CHAPTER 2: BASIC COST MANAGEMENT CONCEPTS

1. The cost management information system is primarily concerned with producing outputs for internal users using inputs and processes needed to satisfy management objectives.
   a. True
   b. False

   ANSWER: True

2. The Financial accounting information system provides information for three broad objectives: costing services and products, planning and control, and decision making.
   a. True
   b. False

   ANSWER: False

3. The value chain is the set of activities required to design, develop, produce, market, deliver and provide post-sales service for the products and services sold to customers.
   a. True
   b. False

   ANSWER: True

4. Cost management information benefits production, marketing, and customer service systems as well as being a crucial part of managerial decision making.
   a. True
   b. False

   ANSWER: True

5. An integrated cost management system receives information from and provides information to only the controller of a company.
   a. True
   b. False

   ANSWER: False

6. Cost assignment is one of the key processes of the cost accounting system.
   a. True
   b. False

   ANSWER: True

7. Cost is the cash or cash equivalent value sacrificed for goods and services that are expected to bring a current or future loss to the company.
   a. True
   b. False

   ANSWER: False

8. The three methods of cost assignment are direct tracing, driver tracing, and allocation.
   a. True
   b. False

   ANSWER: True

9. Assigning costs accurately to cost objects is of low priority. Accuracy is not evaluated based on knowledge of some underlying "true cost".
   a. True
   b. False

   ANSWER: False

10. The most precise of the three methods of cost assignment is direct tracing since it relies on observable causal relationships.
    a. True
    b. False

    ANSWER: True

11. Services differ from tangible products on three dimension: intangibility, perishability, and inseparability.
    a. True
    b. False

    ANSWER: True

12. Intangible products are goods produced by converting raw material into finished products through the use of labor and capital inputs.
    a. True
    b. False

    ANSWER: False

13. Production costs are costs associated with manufacturing goods or providing services and are classified as direct materials, direct labor, and overhead.
    a. True
    b. False

    ANSWER: True

14. Conversion cost is the sum of direct materials and direct labor cost and prime cost is the sum of direct labor and overhead cost.
    a. True
    b. False

    ANSWER: False

15. Product costs include production, marketing, and customer service, and are used for strategic design decisions and tactical profitability analysis.
    a. True
    b. False

    ANSWER: True

16. The income statement prepared for external parties is frequently referred to as absorption-costing income, or full costing income.
    a. True
    b. False

    ANSWER: True

17. The cost of goods sold is the cost of direct materials, direct labor and overhead attached to the units sold.
    a. True
    b. False

    ANSWER: True

18. The cost of goods manufactured represents the total manufacturing cost of goods completed during the current period.
    a. True
    b. False

    ANSWER: True

19. Work in process consists of all partially completed units found in production at a given point in time.
    a. True
    b. False

    ANSWER: True

20. Gross margin, also called gross profit, is the difference between sales and costs of goods sold.
    a. True
    b. False

    ANSWER: True

21. Cost management systems can be broadly classified as traditional or activity based.
    a. True
    b. False

    ANSWER: True

22. A traditional cost accounting system assumes that all costs can be classified as fixed with respect to changes in the units or volume produced.
    a. True
    b. False

    ANSWER: False

23. The overall objective of an activity-based cost management system is to manage activities to reduce costs and improve customer value.
    a. True
    b. False

    ANSWER: True

24. The cost accounting system that emphasizes tracing over allocation is called an activity-based accounting system.
    a. True
    b. False

    ANSWER: True

25. Error costs are costs associated with measurements required by the cost management system and measurement costs are the costs associated with making poor decisions.
    a. True
    b. False

    ANSWER: False

26. A subsystem of the accounting information system designed to satisfy costing, controlling and decision making objectives is called the_____system.

    ANSWER: cost management

27. The cost management subsystem designed to provide accurate and timely feedback concerning the performance of managers relative to their control of activities is the_____information system.

    ANSWER: operational control

28. The overall objective of accounting information is to provide information to_____.

    ANSWER: users

29. The resources given up that are expected to bring a current or future benefit to the organization are called _____ .

    ANSWER: costs

30. Expired costs used up in the generation of revenues are called_____.

ANSWER: expenses

31. The least accurate but easiest to apply method of cost assignment is the_____method.

ANSWER: allocation

32. _____means the consumer cannot see, hear, feel, or taste a service before it is bought.

ANSWER: Intangibility

33. _____are generally materials necessary for production that do not become part of the finished product or are not used to provide a service.

ANSWER: Supplies

34. Costs necessary to market and distribute a product or service are often referred to as order- _____ and order- _____ costs.

ANSWER: getting; filling

35. In preparing an income statement,_____and_____costs are separated.

ANSWER: production; nonproduction

36. Gross margin is the difference between_____and the cost of goods or services sold.

ANSWER: sales revenues

37. _____income is the difference between gross margin and selling and administrative expenses.

ANSWER: Operating

38. Cost management systems are made up of two subsystems: the_____accounting system and the _____control system.

ANSWER: cost; operational

39. Generally, more managerial objectives can be met with an activity-based system than with a_____system.

ANSWER: traditional

40. In deciding whether to implement a(n)_____cost management system, managers must evaluate the trade-off between costs of measurement and cost of errors.

ANSWER: activity-based

41. The set of interrelated parts that performs one or more processes to accomplish specific objectives is called a(n):
    a. cost objective
    b. system
    c. activity
    d. cost driver

    ANSWER: b

42. The overall objective of accounting information systems is to
    a. provide information to users.
    b. manage the organization.
    c. prepare financial reports.
    d. report to the government.

    ANSWER: a

43. In an accounting information system, which of the following is NOT a transformation process?
    a. collecting data
    b. performance reports
    c. analyzing data
    d. summarizing data

    ANSWER: b

44. Which of the following is a cost management subsystem designed to assign costs to individual products and services and other objects, as specified by management?
    a. financial accounting information system
    b. operational control information system
    c. cost accounting information system
    d. all of the above

    ANSWER: c

45. In a company that supplies muffins to bakeries, which of the following would be considered an input?
    a. delivered muffins
    b. flour
    c. baking
    d. none of these

    ANSWER: b

46. In a company that supplies muffins to bakeries, which of the following would NOT be considered an input?
    a. delivered muffins
    b. flour
    c. egg
    d. oil

    ANSWER: a

47. In a company that supplies muffins to bakeries, which of the following would NOT be considered a transforming process?
    a. delivered muffins
    b. baking
    c. packaging
    d. mixing

    ANSWER: a

48. In a company that supplies muffins to bakeries, which of the following would be considered a transforming process?
    a. delivered muffins
    b. baking
    c. egg
    d. oil

    ANSWER: b

49. In a company that supplies muffins to bakeries, delivered muffins to bakeries would be a(n)
    a. interrelated part.
    b. input.
    c. output.
    d. process.

    ANSWER: c

50. In an accounting information system, the inputs are usually
    a. financial statements.
    b. analyzing data.
    c. economic events.
    d. performance reports.

