object instead

Inventoriable costs: The direct costs of materials and labor plus the indirect costs of overhead which become part of the cost of inventory

Manufacturer: A company engaged in a high degree of conversion of raw material that results in a tangible output

Mixed cost: A cost that has both a variable and a fixed component and that changes with changes in activity, but not proportionately

Normal cost system: A costing system that charges the Work in Process Inventory with the actual costs of direct material and direct labor and an assigned amount of overhead based on a predetermined overhead rate

Overhead: Any factory or production cost that is indirect to the product or service (that is, a production-related cost that cannot be directly traced to the product)

Period costs: Costs related to business functions other than production (such as selling and administrative costs) which are expensed in the current accounting period

Predetermined overhead rate: A charge per unit of activity used to allocate or apply overhead cost from the Overhead Control account to Work in Process Inventory for the period's production or services

Predictor: An activity measure that, when changed, is accompanied by consistent, observable changes in a cost item

Prevention costs: Costs incurred to improve quality by precluding product defects and improper processing from occurring

Prime costs: The primary costs (direct material and direct labor) of producing a product or delivering a service

Product costs: Costs associated with making or acquiring the products or providing the services that directly generate the revenues of an entity

Raw material: The materials used in the production process. From the standpoint of conversion, raw material represents work not yet started

Relevant range: The assumed range of activity that reflects the company's normal operating range and over which unit variable costs and total fixed costs are assumed to remain constant

Service company: A firm engaged in a high or moderate degree of conversion using a significant amount of labor

Step cost: A cost that increases (decreases) in distinct amounts because of increased (decreased) activity. Step variable costs have small steps and step fixed costs have large steps

Total cost to account for: The sum of the beginning WIP Inventory and the total current manufacturing costs (DM, DL, OH)

Unexpired cost: The portion of an asset's value that has not yet been consumed or sacrificed and which is reported on the balance sheet as an asset

Variable cost: A cost that varies in total proportionately with changes in activity but which is a constant amount per unit

Work in process: The costs of work started but not yet completed

Lecture Outline

LO.1 Why are costs associated with a cost object?

A. Introduction

1. This chapter provides the necessary terminology to understand and communicate cost and management accounting information. The chapter also presents cost flows and the process of cost accumulation in a production environment.
2. To effectively communicate information, accountants must clearly understand the differences among the various types of costs, their computations, and their usage.
3. To be useful, the term *cost* must be defined more specifically before “the cost” of a product or service can be determined and communicated to others.
 - a. **Cost** reflects the monetary measure of resources given up to attain an objective such as making a good or delivering a service.
 - b. **Unexpired cost**: The portion of an asset’s value that has not yet been consumed or sacrificed and which is reported on the balance sheet as an asset.
 - c. **Expired cost**: The portion of an asset’s value that has been consumed or sacrificed during the period and which is reported as an expense on the income statement.

B. Cost Terminology

1. A **cost management system** is a set of formal methods developed for planning and controlling an organization’s cost-generating activities relative to its strategy, goals, and objectives.
2. Some important types of costs are summarized in text **Exhibit 2–1 (p. 25)**.
3. Association with Cost Object
 - a. A **cost object** is anything (e.g., a product, a product line, a customer) for which management wants to collect or accumulate costs.
 - b. The costs associated with any cost object can be classified according to their relationship to the cost object.
 - c. **Direct costs** are costs that can be conveniently and economically traced to the cost object.
 - i. For example, the cost of steel used by Toyota to manufacture a Tundra pickup truck is a direct cost when the cost object is the Tundra product.
 - d. **Indirect costs** are costs that cannot be economically traced to the cost object but instead must be allocated to the cost object.
 - i. For example, the cost of glue used to manufacture a Tundra pickup truck is an indirect cost when the cost object is the Tundra pickup truck.
 - e. Costs may be direct or indirect depending upon the cost object.

- i. As above, the glue used used to manufacture a Tundra pickup truck is an indirect cost when the cost object is the Tundra pickup truck but is a direct cost when the cost object is the Princeton plant in which the Tundra is manufactured.

LO.2 What assumptions do accountants make about cost behavior, and why are these assumptions necessary?

