c2

Student: ____

1. Which of the following statements is true?

A.
B.
C.
D.
E.

2. Product costs are:

A.
B.
C.
D.
E.

3. Which of the following is a product cost for external financial reporting purposes?

A.
B.
C.
D.
E.

4. Which of the following is a period cost?

A.
B.
C.
D.
E.

5. The accounting records of Niagara Manufacturing Company revealed the following costs: direct materials used, $120,000; direct labour, $275,000; manufacturing overhead, $350,000; and selling and administrative expenses, $400,000. Niagara's product costs total:

A.
B.
C.
D.
E.

6. Costs that are expensed when incurred are called:

A.
B.
C.
D.
E.

7. Which of the following is a period cost?

A.
B.
C.
D.
E.

8. The accounting records of Banff Corporation revealed the following selected costs: Sales commissions, $25,000; plant supervision, $88,600; and administrative expenses, $179,400. Banff Corporation's period costs total:

A.
B.
C.
D.
E.

9. Chant Corporation recently computed total product costs of $647,000 and total period costs of $549,000. On the basis of this information, Chant's income statement should reveal operating expenses of:

A.
B.
C.
D.
E.

10. Which of the following entities would most likely have raw materials, work in process, and finished goods?

A.
B.
C.
D.
E.

11. Which of the following inventories would a discount retailer such as Zellers report as an asset?

A.
B.
C.
D.
E.

12. Which of the following inventories would a company ordinarily hold for sale?

A.
B.
C.
D.
E.

13. Scott Corporation engages in mass customization and direct sales, the latter by accepting customer orders over the Internet. As a result, Scott:

A.
B.
C.
D.
E.

14. Companies that engage in mass customization:

A.
B.
C.
D.
E.

15. ElizabethtownMotors Ltd. manufactures all-wheel drive (AWD) automobiles. Which of the following would not be classified as direct materials by the company?

A.
B.
C.
D.
E.

16. Should direct materials be classified as a part of any or all of the following: conversion cost, manufacturing cost, and prime cost?

A.
B.
C.
D.
E.

17. Ranges Ltd. produces refrigerators and stoves in an assembly-line process. Labour costs incurred during a recent period were: corporate executives, $100,000; assembly-line workers, $80,000; security guards, $18,000. The total of Ranges' direct labour cost was:

A.
B.
C.
D.
E.

18. Depreciation of factory equipment is classified as:

A.
B.
C.
D.
E.

19. Which of the following costs is not a component of manufacturing overhead?

A.
B.
C.
D.
E.

20. The accounting records of Perth Company revealed the following costs, among others:

Factory insurance	$ 32,0(
Raw materials used	256,0(
Customer entertainment	15,0(
Indirect labour	45,0(
Depreciation on salespersons' cars	22,0(
Production equipment rental costs	72,0(

Costs that would be considered in the calculation of manufacturing overhead total:

A.
B.
C.
D.
E.

21. Which of the following statements is correct?

A.
B.
C.
D.
E.

22. Conversion costs are:

A.
B.
C.
D.
E.

23. Prime costs are comprised of:

A.
B.
C.
D.
E.

24. Which of the following statements is true?

A.
B.
C.
D.
E.

25. In a manufacturing company, the cost of goods manufactured during the period would include which of the following elements?

A.
B.
C.
D.
E.

26. Which of the following equations is used to calculate the cost of goods sold during the period?

A.
B.
C.
D.
E.

27. Work-in-process inventory is composed of:

A.
B.
C.
D.
E.

28. The accounting records for Ferguson Manufacturing revealed that the company began the month of September with a finished-goods inventory of $150,000. The finished-goods inventory at the end of September was $70,000 and the cost of goods sold during the month was $125,000. The cost of goods manufactured during September was:

A.
B.
C.
D.
E.

29. Mike's Machinery Ltd. reported the cost of goods manufactured of $300,000, and the firm's year-end balance sheet reported work in process and finished goods of $50,000 and $67,000, respectively. If supplemental information disclosed raw materials used in production of $25,000, direct labour of $80,000, and manufacturing overhead of $90,000, the company's beginning work in process must have been:

A.
B.
C.
D.
E.

30. Maplewood Company reported manufacturing overhead of $300,000 with the company's year-end balance sheet revealing work in process and finished goods of $80,000 and $150,000, respectively. If supplemental information disclosed raw materials used in production of $70,000, direct labour of $130,000, and beginning work in process of $30,000, the company's cost of goods manufactured have been:

A.
B.
C.
D.
E.

31. The accounting records of Dauphin Company revealed the following information:

Total manufacturing costs	$530,00
Work in process inventory – Jan 1	56,00
Work in process inventory – Dec 31	78,00
Finished goods inventory – Jan 1	146,00
Finished goods inventory – Dec 31	123,00

Dauphin's cost of goods sold is:

A.
B.
C.
D.
E.

32. The accounting records of Greenwood Company revealed the following information:

Work in process inventory – Jan 1	$58,0(
Work in process inventory – Dec 31	49,0(
Finished goods inventory – Jan 1	125,0(
Finished goods inventory – Dec 31	158,0(
Cost of goods manufactured	754,0(

Greenwood's cost of goods sold is:

A.
B.
C.
D.
E.

33. An employee accidentally understated the year's advertising expense by $150,000. Which of the following correctly depicts the effect of this error?