    ANSWER: c

51. Which of the following is a cost management subsystem designed to provide accurate and timely feedback concerning the performance of managers and others relative to their planning and control of activities?
    a. financial accounting information system
    b. operational control information system
    c. cost accounting information system
    d. all of the above

    ANSWER: b

52. The accounting information subsystem that is primarily concerned with producing outputs for external users is called:
    a. cost management information system
    b. computer system
    c. internal accounting system
    d. financial accounting information system

    ANSWER: d

53. High quality cost management systems should have an organization-wide perspective. Which of the following would NOT be a benefit of a cost management system?
    a. increases speed by ignoring non-financial information
    b. reduces duplicate data storage and use of data
    c. improves timeliness of reports
    d. increases the efficiency of generating reliable and accurate information

    ANSWER: a

54. Which of the following is a major subsystem of the cost accounting information system?
    a. ERP
    b. Operational control information system
    c. OLAP
    d. EDI

    ANSWER: b

55. A computerized information system that strives to input data once and to make it available to people across the company for different purposes is called a:
    a. cost management information system
    b. enterprise resource planning system
    c. internal accounting system
    d. financial accounting information system

    ANSWER: b

56. A cost management subsystem designed to provide accurate and timely feedback concerning the performance of managers and others relative to their planning and control activities is called the:
    a. cost accounting information system
    b. financial accounting system
    c. operational control information system
    d. tax reporting system

    ANSWER: c

57. Which of the following is NOT one of the features of an operational control information system?
    a. to assist in continuous improvement of all aspects of the business
    b. to improve the value received by customers
    c. to provide product cost information needed by management
    d. to improve profits by improving value

    ANSWER: c

58. Which of the following is NOT an objective of the operational control system?
    a. increasing value to customers
    b. increasing profit by providing value
    c. Increasing post purchase costs
    d. all of the above

    ANSWER: c

59. The resources given up that are expected to bring a current or future benefit to the organization are represented by:
    a. Costs
    b. Expired costs
    c. Expenses
    d. Losses

    ANSWER: a

60. The cash or cash equivalent value sacrificed for goods and services that are expected to bring a current or future benefit to the organization is/are called:
    a. Expenses
    b. Cost
    c. An activity
    d. A loss

    ANSWER: b

61. A cost used up in the production of revenues is a(n)
    a. unexpired cost.
    b. loss.
    c. expense.
    d. asset.

    ANSWER: c

62. Which of the following is an example of a loss?
    a. the cost of a product delivered to a customer
    b. the cost of a delivered advertising campaign
    c. the cost of the purchase of equipment
    d. the write-off of an obsolete product

    ANSWER: d

63. Which of the following is an example of an expense?
    a. the cost of a proposed advertising campaign
    b. the cost of a product delivered to a customer
    c. the cost of the purchase of equipment
    d. the write-off of an obsolete product

    ANSWER: b

64. Which of the following is an example of a possible cost object?
    a. a product
    b. a customer
    c. a department
    d. all of the above

    ANSWER: d

65. Traceability is a function of
    a. an indirect relationship to the cost object.
    b. distortion.
    c. a causal relationship.
    d. none of these.

    ANSWER: c

66. Factors that cause changes in resource usage, activity usage, costs and revenues are called
    a. indirect costs.
    b. drivers.
    c. assignments.
    d. cost objects.

    ANSWER: b

67. The most likely method to assign the cost of an assembly-line supervisor when the assembly line is the cost object is the:
    a. driver tracing method
    b. arbitration method
    c. allocation method
    d. direct tracing method

    ANSWER: d

68. Which cost assignment method would likely assign the cost of heating in a plant that makes beds and dressers when the bed product line is the cost object?
    a. driver tracing
    b. direct tracing
    c. allocation
    d. arbitration

    ANSWER: c

69. Which cost assignment method would likely assign the cost of maintenance for machines in a department that does cutting when the cutting activity is the cost object?
    a. driver tracing
    b. direct tracing
    c. allocation
    d. arbitration

    ANSWER: a

70. Which of the following expenses incurred by a department store is a direct cost for the women's shoe department?
    a. the salespersons' commissions in the women's shoe department
    b. the salaries for individuals working in the accounting department
    c. the advertising expense for the service department
    d. the allocated rent expense for the clothing department

    ANSWER: a

71. Which of the following costs incurred by a chair manufacturer would be traced to the product cost through direct tracing?
    a. the depreciation on factory equipment
    b. the supervisor's salary
    c. the insurance on the factory building
    d. the woodworker's salary

    ANSWER: d

72. Direct costs
    a. are incurred for the benefit of the business as a whole.
    b. would continue even if a particular product were discontinued.
    c. are those costs that can be easily and accurately traced to a cost object.
    d. can be assigned to products only by a process of allocation.

    ANSWER: c

73. The direct costs of operating a college computer center would NOT include
    a. rent paid for computers.
    b. a fair share of college utilities.
    c. paper used by the center.
    d. computer consultants' salaries.

    ANSWER: b

74. Which of the following methods of assigning costs is based on convenience or some assumed linkage, and reduces the overall accuracy of the cost assignments?
    a. direct tracing
    b. driver tracing
    c. allocation
    d. all of the above

    ANSWER: c

75. Which of the following costs incurred by a bus manufacturer would NOT be directly attributable to the finished product?
    a. the wages paid to assembly-line production workers
    b. the tires for buses
    c. the windshields for buses
    d. the depreciation on factory building

    ANSWER: d

76. The assignment of indirect costs to cost objects is referred to as:
    a. Allocation
    b. Direct tracing
    c. Physical observation
    d. Cost management

    ANSWER: a

77. What is a disadvantage of assigning costs evenly over all cost objects?
    a. not all costs will be assigned
    b. total costs will be distorted
    c. costs may be distorted by consumption patterns of other cost objects
    d. none of these

    ANSWER: c

78. The insurance paid on the factory is
    a. a direct cost if the cost object is the factory.
    b. an indirect cost if the cost object is the product produced.
    c. could be either a direct cost or an indirect cost, depending on the cost object.
    d. all of the above.

    ANSWER: d

79. Which of the following would NOT be a cost that could be directly traced to a custom piece of furniture based upon physical observation?
    a. the wood and upholstery materials that are in the final piece
    b. the depreciation paid on factory equipment t
    c. he labor of the worker assembling the piece of furniture
    d. the labor of the woodworker who finishes the wood of the piece

    ANSWER: b

80. The precision of driver tracing depends upon
    a. physically observable relationships.
    b. the strength of causal relationships described by the driver.
    c. allocation estimations.
    d. both b and c.

    ANSWER: b

81. If physical observation can NOT be used to identify the exact amount of resources consumed by a cost object, the next best approach is
    a. driver tracing.
    b. allocation.
    c. estimation.
    d. none of these.

    ANSWER: a

82. Services differ from tangible products in which of the following dimensions?
    a. intangibility
    b. inseparability
    c. perishability
    d. all of the above

    ANSWER: d

83. With regards to products, perishability can be defined as
    a. buyers of products who cannot see, feel, hear or taste the product before it is bought.
    b. services that cannot be stored.
    c. buyers and sellers who must be in direct contact for the sale to take place.
    d. buyers of the product who do not need direct contact with the manufacturer of the product.

    ANSWER: b

84. Intangibility of services means that
    a. products cannot be seen, tasted, heard or felt before the purchase.
    b. products cannot be stored.
    c. exchange takes place in direct contact.
    d. both a and c.

    ANSWER: a

85. An example of a tangible product, rather than a service, would be
    a. housekeeping.
    b. insurance coverage.
    c. paper.
    d. medical exam.

    ANSWER: c

86. With regard to services, inseparability means that
    a. products cannot be stored.
    b. direct contact must take place for an exchange.
    c. products have a physical presence.
    d. none of the above apply to inseparability.

    ANSWER: b

87. An example of a service, rather than a tangible product, would be
    a. medical exams.
    b. cloths.
    c. trucks.
    d. radios.