C. Reaction to Changes in Activity

1. General

- a. A cost's behavior pattern is described according to the way its total cost (rather than its unit cost) reacts to changes in a related activity measure over the relevant range.
- b. Common activity measures include production volume, service and sales volumes, hours of machine time used, pounds of material moved, and number of purchase orders processed.
- c. The **relevant range** is the assumed range of activity that reflects the company's normal operating range.
- d. Accountants assume that there are three cost behavior patterns: variable, fixed, and mixed.
 - i. A **variable cost** is a cost that varies in total in direct proportion to changes in activity but is constant on a unit basis. Although accountants view variable costs as linear, economists view these costs as curvilinear as shown in text **Exhibit 2-2 (p. 27)**.
 - ii. A **fixed cost** is a cost that remains constant in total within the relevant range of activity but varies inversely with changes in the level of activity on a per unit basis. The variable and fixed cost behavior patterns are summarized in text **Exhibit 2-3 (p. 28)**.
 - iii. A **mixed cost** has both a variable and a fixed component as illustrated in text **Exhibit 2-4 (p. 28)**. Mixed costs must be separated into their variable and fixed components in order to make valid estimates of total costs at various activity levels.
- e. Management may decide to "trade" fixed and variable costs for one another.
 - i. For example, installing new automated production equipment would result in an additional large fixed cost for depreciation but would eliminate the variable cost of wages for hourly production workers.
 - ii. A shift from one type of cost behavior to another type changes a company's basic cost structure and can have a significant impact on its profits.
- f. A **step cost** is a cost that shifts upward or downward when activity changes by a certain interval or "step." Step costs can be variable or fixed; step variable costs have small steps while step fixed costs have large steps.
- g. Assuming a variable cost is constant per unit and a fixed cost is constant in total within the relevant range can be justified for two reasons:

- i. If the company operates only within the relevant range of activity, the assumed conditions approximate reality and, thus, the cost behaviors are appropriate.
 - ii. Second, selection of a constant per-unit variable cost and a constant total fixed cost provides a convenient, stable measurement for use in planning, controlling, and decision making activities.
- h. Selection of an appropriate activity measure is important.
- i. A **predictor** is an activity measure that, when changed, is accompanied by consistent, observable changes in a cost item. However, simply because two items change together does not prove that the predictor causes the change.
 - ii. A **cost driver** is a predictor that has an absolute cause-and-effect relationship with the cost in question.
 - iii. Text **Exhibit 2–5 (p. 30)** illustrates the linear cause-and-effect relationship between production volume and total raw material cost.
 - iv. Traditionally, a single predictor has often been used to predict costs but accountants and managers are realizing that single predictors do not necessarily provide the most reliable forecasts, thus causing a movement toward activity-based costing, which uses multiple cost drivers to predict different costs.

LO.3 How are costs classified on the financial statements, and why are such classifications useful?

2. Classification on the Financial Statements

- a. The balance sheet is a statement of unexpired costs (assets) and liabilities and owners' capital whereas the income statement is a statement of revenues and expired costs (expenses and losses).
- b. The matching concept provides a basis for deciding when an unexpired cost becomes an expired cost and is moved from an asset category to an expense or loss category.
- c. When the product is specified as the cost object, all costs can be classified as either product or period costs.
- d. **Product costs**, also called **inventoriable costs**, are related to making or acquiring the products or providing the services that directly generate the revenues of an entity.
 - i. **Direct material** is any material that can be easily and economically traced to a product.
 - ii. **Direct labor** refers to the time spent by individuals who work specifically on manufacturing a product or performing a service.
 - iii. **Overhead** is any factory or production cost that is indirect (i.e., not direct material or direct labor) to the product or service.

- e. The sum of direct labor and overhead costs is referred to as **conversion cost** as those are the costs incurred to convert materials into products.
- f. The sum of direct material and direct labor cost is referred to as **prime cost** as those are the primary costs in making most products.
- g. **Period costs** are related to business functions other than production, such as selling and administration.
 - i. Period costs are generally more closely associated with a particular time period than with making or acquiring a product or performing a service.
 - ii. Period costs that have future benefit are classified as assets, whereas those having no future benefit are expenses. For example, prepaid insurance (asset) becomes insurance expense.
 - iii. **Distribution costs** are period costs incurred to warehouse, transport, or deliver a product or service.