    ANSWER: a

88. Which of the following is a service organization?
    a. grocery store
    b. CPA firm
    c. cattle ranch
    d. department store

    ANSWER: b

89. Which of the following costs would be included in value-chain product costs?
    a. research and development
    b. production
    c. customer service
    d. all of the above

    ANSWER: d

90. Product value-chain costs assist managers in meeting which of the following objectives?
    a. product mix decisions
    b. tactical profitability analysis
    c. external financial reporting
    d. strategic design decisions

    ANSWER: a

91. Value-chain product costs include which of the following?
    a. customer service costs
    b. marketing costs
    c. research and development
    d. all of the above

    ANSWER: d

92. Which of the following costs would NOT be included in operating product costs?
    a. production
    b. marketing
    c. research and development
    d. all of the above

    ANSWER: c

93. Which of the following costs would be included in traditional product costs used for external reporting?
    a. research and development
    b. production
    c. marketing
    d. all of the above

    ANSWER: b

94. Which of the following costs is NOT a product cost?
    a. rent on an office building
    b. indirect labor
    c. repairs on manufacturing equipment
    d. steel used in inventory items produced

    ANSWER: a

95. Which of the following costs is an example of product costs?
    a. selling commissions
    b. nonfactory office salaries
    c. direct materials
    d. advertising expense

    ANSWER: c

96. Which of the following costs incurred by a furniture manufacturer would be a product cost?
    a. office salaries
    b. lumber
    c. commissions paid to sales staff
    d. controller's salary

    ANSWER: b

97. Which of the following costs is a product cost?
    a. lease payments on cars used by salespersons
    b. president's salary
    c. property taxes on factory building
    d. depreciation on office equipment

    ANSWER: c

98. Which of the following costs is a period cost for a manufacturing company?
    a. controller's salary
    b. wages of machine operators
    c. insurance on factory equipment
    d. fringe benefits for factory employees

    ANSWER: a

99. In a traditional manufacturing company, product costs include
    a. direct materials only.
    b. direct materials, direct labor, and factory overhead.
    c. direct materials and direct labor only.
    d. direct labor only.

    ANSWER: b

100. Which of the following costs is an indirect product cost?
    a. president's salary
    b. wages of assembly workers
    c. materials used
    d. property taxes on plant facilities

    ANSWER: d

101. If the total warehousing cost for the year amounts to $450,000, and 40 percent of the warehousing activity is associated with finished goods and 60 percent with direct materials, how much of the cost would be charged as a product cost?
a. $90,000
b. $180,000
c. $270,000
d. $450,000

ANSWER: c
RATIONALE: SUPPORTING CALCULATIONS: $450,000 × 0.60 = $270,000

102. Which of the following costs would be included as part of direct materials in the production of an automobile?
a. glue for a sticker applied to the automobile
b. steel
c. gasoline used to fuel machines in production
d. none of these

ANSWER: b

103. All of Eva Enterprise's operations are housed in one building with the costs of occupying the building accumulated in a separate account. The total costs incurred in July amounted to $48,000. The company allocates these costs on the basis of square feet of floor space occupied. Administrative offices, sales offices, and factory operations occupy 9,000, 6,000, and 30,000 square feet, respectively. How much will be classified as a product cost for July?
a. $9,600
b. $6,400
c. $16,000
d. $32,000

ANSWER: d
RATIONALE: SUPPORTING CALCULATIONS: [30,000/(9,000 + 6,000 + 30,000)] × $48,000 = $32,000

104. Which of the following costs would be considered a direct material?
a. glue in the production of automobiles
b. labor used to finish product
c. paper used in the production of books
d. depreciation on the corporation's office building

ANSWER: c

105. The difference between a supply and an indirect material is that
a. supplies are not necessary for production.
b. indirect materials are not physically part of the product.
c. supplies are not necessary for production and are not physically part of the product.
d. supplies are necessary for production and are not physically part of the product.

ANSWER: d

106. Which of the following costs would be included as part of direct labor?
    a. a materials handler
    b. a cutter in the production of shelving
    c. an assembly-line supervisor
    d. a janitor

    ANSWER: b

107. Which of the following costs would be included as part of factory overhead?
    a. depreciation of plant equipment
    b. direct labor
    c. depreciation on the corporation's office building
    d. paper used in the production of books

    ANSWER: a

108. Which of the following items would NOT be classified as part of factory overhead of a firm that makes sailboats?
    a. factory supplies used
    b. depreciation of factory buildings
    c. canvas used in sail
    d. indirect materials

    ANSWER: c

109. Wages paid to a janitor in the factory would be classified as
    a. direct labor.
    b. direct janitor salaries.
    c. supervisor salaries.
    d. factory overhead.

    ANSWER: d

110. All of the following costs are included in factory overhead EXCEPT
    a. factory supplies.
    b. indirect labor.
    c. plant foreman's salary.
    d. direct labor.

    ANSWER: d

111. Selling and administrative costs are classified as
    a. product costs.
    b. conversion costs.
    c. period costs.
    d. factory overhead.

    ANSWER: c

112. Which of the following costs is NOT a period cost?
    a. receptionist's salary
    b. steel used in steel railings
    c. depreciation on sales staffs' cars
    d. sales commission

    ANSWER: b

113. Which of the following costs is a period cost?
    a. depreciation of factory equipment
    b. transportation-in for material shipments
    c. amortization of a patent for the company's product
    d. depreciation of office computers

    ANSWER: d

114. An example of a period cost is
    a. president's salary.
    b. insurance on factory equipment.
    c. property taxes on factory building.
    d. wages of factory custodians.

    ANSWER: a

115. An example of a nonproduction cost is
    a. wages paid to assembly-line employees.
    b. manufacturing supplies.
    c. insurance on manufacturing facilities.
    d. the treasurer's salary.

    ANSWER: d

116. Which of the following costs are expensed in the period in which they are incurred?
    a. Direct materials costs
    b. Product costs
    c. Factory overhead costs
    d. Nonproduction costs

    ANSWER: d

117. Order-getting costs would NOT include
    a. marketing costs.
    b. customer service costs.
    c. advertising.
    d. salaries of sales personnel.

    ANSWER: b

118. Period costs do NOT include
    a. order-getting costs.
    b. order-filling costs.
    c. order-making costs.
    d. all of the above are period costs.

    ANSWER: c

119. Prime product costs include
    a. only factory overhead.
    b. only direct labor.
    c. direct labor and factory overhead.
    d. direct materials and direct labor.

    ANSWER: d

120. The sum of direct labor and factory overhead is referred to as
    a. period costs.
    b. conversion costs.
    c. prime costs.
    d. direct product costs.

    ANSWER: b

121. Conversion costs do NOT include
    a. direct materials.
    b. direct labor.
    c. factory overhead.
    d. any of these costs.

    ANSWER: a

122. Which of the following would NOT be included in the conversion cost of an automobile?
    a. screws used in assembly
    b. assembly worker wages
    c. depreciation on machinery
    d. steel

    ANSWER: d

123. Costs that are expensed in the period in which they are incurred are called:
    a. Direct materials costs
    b. Product costs
    c. Noninventoriable costs
    d. Inventoriable costs

    ANSWER: c

Figure 2-11

Information from the records of the Abel Corporation for July 2016 was as follows:

Sales	$1,230,000
Selling and administrative expenses	210,000
Direct materials used	264,000
Direct labor	300,000
Factory overhead *	405,000

*variable overhead is $205,000, fixed overhead is $200,000

	Inventories	
	July 1, 2016	July 31, 2016
Direct materials	$36,000	$42,000
Work in process	75,000	84,000
Finished goods	69,000	57,000

124. **Refer to Figure 2-11**. The conversion cost is
    a. $960,000
    b. $1,179,000
    c. $705,000
    d. $564,000

    ANSWER: c
    RATIONALE: $300,000 + $405,000 = $705,000

125. **Refer to Figure 2-11**. The prime costs are
    a. $210,000
    b. $264,000
    c. $300,000
    d. $564,000

    ANSWER: d
    RATIONALE: $264,000 + $300,000 = $564,000

126. **Refer to Figure 2-11**. The variable product costs are
    a. $969,000
    b. $769,000
    c. $764,000
    d. $1,179,000

    ANSWER: b
    RATIONALE: $264,000 + $300,000 + $205,000 = $769,000

127. **Refer to Figure 2-11**. The total product cost is
    a. $1,179,000
    b. $969,000
    c. $615,000
    d. $764,000

    ANSWER: b
    RATIONALE: $ 264,000 + $300,000 + 405,000 = $969,000

Figure 2-12

Information from the records of the Conundrum Company for September 2016 was as follows:

Sales	$307,500
Selling and administrative expenses	52,500
Direct materials used	66,000
Direct labor	75,000
Variable factory overhead	50,000
Factory overhead	51,250

	Inventories	
	Sept. 1, 2016	Sept 30, 2016
Direct materials	$8,000	$10,500
Work in process	18,750	21,000
Finished goods	17,250	14,250

Conundrum Corporation produced 20,000 units.