LO.4 How does the conversion process occur in manufacturing and service companies?

D. The Conversion Process

1. General

- a. In general, product costs are incurred in the production (or conversion) area and period costs are incurred in all nonproduction (or nonconversion) areas.
- b. Conversion process outputs are usually either products or services.
- c. See text **Exhibit 2–6 (p. 31)** for a comparison of the conversion activities of different types of organizations.
- d. Firms that engage in only low or moderate degrees of conversion (such as retailers) can conveniently expense insignificant costs of labor and overhead related to conversion.
- e. In high-conversion firms, the informational benefits gained from accumulating the material, labor, and overhead costs incurred to produce outputs significantly exceed clerical accumulation costs as illustrated in text **Exhibit 2-7 (p. 32)**.
- f. A **manufacturer** is defined as any company engaged in a high degree of conversion of raw material input into a tangible output using people and machines.
- g. A **service company** refers to a for-profit business or not-for-profit organization that uses a significant amount of labor to engage in a high or moderate degree of conversion, whose outputs can be tangible (e.g., an architectural drawing) or intangible (e.g., insurance protection).

2. Retailers versus Manufacturers/Service Companies

- a. Retail companies purchase goods in finished or almost finished condition so those goods typically need little, if any, conversion before being sold to customers.

- b. In comparison, manufacturers and service companies engage in activities that involve the physical transformation of inputs into, respectively, finished products and services.
 - c. A cost accounting system is required to assign the materials or supplies and conversion costs of manufacturers and service companies to output to determine the cost of inventory produced and cost of goods sold or services rendered.
 - d. The production or conversion process occurs in three stages:
 - i. Work not started (raw material);
 - ii. Work started but not completed (work in process); and
 - iii. Work completed (finished goods).
 - e. Text **Exhibit 2–8 (p. 33)** compares the input–output relationships of a retail company with those of a manufacturing/service company.
 - i. As shown in the exhibit, unlike manufacturers and service firms, retail firms have no “production center” where input factors such as raw material enter and are transformed and stored until the goods or services are completed.
 - f. Text **Exhibit 2–9 (p. 35)** depicts some of the costs associated with each stage of the conversion process.
 - i. In the first stage of processing, the costs incurred reflect the prices paid for raw materials and/or supplies.
 - ii. As work progresses through the second stage, accrual-based accounting requires that labor and overhead costs related to the conversion of raw materials or supplies be accumulated and attached to the goods.
 - iii. The total costs incurred in stages 1 and 2 equal the total production cost of finished goods in stage 3.
3. Manufacturers versus Service Companies
- a. In a service firm, the work not started stage of processing normally consists of the cost of supplies needed to perform the services (Supplies Inventory).
 - i. When supplies are placed into process, labor and overhead are added to achieve finished results. Thus, some service firms use two accounts (a Supplies Inventory account and a Work in Process Inventory account) to accumulate these costs.
 - b. Manufacturers use three inventory accounts: (1) Raw Material Inventory (instead of Supplies), (2) Work in Process Inventory (for partially converted goods), and (3) Finished Goods Inventory.
 - c. Because services generally cannot be warehoused, costs of finished jobs are usually transferred immediately to the income statement to be matched against service revenue rather than being carried on the balance sheet in a finished goods inventory account.

- d. All organizations (retailers, manufacturers, and service firms) need management and cost accounting techniques to help them find ways to reduce costs without sacrificing quality or productivity.

LO.5 What are the product cost categories, and what items comprise those categories?

E. Components of Product Cost

1. Direct Material

- a. Direct material cost includes the cost of all materials used to manufacture a product or perform a service.
- b. Material costs that are not conveniently or economically traceable are classified as indirect costs and included in overhead.
- c. See text Exhibit 2–9 (p. 35) for an example of direct vs. indirect material costs.