128. **Refer to Figure 2-1**2. The prime costs per unit for September were
a. $7.05
b. $8.8125
c. $14.7375
d. $20.00

ANSWER: a
RATIONALE: $66,000 + $75,000 = $141,000/20,000 units = $7.05 per unit

129. **Refer to Figure 2-12**. What are the conversion costs per unit?
a. $7.05
b. $8.8125
c. $12.1125
d. $14.7375

ANSWER: b
RATIONALE: $75,000 + $50,000 + $51,250 = $176,250/ 20,000 units = $ 8.8125

130. **Refer to Figure 2-12**. If production increased to 32,000 units next year, what is the effect on variable product costs per unit and total product costs per unit respectively?
    a. remain the same; remain the same
    b. remain the same; decrease
    c. increase; remain the same
    d. decrease; increase

    ANSWER: b
    RATIONALE: variable product cost per unit remain the same; total product cost per unit will decrease

131. Refer to Figure 2-12. What are the total variable costs per unit?
    a. $7.05
    b. $9.55
    c. $2.175
    d. $6.25

    ANSWER: b
    RATIONALE: $66,000 + 75,000 + 50,000 = $191,000/ 20,000 units = $9.55 per unit

132. Refer to Figure 2-12. What is the total product cost per unit?
    a. $14.7375
    b. $12.1125
    c. $12.175
    d. $12.2375

    ANSWER: b
    RATIONALE: $66,000 + $75,000 + $50,000 + $51,250 = $242,250/20,000 = $12.1125

133. Product costs are converted from cost to expense when
    a. units are completed.
    b. materials are purchased.
    c. units are sold.
    d. materials are requisitioned.

    ANSWER: c

134. A company has purchased some steel to use in the production of steel railings. If this steel has NOT been put into production, it would be classified as
    a. finished goods inventory.
    b. factory supplies.
    c. work-in-process inventory.
    d. direct materials inventory.

    ANSWER: d

135. The income statement prepared for external reporting is
    a. based on a functional classification.
    b. referred to as absorption-costing income.
    c. called full-costing income.
    d. all of the above.

    ANSWER: d

136. Which of the following costs would NOT be included in calculating inventory values under the absorption-costing basis?
    a. direct materials
    b. fixed overhead
    c. selling and administrative expenses
    d. direct labor

    ANSWER: c

137. When calculating the absorption-costing income for external reporting, all
    a. manufacturing costs ultimately become nonmanufacturing costs.
    b. manufacturing costs are product costs and product costs are never expensed.
    c. costs of selling manufactured products are classified as product costs.
    d. selling and administrative costs are classified as nonmanufacturing costs.

    ANSWER: d

138. Which of the following accounts would appear on the financial statements of ONLY a manufacturing firm?
    a. materials inventory
    b. bonds payable
    c. prepaid insurance
    d. retained earnings

    ANSWER: a

139. Which type of inventory is normally sold to other organizations?
    a. direct materials
    b. factory supplies
    c. work in process
    d. finished goods

    ANSWER: d

140. The records of Custom Choppers, Inc. for September 2016 shows the following information:

Sales	$820,000
Selling and administrative expenses	140,000
Direct materials purchases	176,000
Direct labor	200,000
Factory overhead	270,000
Direct materials, September 1	24,000
Work in process, September 1	50,000
Finished goods, September 1	46,000
Direct materials, September 30	28,000
Work in process, September 30	56,000
Finished goods, September 30	38,000

The net income for the month of September is

a. $644,000.

b. $36,000.

c. $636,000.

d. $180,000.

ANSWER: b

RATIONALE: SUPPORTING CALCULATIONS:
COGM = ($24,000 + $176,000 - $28,000) + $200,000 + $270,000 +$50,000 - $56,000 = $636,000

COGS = $636,000 + $46,000 - $38,000 = $644,000
NI = $820,000 - $140,000 - $644,000 = $36,000

141. The merchandise inventory in a merchandising business corresponds most closely to which of the following items in a manufacturing firm?

a. materials inventory

b. cost of goods available for sale

c. cost of goods manufactured

d. finished goods inventory

ANSWER: d

142. If beginning work-in-process inventory is $160,000, ending work-in-process inventory is $180,000, cost of goods manufactured is $500,000, and direct materials used are $130,000, what are the conversion costs?

a. $210,000
b. $320,000
c. $340,000
d. $390,000

ANSWER: d

RATIONALE: SUPPORTING CALCULATIONS: $500,000 + $180,000 - $160,000 - $130,000 = $390,000

143. The following information pertains to Steel Wheels, Inc:

Cost of goods manufactured	$350,000
Beginning work-in-process inventory	110,000
Ending work-in-process inventory	80,000
Manufacturing overhead	50,000

What are the prime costs for the year?
a. $360,000
b. $480,000
c. $270,000
d. $300,000

ANSWER: c
RATIONALE: SUPPORTING CALCULATIONS: $350,000 + $80,000 - $110,000 - $50,000 = $270,000

144. Inventory balances for the Beemer Enterprises in April 2016 are as follows:

	April 1, 2016	April 30, 2016
Raw materials	$27,000	$21,000
Work in process	48,000	37,200
Finished goods	108,000	90,000

During April, purchases of direct materials were $36,000. Direct labor and factory overhead costs were $60,000 and $84,000, respectively.

Prime costs for April were
a. $102,000
b. $96,000
c. $87,000
d. $81,000

ANSWER: a
RATIONALE: SUPPORTING CALCULATIONS: ($27,000 + $36,000 - $21,000) + $60,000 = $102,000

145. Inventory balances for Marshall, Inc., in June 2016 are as follows:

	June 1, 2016	June 30, 2016
Raw materials	$1,125	$ 875
Work in process	2,000	1,550
Finished goods	4,500	3,750

During June, purchases of direct materials were $1,500. Direct labor and factory overhead costs were $2,500 and $3,500, respectively. Conversion costs for June were

a. $8,200.
b. $7,750.
c. $7,500.
d. $6,000.

ANSWER: d

RATIONALE: SUPPORTING CALCULATIONS: $2,500 + $3,500 = $6,000

Figure 2-13

Inventory balances for the Jameson Company in October 2016 are as follows:

	October 1, 2106	October 31, 2016
Raw materials	$27,000	$21,000
Work in process	48,000	37,200
Finished goods	108,000	90,000

During October, purchases of direct materials were $36,000. Direct labor and factory overhead costs were $60,000 and $84,000, respectively.

146. Refer to Figure 2-13. What is the cost of materials used in production?

a. $36,000
b. $42,000
c. $47,800
d. $54,000

ANSWER: b

RATIONALE: $27,000 +$ 36,000 - $21,000 = $42,000

147. **Refer to Figure 2-13**. What are the total manufacturing costs added to production in the period?
a. $186,000
b. $180,000
c. $144,000
d. $174,200

ANSWER: a
RATIONALE: $ 42,000 + $60,000 + $84,000 = $186,000

148. **Refer to Figure 2-13**. What is the cost of goods manufactured?
a. $180,000
b. $186,000
c. $194,000
d. $196,800

ANSWER: d
RATIONALE: $42,000 + $60,000 + $84,000 + $48,000 - $37,200 = $196,800

149. The sum of the total additions to work in process during a period is
a. total manufacturing costs added.
b. factory overhead applied.
c. material used.
d. cost of goods manufactured.

ANSWER: a

150. The following information for the Sutton Glass Company has been provided:

Cost of goods manufactured	$100,000
Work in process:	
Beginning	15,000
Ending	20,000
Direct labor	30,000
Direct materials used	?
Factory overhead	45,000

What is the amount of direct materials used?
a. $25,000
b. $30,000
c. $35,000
d. $100,000

ANSWER: b
RATIONALE: SUPPORTING CALCULATIONS: $100,000 + $20,000 - $15,000 - $30,000 - $45,000 = $30,000

151. The ending work-in-process inventory is deducted on the
    a. balance sheet.
    b. income statement.
    c. statement of cost of goods manufactured.
    d. statement of cash flows.