2. Direct labor

- a. Direct labor refers to the effort of individuals who manufacture a product or perform a service.
- b. Direct labor cost consists of the wages or salaries paid to direct labor personnel conveniently traceable to the product or service.
 - i. Direct labor should include basic compensation, production efficiency bonuses, the employees' share of Social Security and Medicare taxes, and if the company's operations are relatively stable, all employer-paid insurance costs, holiday and vacation pay, and pension and other retirement benefits.
- c. Labor costs that cannot be reasonably or economically traced are classified as indirect costs and included in overhead.
 - i. Although fringe benefit costs should be treated as direct labor, the time, effort, and clerical expense of tracing such costs to production do not warrant such treatment.
 - ii. Costs for overtime or shift premiums are usually considered overhead rather than direct labor cost and are allocated among all units unless the overtime costs resulted from expediting a customer's request.
- d. Because laborers historically performed the majority of conversion activity, direct labor once represented a large portion of total manufacturing cost.
 - i. Now, in highly automated work environments, direct labor often represents only 10 to 15 percent of total manufacturing cost.

3. Overhead

- a. Overhead is any factory or production cost that is indirect to manufacturing a product or providing a service.

- b. Overhead includes indirect material, indirect labor and other production-related costs such as factory depreciation, factory utilities, factory insurance, etc.
- c. Automated and computerized technologies have made manufacturing more capital intensive and overhead has become a progressively larger proportion, and such costs merit much more attention than they did in the past.
- d. Variable overhead includes the costs of indirect material, indirect labor paid on an hourly basis, lubricants used for machine maintenance, and the variable portion of factory utility charges.
- e. Fixed overhead includes costs such as straight-line depreciation on factory assets, factory license fees, factory insurance and property taxes, and fixed indirect labor costs such as salaries for production supervisors, shift superintendents, and plant managers.
- f. Quality costs are an important component of overhead cost since high-quality products or services enhance a company's ability to generate revenues and produce profits. Managers are concerned about production process quality because higher process quality leads to shorter production time and reduced costs for spoilage and rework.
 - i. **Prevention costs** are incurred to improve quality by precluding product defects and improper processing from occurring.
 - ii. **Appraisal costs** are costs incurred for monitoring or inspecting products in order to find mistakes not eliminated through prevention.
 - iii. **Internal Failure costs** are costs such as scrap and rework that result when quality problems are detected before the product reaches the final customer.
 - iv. **External Failure costs** are incurred when quality problems are not discovered until after the product has been delivered to the final customer and include costs such as product returns and warranty claims.
- g. Some quality costs are variable in relation to the quantity of defective output, some are step fixed with increases at specific levels of defective output, and some are fixed for a specific time.

LO.6 How and why does overhead need to be allocated to products?

F. Accumulation and Allocation of Overhead

1. General

- a. To satisfy the historical cost and matching principles, which require that all production or acquisition costs attach to the units produced or purchased, overhead must be accumulated over a period and allocated to the products manufactured or services rendered during that period.
- b. **Cost allocation** refers to the assignment of an indirect cost to one or more cost objects using some reasonable allocation base or driver.

- c. Overhead costs are allocated to cost objects for three reasons: (1) to determine the full cost of the cost object, (2) to motivate the manager in charge of the cost object to manage it efficiently, and (3) to compare alternative courses of action for management planning, controlling, and decision making.
2. Allocating overhead
- a. In an **actual cost system**, actual direct material and direct labor costs are accumulated in Work in Process (WIP) Inventory as the costs are incurred. Actual production overhead costs are accumulated separately in an Overhead Control account and are assigned to WIP Inventory at the end of a period or at completion of production.
 - i. Use of an actual cost system is generally considered to be difficult because all production overhead information must be available before any cost allocation can be made to products or services.
 - b. In a **normal cost system**, actual direct material and direct labor costs and an estimated amount of overhead (assigned using a predetermined overhead rate or rates) are accumulated in WIP.
 - i. A **predetermined overhead rate** (or overhead application rate) is a charge per unit of activity that is used to allocate (or apply) overhead cost from the Overhead Control account to WIP Inventory for the period's production or services.
 - c. Product costs can be accumulated using either a perpetual or a periodic inventory system.
 - i. A perpetual inventory system, as illustrated in text **Exhibit 2-10 (p. 39)**, continuously provides current information on the flow of product costs from Raw Materials Inventory through Work in Process Inventory to Finished Goods Inventory and, ultimately, to Cost of Goods Sold Expense.
 - d. Text **Exhibit 2-11 (p. 40)** presents journal entries to illustrate the flow of manufacturing costs in an actual cost system while text **Exhibit 2-12 (p. 41)** presents selected T-accounts associated with the example.