    ANSWER: c

152. Cost of goods sold equals cost of goods manufactured
    a. when finished goods inventories remain constant.
    b. when work-in-process inventories remain constant.
    c. plus beginning work-in-process inventory minus ending work-in-process inventory.
    d. when materials inventories remain constant.

    ANSWER: a

153. Inventory balances for Spiritlight Ventures for November 2016 are as follows:

	November 1, 2016	November 30, 2016
Materials	$ 9,000	$ 7,000
Work in process	16,000	12,400
Finished goods	36,000	30,000

During November, purchases of direct materials were $18,000. Direct labor and factory overhead costs were $20,000 and $28,000, respectively.

The cost of goods manufactured in November was

a. $68,000.
b. $77,600.
c. $74,000.
d. $71,600.

ANSWER: d

RATIONALE: SUPPORTING CALCULATIONS: $9,000 + $18,000 - $7,000 + $20,000 + $28,000 + $16,000 - $12,400 =$71,600

154. Selected data concerning the past year's operations of the Motor City Corporation are as follows:

Selling and administrative expenses	$225,000
Direct materials used	467,500
Direct labor (50,000 hours)	450,000
Factory overhead application rate	8 per DLH

	Inventories	
	Beginning	Ending
Direct material	$75,000	$67,500
Work in process	112,500	135,000
Finished goods	60,000	37,500

The cost of direct materials purchased is

a. $467,500.
b. $460,000.
c. $437,500.
d. $445,000.

ANSWER: b

RATIONALE: SUPPORTING CALCULATIONS: $467,500 + $67,500 - $75,000 = $460,000

Figure 2-14

The following is the data for Lauren Enterprises:

Selling and administrative expenses	$75,000
Direct materials used	265,000
Direct labor (25,000 hours)	300,000
Factory overhead application rate	$16 per DLH

	Inventories	
	Beginning	Ending
Direct materials	$50,000	$45,000
Work in process	75,000	90,000
Finished goods	40,000	25,000

155. **Refer to Figure 2-14**. What is the cost of goods manufactured?
a. $1,115,000
b. $965,000
c. $955,000
d. $950,000

ANSWER: d
RATIONALE: SUPPORTING CALCULATIONS: $265,000 + $300,000 + $400,000($16 × 25,000) + $75,000 - $90,000 =$950,000

156. **Refer to Figure 2-14**. What is the cost of goods sold?
a. $565,000
b. $950,000
c. $965,000
d. $980,000

ANSWER: c
RATIONALE: $265,000 + $ 300,000 + $400,000 + $75,000 - $90,000 + $40,000 - $25,000 = $965,000

157. The cost of units completed during a period is called
a. cost of goods sold.
b. cost of goods manufactured.
c. current manufacturing costs.
d. finished goods inventory.

ANSWER: b

158. The records for the previous year for Sarasota Boat Builders, Inc., shows the following data::

Selling and administrative expenses	$300,000
Direct materials used	530,000
Direct labor (100,000 hours)	600,000
Factory overhead application rate	$5 per DLH

	Inventories	
	Beginning	Ending
Work in process	$150,000	$160,000
Finished goods	80,000	50,000

The cost of goods sold is
a. $1,630,000.
b. $1,880,000.
c. $1,600,000.
d. $1,650,000.

ANSWER: d

RATIONALE: SUPPORTING CALCULATIONS: $530,000 + $600,000 + $500,000($5 × 100,000) + $150,000 - $160,000 + $80,000 - $50,000 = $1,650,000

159. The following information has been provided for Hopen Enterprises:

Cost of goods manufactured	$7,500
Work in process	
Beginning	1,200
Ending	1,400
Direct labor	4,000
Materials placed in production	1,500
Factory overhead	?

What is the amount of factory overhead?
a. $2,000
b. $2,200
c. $1,400
d. $5,500

ANSWER: b

RATIONALE: SUPPORTING CALCULATIONS: $7,500 + $1,400 - $1,200 - $4,000 - $1,500 = $2,200

160. The following information is from the records of Stretch Limousines, Inc.:

Net direct materials purchase cost	$225,000
Total direct materials used	275,000
Beginning direct materials inventory	125,000

The ending direct materials inventory is
a. $175,000.
b. $75,000.
c. $50,000.
d. $100,000.

ANSWER: b

RATIONALE: SUPPORTING CALCULATIONS: $125,000 + $225,000 - $275,000 = $75,000

161. The Sumter Company recently had a fire in its accounting office, destroying most of its records. Only the following information could be salvaged for 2016:

Direct labor	$400,000
Factory overhead	200,000
Cost of goods sold	800,000
Work in process, January 1	80,000
Finished goods, January 1	160,000
Work in process, December 31	100,000
Finished goods, December 31	120,000

The cost of direct materials used in production during 2016 is
a. $140,000.
b. $180,000.
c. $200,000.
d. $260,000.

ANSWER: b

RATIONALE: SUPPORTING CALCULATIONS: $800,000 + $120,000 - $160,000 + $100,000 - $80,000 - $400,000 -$200,000 = $180,000

Figure 2-15

Information from the records of Chrome Ponies Enterprises for June 2016 is as follows:

Sales	$41,000
Direct labor	10,000
Selling and administrative expenses	7,000
Direct materials purchases	6,000
Factory overhead	13,500

	Inventories	
	June 1, 2016	June 30, 2016
Direct materials	$1,200	$1,400
Work in process	2,500	2,800
Finished goods	2,300	1,900

162. Refer to Figure 2-15. What was the cost of materials used in production?
a. $ 6,200
b. $ 6,000
c. $5,800
d. $19,500

ANSWER: c

RATIONALE: $6,000 + $1,200 - $1,400 = $5,800

163. Refer to Figure 2-15. Chrome Ponies Enterprises' cost of goods manufactured in June is
a. $29,300.
b. $29,700.
c. $29,200.
d. $29,000.

ANSWER: d

RATIONALE: SUPPORTING CALCULATIONS: ($1,200 + $6,000 - $1,400) + $10,000 + $13,500 + $2,500 - $2,800 = $29,000

164. Refer to Figure 2-15. What are the total manufacturing costs added?
a. $18,500
b. $19,300
c. $29,000
d. $29,300

ANSWER: d

RATIONALE: $6,000 + $1,200 - $1,400 + $10,000 + $13,500 = $29,300

165. Refer to Figure 2-15. What is the gross margin (profit)?
    a. $11,500
    b. $11,600
    c. $4,500
    d. $4,600

    ANSWER: b

    RATIONALE: $41,000 - ($1,200 + $6,000 - $1,400) + $10,000 + $13,500 + $2,500 - $2,800 +$2,300 - $1,900 = $11,600

166. Refer to Figure 2-15. What is the cost of goods sold?
    a. $36,500
    b. $28,600
    c. $29,400
    d. $29,500

    ANSWER: c

    RATIONALE: ($1,200 + $6,000 - $1,400) + $10,000 + $13,500 + $2,500 - $2,800 + $2,300 - $1,900 = $29,400

167. Morton Manufacturing shows cost of goods sold for the month of March was $90,000. The finished goods inventory was $15,000 on March 1 and $17,500 on March 31. Beginning and ending work-in-process inventories were $20,000 and $25,000, respectively. What was the cost of goods manufactured during March?
    a. $92,500
    b. $90,000
    c. $87,500
    d. $97,500

    ANSWER: a

    RATIONALE: SUPPORTING CALCULATIONS: $90,000 + $17,500 - $15,000 = $92,500

168. Assume the following information for the Blue Knights Corporation for the year ended December 31, 2016:

Sales	$2,250
Cost of goods manufactured for the year	1,350
Beginning finished goods inventory	450
Ending finished goods inventory	495
Selling and administrative expenses	300

    What is the cost of goods sold for the year ended December 31, 2016?
    a. $1,305
    b. $1,605
    c. $1,350
    d. $1,650

    ANSWER: a

    RATIONALE: SUPPORTING CALCULATIONS: $1,350 + 450 - $495 = $1,305

169. Rebel Yell, Inc., recorded the following data for April:

Beginning finished goods inventory	$60,000
Beginning work-in-process inventory	40,000
Ending work-in-process inventory	80,000
Ending finished goods inventory	50,000
Factory overhead costs	200,000
Direct materials used	160,000
Direct labor	100,000

What is the cost of goods manufactured for April?
a. $470,000
b. $420,000
c. $460,000
d. $430,000

ANSWER: b
RATIONALE: SUPPORTING CALCULATIONS: $160,000 + $100,000 + $200,000 + $40,000 - $80,000 = $420,000

170. The records of the Williamson Company show the following information:

Direct materials used	$90,000
Direct labor	130,000
Factory overhead	150,000
Beginning work-in-process inventory	15,000
Beginning finished goods inventory	20,000
Ending work-in-process inventory	42,000
Selling and administrative expenses	37,500

What was the cost of goods manufactured during the year?
a. $370,000
b. $365,000
c. $343,000
d. $333,000

ANSWER: c
RATIONALE: SUPPORTING CALCULATIONS: $90,000 + $130,000 + $150,000 + $15,000 - $42,000 = $343,000

171. Which of the following is NOT an example of a difference between the income statement of a service organization and the income statement of a manufacturing organization?
    a. A service company will never have work in process.
    b. The service company will not have a finished goods inventory.
    c. Fulfillment costs may be added to cost of goods sold of a service company.
    d. Research and development expenses are not usually a major component of a service organization.

    ANSWER: a

172. Which of the following items would NOT appear on an income statement of a service organization?
    a. selling expenses
    b. cost of goods sold
    c. administrative expenses
    d. gross margin

    ANSWER: b

173. Which of the following items is NEVER relevant to the cost flows of a service organization?
    a. finished goods inventory
    b. materials inventory
    c. work-in-process inventory
    d. all of the above are always relevant.

    ANSWER: a

174. Assume the following data for Rodriguez Services, an accounting firm, for November:

Beginning materials inventory	$20,000
Beginning work-in-process inventory	40,000
Ending work-in-process inventory	50,000
Ending materials inventory	10,000
Actual overhead costs	100,000
Direct materials used	60,000
Direct labor	200,000

    What is the cost of services sold for November?
    a. $370,000
    b. $350,000
    c. $360,000
    d. $330,000

    ANSWER: b
    RATIONALE: SUPPORTING CALCULATIONS: $60,000 + $200,000 + $100,000 + $40,000 - $50,000 = $350,000

Figure 2-16
A small engine repair shop purchased materials costing $9,000 in July. The beginning inventory of material parts was $4,500 and the ending inventory of material parts was $4,000. Payments for direct labor for July totaled $27,000, secretarial costs were $2,000, and overhead of $5,000 was incurred. In addition, $5,000 was spent on advertising and $2,000 for the franchise name. Revenue for July was $50,000.

175. **Refer to Figure 2-16**. What is the cost of services sold for July?
a. $41,500
b. $43,500
c. $50,500
d. $40,500

ANSWER: a
RATIONALE: SUPPORTING CALCULATIONS: $9,000 + $4,500 - $4,000 + $27,000 + $5,000 = $41,500

176. **Refer to Figure 2-16**. What is the gross margin for July?
a. $41,500
b. $43,500
c. $1,500
d. $8,500

ANSWER: d
RATIONALE: SUPPORTING CALCULATIONS: COSS = $9,000 + $4,500 - $4,000 + $27,000 + $5,000 = $41,500 GM =$50,000 - 41,500 = $8,500

177. One or more of the following is (are) a cost accounting system(s) that use(s) only unit-based activity drivers to assign costs to cost objects.
a. Activity-based management
b. Activity-based costing system
c. Functional-based cost management system
d. Both a and b

ANSWER: c

178. Which of the following would be associated with a functional-based cost accounting information system?
a. setup costs assigned to products using the number of setups as the driver
b. materials handling costs assigned to products using the number of moves as the activity driver
c. customer service costs assigned to products using the number of complaints as the activity driver
d. purchasing costs assigned to products using number of direct labor hours as the activity driver

ANSWER: d

179. In a functional-based management system, one is NOT likely to find
    a. unit- and non-unit-based cost drivers.
    b. maximization of individual unit performance.
    c. narrow and rigid product costing.
    d. allocation intensive cost assignment.

    ANSWER: a

180. In a cost management system, the cost view does NOT include
    a. resources.
    b. activities.
    c. driver analysis.
    d. products and customers.

    ANSWER: c

181. The system that focuses on the management of activities with the objective of improving the value received by the customer and the profit received by providing this value is called.
    a. Activity-based management
    b. Contemporary cost control
    c. Functional-based cost management system
    d. JIT

    ANSWER: a

182. Which of the following items would be associated with both a functional-based cost accounting information system and an activity based cost information system?
    a. Overhead is assigned on a plant-wide rate based on direct labor hours.
    b. Customer service costs are assigned to products using number of complaints as the activity driver.
    c. Direct labor cost is assigned to products using direct tracing.
    d. None of these.

    ANSWER: c

183. In a cost management system, the process view does NOT include
    a. resources.
    b. activities.
    c. driver analysis.
    d. performance analysis.

    ANSWER: a

184. Which is NOT a benefit of an activity-based cost management system?
    a. greater product costing accuracy
    b. increased cost of implementing the system
    c. improved decision making
    d. enhanced strategic planning

    ANSWER: b

185. In an activity-based management system, one is NOT likely to find
    a. tracing of costs to activities.
    b. only unit-based drivers.
    c. broad flexible product costing.
    d. systemwide performance maximization.

    ANSWER: b

186. Which of the following is a trait of a functional-based cost management system?
    a. unit-based drivers
    b. tracing intensive
    c. use of both financial and nonfinancial measures of performance
    d. detailed activity information

    ANSWER: a

187. Which of the following is NOT a trait of a functional-based cost management system?
    a. unit-based drivers
    b. narrow and rigid product costing
    c. allocation-intensive
    d. focus on managing activities

    ANSWER: d

188. Which of the following is a trait of an activity-based cost management system?
    a. allocation-intensive
    b. narrow and rigid product costing
    c. non-unit-based drivers
    d. focus on managing costs

    ANSWER: c

189. The optimal level in the trade-off between measurement and error costs is when
    a. measurement costs are greater than error costs.
    b. measurement costs and error costs are minimized.
    c. measurement costs are less than error costs.
    d. the total of measurement costs and error costs are maximized.

    ANSWER: b

190. Error costs can be defined as
    a. the costs associated with the measurements required by the cost management system.
    b. unit costs assigned based on activities.
    c. the costs associated with making poor decisions based on bad cost information.
    d. none of these

    ANSWER: c

191. Describe a cost management information system, its objectives, and major subsystems.

    ANSWER: The cost management information system is an accounting information subsystem that is primarily concerned with producing outputs for internal users using inputs and processes needed to satisfy management objectives.

    The objectives are as follows:
    1. To provide information for costing out services, products, and other objects of interest to management.
    2. To provide information for planning and control.
    3. To provide information for decision making.

    The major subsystems of a cost management information system are the cost accounting information system and the operational control information system.