LO.7 How is cost of goods manufactured calculated and used in preparing an income statement?

3. Cost of Goods Manufactured and Sold
- a. The Cost of Goods Manufactured (CGM) is the total production cost of the goods that were completed and transferred to Finished Goods Inventory during the period.
 - i. This amount is similar to the cost of net purchases in the cost of goods sold schedule for a retailer.
 - b. Information needed for computing CGM is found in the Raw Materials Inventory, Work in Process Inventory, and Overhead Control accounts:

Beginning WIP
+ Cost of Direct Materials Added (See Note 1)
+ Cost of Direct Labor Added
+ Cost of Overhead
Total Cost to Account For
- Ending WIP
Cost of Goods Manufactured (CGM)

Note 1: Direct material added = Beginning Raw Materials + Raw Materials Purchased – Ending Raw Materials

c. Cost of Goods Sold (CGS)

- i. The Cost of goods sold is computed as follows:

Beginning Finished Goods
+ Cost of Goods Manufactured
Goods available for sale
- Ending Finished Goods
Cost of Goods Sold (CGS)

- ii. Formal schedules of cost of goods manufactured and cost of goods sold are presented in text **Exhibit 2–13 (p. 42)** based on the information provided in Exhibits 2–11 and 2–12.

Multiple Choice Questions

1. (LO.1) Select the *incorrect* statement concerning cost objects.
 - a. When the cost object is the Production Department, the cost of a production supervisor's salary would be a direct cost.
 - b. A direct cost must be conveniently and economically traceable to the cost object.
 - c. When the cost object is a Tundra truck, the cost of the truck's engine is a direct cost.
 - d. When the cost object is the Toyota Princeton Indiana manufacturing plant the cost of overhead is an indirect cost.
2. (LO.2) Which of the following statements is correct concerning fixed costs?
 - a. Within the relevant range, total fixed costs always increase when volume increases.
 - b. A step cost may be fixed or variable.
 - c. The fixed costs per unit will remain constant provided volume remains within the relevant range.
 - d. Within the relevant range, total fixed costs always decrease when volume increases.
3. (LO.2) A utility bill that includes a flat charge for basic service plus a stated rate for each kilowatt hour of usage beyond a specified level is an example of a
 - a. mixed cost.
 - b. step cost.
 - c. variable cost.
 - d. independent cost.
4. (LO.2) In relation to the dollar amount of Tundra truck sales, which of the following classifications is appropriate for the truck tires used in production and for the salaries of production supervisors?

<u>Truck Tires</u>	<u>Production Supervisor Salaries</u>
a. Variable cost	Fixed cost
b. Fixed cost	Variable cost
c. Variable cost	Mixed cost
d. Mixed cost	Fixed cost

5. (LO.3) The estimated unit cost for a company planning to produce and sell at a level of 12,000 units per month is as follows:

<u>Cost Item</u>	<u>Estimated Unit Cost</u>
Direct material	\$20
Direct labor	32
Variable manufacturing overhead	6
Fixed manufacturing overhead	12
Variable selling	4
Fixed selling	4

What is the total estimated conversion costs per unit?

- a. \$70
- b. \$58
- c. \$52
- d. \$50

6. (LO.3) Which of the following is *not* a product cost for Tundra trucks?
 - a. Steering wheel
 - b. Glue
 - c. Salary of product sales manager
 - d. Overhead

7. (LO.4) Which of the following types of firms has the highest degree of conversion causing a major transformation from input to output?
 - a. Lee's Landscaping Company
 - b. Toyota Manufacturing Company
 - c. Wal-Mart Stores
 - d. All of the above

8. (LO.4) Select the *incorrect* statement concerning the stages of the production or conversion process.
 - a. A manufacturing company's Finished Goods inventory account is similar to a service company's Supplies inventory account.
 - b. Firms such as retailers that engage in only low or moderate degrees of conversion ordinarily have only a single inventory account.
 - c. The production process occurs in three stages: raw material, work in process, and finished goods.
 - d. At the point of sale, product costs flow from an inventory account to Cost of Goods Sold expense.