192. The following items (partial list) are associated with a functional-based cost accounting information system, an activity-based cost accounting information system, or both:

a. materials purchasing cost incurrence
b. assignment of purchasing cost to products using direct labor hours
c. assignment of purchasing cost using number of purchase orders
d. usage of direct materials
e. direct materials cost assigned to products using direct tracing
f. materials handling cost incurrence
g. materials handling cost assigned using direct labor hours
h. materials handling cost assigned using the number of moves as the driver
i. computer
j. materials handling equipment
k. decision to make a part or buy it from a supplier
l. costing out of products
m. report detailing individual product costs

Required:

1. For an activity-based cost system, classify the items into one of the following categories:
   a. interrelated parts
   b. processes
   c. objectives
   d. inputs
   e. outputs
   f. user actions
2. How would the choices differ between the two systems? What are the costs and benefits of each?

ANSWER:

1. The activity-based cost accounting system:
   a. interrelated parts: computer
   b. processes: cost assignment: direct tracing of materials, driver tracing of purchasing costs (orders), materials handling cost (moves)
   c. objectives: costing out of products
   d. inputs: direct materials cost, purchasing cost, materials handling cost
   e. outputs: product cost report
   f. user actions: make-or-buy decision

2. The difference in the costing systems is found in the processes. A functional-based cost system would not use nonunit drivers such as moves and orders to assign overhead but would use a unit driver like direct labor hours. There is increased accuracy of the cost assignments in an activity- based system, and a more comprehensive idea of costs may be used for decision making.

   The activity-based cost accounting system is more expensive to develop but has the benefit of more comprehensive uses for cost information. The functional-based cost system is simpler and less expensive to implement but the information generated is

less versatile.

193. Explain the differences between direct tracing, driver tracing, and allocation.

ANSWER: Direct tracing is the process of identifying and assigning costs to a cost object that are specifically or physically associated with the cost object.

Driver tracing is assigning costs using drivers, which are causal factors. The driver approach relies on identification of factors that allegedly capture the causal relationship.

Allocation is the assignment of indirect costs to cost objects based on convenience or assumed linkages.

194. Classify the following costs incurred by a step railing manufacturing company as direct materials, direct labor, factory overhead, or period costs:

a. Wages paid to production workers
b. Utilities in the office
c. Depreciation on machinery in plant
d. Steel
e. Accountant's salary
f. Rent on factory building
g. Rent on office equipment
h. Maintenance workers' wages
i. Utilities in the plant
j. Maintenance on office equipment

ANSWER:

a. Direct labor
b. Period
c. Factory overhead
d. Direct materials
e. Period
f. Factory overhead
g. Period
h. Factory overhead
i. Factory overhead
j. Period

195. Big Foot Athletics designs and manufactures running shoes. A new model of shoes, Fast Track, has been developed and is ready for production.

Required:

Which costs will the production manager collect from the value chain, and how would these costs be used in different decisions?

a. traditional product costs
b. operating product costs
c. value-chain product costs

ANSWER: Production costs would be included in all of the above definitions.

a. traditional product costs:	Direct materials, direct labor and manufacturing overhead are the traditional product costs. They would be used for external reporting, budgeting, and control of costs.
b. operating product costs:	In addition to the traditional product costs, marketing and customer service costs would be considered in analyzing profitability of the product. Strategic questions about the operating design, i.e., materials and plant layout, would be addressed. The focus is on the revenue and cost of Fast Track.
c. value-chain product costs:	Production costs of Fast Track must be viewed in relation to other products. Strategic pricing and product mix decisions must be made. The profitability of all the product lines is at issue.

196. Information from the records of the Maloney Company for the month of May 2016 is as follows:

Purchases of direct materials	$54,000
Indirect labor	15,000
Direct labor	31,200
Depreciation on factory machinery	9,000
Sales	165,900
Selling and administrative expenses	18,900
Rent on factory building	21,000

	Inventories	
	May 1, 2016	May 31, 2016
Direct materials	$24,000	$26,100
Work in process	6,300	9,600
Finished goods	15,000	17,100

Required:

a. Prepare a statement of cost of goods manufactured for the month of May.
b. Prepare an income statement for the month of May.
c. Determine prime and conversion costs.

ANSWER:

a.

Maloney Company
Statement of Cost of Goods Manufactured
For the Month of May 2016

Direct materials:		
Beginning inventory	$ 24,000	
Add: Purchases	54,000	
Materials available	$ 78,000	
Less: Ending inventory	26,100	
Direct materials used in production		$ 51,900
Direct labor		31,200
Manufacturing overhead:		
Indirect labor	$ 15,000	
Depreciation on machinery	9,000	
Rent on factory	21,000	45,000
Total manufacturing costs added		$128,100
Add: Beginning work-in-process inventory		6,300
Total costs in process		$134,400
Less: Ending work-in-process inventory		9,600
Cost of goods manufactured		$124,800

b.

Maloney Company
Income Statement
For the Month of May 2016

Sales		$165,900
Less: Cost of goods sold:		
Add: Cost of goods manufactured	$124,800	
Beginning inventory finished goods	15,000	
Cost of goods available for sale	$139,800	
Less: Ending inventory finished goods	17,100	122,700
Gross margin		$ 43,200
Less: Selling and administrative expenses		18,900
Operating income		$ 24,300

c. Prime costs = $51,900 + $31,200 = $83,100
Conversion costs = $31,200 + $45,000 = $76,200

197. The following information pertains to the Montpelier Company:

Direct materials purchases	$62,400
Beginning direct materials	10,400
Factory overhead	58,400
Beginning work in process	10,600
Cost of goods manufactured	164,000
Ending finished goods	20,000
Gross margin	21,000
Selling and administrative expenses	7,000
Beginning finished goods	16,000
Ending work in process	8,000
Ending direct materials	12,400
Direct labor	?
Direct materials used	?
Operating income (loss)	?
Total manufacturing costs added	?
Cost of goods sold	?
Sales	?

Required:

Determine the following values:

a. Net income
b. Total manufacturing costs added
c. Cost of goods sold
d. Sales
e. Direct materials used
f. Direct labor

ANSWER:

a. $21,000 – $7,000 = $14,000
b. $164,000 + $8,000 – $10,600 = $161,400
c. $16,000 + $164,000 – $20,000 = $160,000
d. $21,000 + $160,000* = $181,000
e. $10,400 + $62,400 - $12,400 = $60,400
f. $161,400** - $60,400*** – $58,400 = $42,600

*Found in c
**Found in b
***Found in e

198. Information about Mobile Enterprises for the year ending December 31, 2016, is as follows:

Sales	$300,000
Selling and administrative expenses	18,000
Net income	8,000

Beginning inventories:	
Direct materials	20,000
Work in process	18,000
Finished goods	62,000

Ending direct materials is 20 percent larger than beginning direct materials. Ending work in process is half of the beginning work in process. Ending finished goods increased by $8,000 during the year. Prime costs and conversion costs are 70 percent and 60 percent of total manufacturing costs added, respectively. Materials purchases are $113,200.

Required:

a. Prepare a statement of cost of goods manufactured.
b. Prepare an income statement.

Note: Find the numbers for the income statement first.

ANSWER:

a.

Mobile Enterprises
Statement of Cost of Goods Manufactured
For the Year Ended December 31, 2016

Direct materials:	
Beginning inventory*	$ 20,000
Add: Purchases*	113,200
Materials available	$133,200
Less: Ending inventory* ($20,000 × 1.20)	24,000
Direct materials used in production	$109,200
Direct labor [(.7 × 273,000) – 109,200]	81,900
Manufacturing overhead [(.6 × 273,000) – 81,900]	81,900
Total manufacturing costs added	$273,000
Add: Beginning work-in-process inventory*	18,000
Total costs in process	$291,000
Less: Ending work-in-process inventory* ($18,000 × 0.50)	9,000
Cost of goods manufactured	$282,000

b.

Mobile Enterprises
Income Statement
For the Year Ended December 31, 2016

Sales*		$300,000
Less: Cost of goods sold:		
Add: Cost of goods manufactured	$282,000	
Beginning inventory finished goods*	62,000	
Cost of goods available for sale	$344,000	
Less: Ending inventory finished goods* ($62,000 + $8,000)	70,000	274,000
Gross margin		$ 26,000
Less: Selling and administrative expenses*		18,000
Operating income*		$ 8,000

*These items are provided.

199. The following costs were incurred by the Awesome Company:

Direct labor	$600,000
Direct material purchases	555,000
Depreciation on plant	30,000
Factory supervisor's salary	75,000
Plant maintenance	15,000
Plant utilities	27,000
Sales	1,950,000
Selling and administrative expenses	300,000
Beginning direct materials inventory	51,000
Beginning work-in-process inventory	24,000
Beginning finished goods inventory	54,000
Ending direct materials inventory	45,000
Ending work in process	39,000
Ending finished goods	72,000

Required:

Calculate the following values:

a. Direct materials used
b. Cost of goods manufactured
c. Cost of goods sold
d. Operating income

ANSWER:

a. $51,000 + $555,000 – $45,000 = $561,000
b. $561,000 + $600,000 + $75,000 + $30,000 + $15,000 + $27,000 + $24,000 – $39,000 = $1,293,000
c. $54,000 + $1,293,000 – $72,000 = $1,275,000
d. $1,950,000 – $1,275,000 – $300,000 = $375,000

200. Foremost Corporation incurred the following costs:

Beginning direct materials inventory	$17,000
Beginning work-in-process inventory	8,000
Beginning finished goods inventory	18,000
Ending direct materials inventory	15,000
Ending work in process	13,000
Ending finished goods	24,000
Factory supervisor's salary	25,000
Depreciation on plant	10,000
Sales	650,000
Selling and administrative expenses	100,000
Plant maintenance	5,000
Plant utilities	9,000
Direct material purchases	185,000
Direct labor	200,000

Required:

Calculate the following values:

a. Direct materials used
b. Cost of goods manufactured
c. Cost of goods sold
d. Operating income

ANSWER:

a. $17,000 + $185,000 – $15,000 = $187,000
b. $187,000 + $200,000 + $25,000 + $10,000 + $5,000 + $9,000 + $8,000 – $13,000 = $431,000
c. $18,000 + $431,000 – $24,000 = $425,000
d. $650,000 – $425,000 – $100,000 = $125,000

201. Corlis Custom Builders designs decks, gazebos, and play equipment for residential homes. The following was provided for the year ended September 30, 2016:

Direct labor	$600,000
Direct material purchases	40,000
Administrative	130,000
Overhead	75,000
Selling	265,000
Beginning direct materials inventory	20,000
Beginning designs in process	14,000
Ending direct materials inventory	10,000
Ending designs in process	39,000

The average design fee is $700. There were 2,000 designs processed during the year.

Required:

a. Prepare a statement of cost of services sold.
b. Prepare an income statement.
c. Discuss three differences between services and tangible products.

ANSWER:

a.

Corlis Custom Builders
Cost of Services Sold
For the Year Ended September 30, 2014

Beginning materials	$ 20,000
Purchases	40,000
Materials available	60,000
Less Ending materials	10,000
Materials used	50,000
Direct labor	600,000
Overhead	75,000
Beginning design in process	14,000
Ending designs in process	39,000
Cost of Services Sold	$700,000

b.

Corlis Custom Builders
Income Statement
For the Year Ended September 30, 2014

Sales	$1,400,000
Cost of services sold	700,000
Gross margin	700,000
Selling	265,000
Administrative	130,000
Net income	$ 305,000

c. Services have three attributes that are not possessed by tangible products: intangibility, perishability, and inseparability.

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202. Define activity-based management. In your answer, present the activity-based management model in good form.

ANSWER: Activity-based management focuses on the management of activities with the objective of improving the value received by the customer and the profit received by providing this value; it includes driver analysis, activity analysis, and performance evaluation and draws on activity-based costing as a major source of information. Exhibit 2-7 in the text presents the model.

203. In choosing a cost management system, the controller must balance the total costs of implementing such systems. What costs must be balanced to determine total cost? How do functional-based and activity-based cost systems balance the trade-offs?

ANSWER: Error costs and measurement costs must be considered in choosing a cost management system. Activity-based cost management has greater measurement costs due to analyzing many activities but has greater accuracy and fewer error costs. Functional-based cost systems have lower measurement costs but higher error costs. Controllers must assess the need for accuracy in costing, pricing, and managing profitability.

204. The cost of goods sold for the Immaculate Corporation for the month of April 2016 was $450,000. Work-in-process inventory at the end of April was 95 percent of the work-in-process inventory at the beginning of the month. Overhead is 80 percent of the direct labor cost. During the month, $110,000 of direct materials were purchased. Revenues for Immaculate were $600,000, and the selling and administrative costs were $70,000.

Other information about Immaculate's inventories and production for April was as follows:

Ending inventories-April 30	
Direct materials	$19,000
Work in process	?
Finished goods	105,000

Beginning inventories-April 1	
Direct materials	$22,200
Work in process	40,000
Finished goods	208,500

Required:

a. Prepare a cost of goods manufactured and cost of goods sold statements.
b. Prepare an income statement.
c. What are the prime costs, conversion costs, and period costs?

ANSWER: a.

Immaculate Corporation
Statement of Cost of Goods Manufactured
For Month of April 2016

Direct materials:	
Beginning inventory*	$ 22,200
Add: Purchases*	110,000
Materials available	$132,200
Less: Ending inventory*	19,000
Direct materials used in production	$113,200
Direct labor below	128,500
Manufacturing overhead ($128,500 ´ 0.80)	102,800
Total manufacturing costs added	$344,500
Add: Beginning work-in-process inventory*	40,000
Total costs in process	$384,500
Less: Ending work-in-process inventory ($40,000 ´ 0.95)	38,000
Cost of goods manufactured (from COGS statement)	$346,500

DM used = $22,200 + $110,000 – $19,000 = $113,200
CGM = $450,000 + $105,000 – $208,500 = $346,500
Total manufacturing costs added = DM + DL + MOH
$344,500 = 113,200 + DL + MOH
$231,300 = DL + MOH
$231,300 = DL + {MOH = 0.80 ´ DL}
$231,300 = DL + .8DL
$231,300 = 1.8DL
$128,500 = DL
MOH = 0.80 × DL
MOH = 0.80 × 128,500 = 102,800

Immaculate Corporation
Cost of Goods Sold Statement
For Month of April 2016

Cost of goods sold*:	
Add: Cost of goods manufactured	$346,500
Beginning inventory finished goods*	208,500
Cost of goods available for sale	$555,000
Less: Ending inventory finished goods*	105,000
Cost of Goods Sold*	$450,000

*These items are provided.

b.

Immaculate Company
Income Statement
For Month of April 2016

Sales*		$600,000
Less: Cost of goods sold*:		
Add: Cost of goods manufactured	$346,500	
Beginning inventory finished goods*	208,500	
Cost of goods available for sale	$555,000	
Less: Ending inventory finished goods*	105,000	450,000
Gross margin		$150,000
Less: Selling and administrative expenses*		70,000
Operating income		$ 80,000

*These items are provided.

c. Conversion costs = direct labor and overhead = $231,300
= $128,500 + $102,800 = $231,300
Prime costs = DM + DL = $113,200 + $128,500 = $241,700
Period costs = $70,000

205. Describe several of the major differences between a functional-based cost management system and an activity-based cost management system.

ANSWER: The functional-based cost accounting system assumes that all costs can be classified as fixed or variable with respect to changes in the units or volume of product produced.

The activity-based cost management system's objective is to improve the quality, content, relevance, and timing of information.

A comparison of the two systems is shown below:

Functional-based	Activity-based
1. Unit-based drivers	1. Unit and nonunit-based drivers
2. Allocation-intensive	2. Tracing-intensive
3. Narrow and rigid product costing	3. Broad, flexible product costing
4. Focus on managing costs	4. Focus on managing activities
5. Sparse activity information	5. Detailed activity information
6. Maximization of individual unit performance	6. Systemwide performance maximization
7. Uses financial measures of performance	7. Uses both financial and nonfinancial measures of performance