9. (LO.5) Which of the following would *not* be classified as direct material for a Tundra truck?
 - a. Cost of the battery
 - b. Cost of the glue used to secure the carpet in the cab of the truck
 - c. Cost of freight paid on the truck windshield
 - d. Cost of the fuel tank

10. (LO.5) Which of the following would be classified as direct labor for the production of a Tundra truck?
 - a. Wages paid to assembly line (production) workers
 - b. Bonuses paid to production workers for exceeding production goals
 - c. Production workers' Social Security taxes
 - d. All of the above

11. (LO.5) Which of the following costs would *not* be classified as overhead for the production of Tundra trucks?
 - a. Salary of plant manager
 - b. Indirect labor costs
 - c. Salary of Toyota Chief Executive Officer
 - d. Depreciation of production machinery

12. (LO.6) All of the following are reasons why overhead costs are allocated to cost objects *except*:
 - a. to compare alternative courses of action for management planning and decision making.
 - b. to identify the fixed and variable components of the various overhead costs.
 - c. to determine the full cost of the cost object.
 - d. to motivate the manager in charge of the cost object to manage it efficiently.

13. (LO.7) A Company had the following inventories at the beginning and end of January:

	<u>January 1</u>	<u>January 31</u>
Finished goods	\$12,500	\$11,700
Work in process	23,500	25,100
Direct material	13,400	12,400

The following additional manufacturing data were available for the month of January:

Direct material purchased	\$18,900
Direct labor	30,000
Actual factory overhead	17,500

What was the total cost of direct material used for January?

- a. \$19,900
- b. \$18,900
- c. \$17,900
- d. \$6,500

14. (LO.7) B Company had the following inventories at the beginning and end of January:

	<u>January 1</u>	<u>January 31</u>
Finished goods	\$125,000	\$117,000
Work in process	235,000	251,000
Direct material	134,000	124,000

The following additional manufacturing data were available for the month of January:

Direct material used	\$189,000
Direct labor	300,000
Actual factory overhead	175,000

What was B Company's cost of goods manufactured for January?

- a. \$672,000
- b. \$660,000
- c. \$658,000
- d. \$648,000

15. (LO.7) C Company had the following inventories at the beginning and end of January:

	<u>January 1</u>	<u>January 31</u>
Finished goods	\$125,000	\$117,000
Work in process	235,000	251,000
Direct material	134,000	124,000

Assuming the Cost of Goods Manufactured for January was \$660,000, what was C Company's cost of goods sold for January?

- a. \$676,000
- b. \$668,000
- c. \$666,000
- d. \$652,000

Multiple Choice Solutions

1. d
2. b
3. a
4. a (CMA Adapted)
5. d (CMA Adapted)

Estimated unit conversion costs: Direct labor \$32 + Variable OH \$6 + Fixed OH \$12 = **\$50**

6. c
7. b
8. a
9. b
10. d
11. c
12. b
13. a (CMA Adapted)

Total direct materials used:

Direct materials at January 1	\$13,400
Direct materials purchased	<u>18,900</u>
Materials available for use	\$32,300
Less Direct materials at January 31	<u>12,400</u>
Direct materials used	<u>\$19,900</u>

14. d (CMA Adapted)

Cost of goods manufactured:

Work in process at January 1	\$ 235,000
Total manufacturing cost	664,000
Work in process at January 31	<u>(251,000)</u>
Cost of goods manufactured	<u>\$ 648,000</u>

15. b (CMA Adapted)

Cost of goods sold:

Finished goods at January 1	\$ 125,000
Cost of goods manufactured	660,000
Finished goods at January 31	<u>(117,000)</u>
Cost of goods sold	<u>\$ 668,000</u>