A.
B.
C.
D.
E.

34. Which of the following would likely be a suitable cost driver for the amount of direct materials used?

A.
B.
C.
D.
E.

35. The choices below depict five costs of Benton Corporation and a possible driver for each cost. Which of these choices likely contains an inappropriate cost driver?

A.
B.
C.
D.
E.

36. Variable costs are those costs that:

A.
B.
C.
D.
E.

37. Which of the following is <u>not</u> an example of a variable cost?

A.
B.
C.
D.
E.

38. Which costs will change with a decrease in activity?

A.
B.
C.
D.
E.

39. Which of the following is an example of a fixed cost?

A.
B.
C.
D.
E.

40. The variable costs per unit are $4 when a company produces 10,000 units of product. What are the variable costs per unit when 8,000 units are produced?

A.
B.
C.
D.
E.

41. The fixed costs per unit are $20 when a company produces 10,000 units of product. What are the fixed costs per unit when 25,000 units are produced?

A.
B.
C.
D.
E.

42. Total costs are $200,000 when 20,000 units are produced; of this amount, variable costs are $84,000. What are the total costs when 26,000 units are produced?

A.
B.
C.
D.
E.

43. Which of the following would <u>not</u> be characterized as a cost object?

A.
B.
C.
D.
E.

44. Costs that can be easily traced to a specific department are called:

A.
B.
C.
D.
E.

45. Which of the following would <u>not</u> be considered a direct cost with respect to the service department of a new car dealership?

A.
B.
C.
D.
E.

46. Indirect costs:

A.
B.
C.
D.
E.

47. The salary that is sacrificed by a college student who pursues a degree full time is a(n):

A.
B.
C.
D.
E.

48. The tuition fee that will be paid next semester by a college student who pursues a degree is a(n):

A.
B.
C.
D.
E.

49. Which of the following costs should be ignored when choosing among alternatives?

A.
B.
C.
D.
E.

50. If the total cost of alternative A is $600,000 and the total cost of alternative B is $200,000, then $400,000 is termed the:

A.
B.
C.
D.
E.

51. Tiny Totts is a nursery school for kindergarten children. When there are twenty children enrolled, total revenues and total costs are $6,000 and $3,200, respectively. When there are twenty-one children enrolled, total revenues and total costs are $6,300 and $3,255, respectively. The marginal cost when the twenty-first student enrolls in the school is:

A.
B.
C.
D.
E.

52. Tiny Totts is a nursery school for kindergarten children. When there are twenty children enrolled, total revenues and total costs are $6,000 and $3,200, respectively. When there are twenty-one children enrolled, total revenues and total costs are $6,300 and $3,255, respectively. The average cost when there are twenty children enrolled in the school is:

A.
B.
C.
D.
E.

53. Consider the three firms that follow: (1) Air Canada, (2) Chrysler Canada and (3) Zellers. These firms, examples of service providers, manufacturers, and merchandisers, tend to have different characteristics with respect to costs and financial-statement disclosures.

Required:

Determine which of the preceding firms (1, 2, and/or 3) would likely:

A. Disclose operating expenses on the income statement.
B. Have product costs.
C. Have period costs.
D. Disclose cost of goods sold on the income statement.
E. Have no meaningful investment in inventory.
F. Maintain raw-material, work-in-process, and finished-goods inventories.
G. Have variable and fixed costs.

54. Consider the following cost items:

1. Sales commissions earned by a company's sales force.
2. Raw materials purchased during the period.
3. Current year's depreciation on a firm's manufacturing facilities.
4. Year-end completed production of a carpet manufacturer.
5. The cost of products sold to customers of an apparel store.
6. Wages earned by machine operators in a manufacturing plant.
7. Income taxes incurred by an airline.
8. Marketing costs of an electronics manufacturer.
9. Indirect labour costs incurred by a manufacturer of office equipment.

Required:

A. Evaluate the costs just cited and determine whether the associated dollar amounts would be found on the firm's balance sheet, income statement, or schedule of cost of goods manufactured. (Note: In some cases, more than one answer will apply.)
B. What major asset will normally be insignificant for service enterprises and relatively substantial for retailers, wholesalers, and manufacturers? Briefly discuss.
C. Briefly explain the similarity and difference between the merchandise inventory of a retailer and the finished-goods inventory of a manufacturer.

55. Eastside Manufacturing produces small electric engines. Identify the following costs as direct materials (DM), direct labour (DL), manufacturing overhead (MOH), or a period cost (PC). Also indicate whether the cost is variable (V) or fixed (F) with respect to behaviour.

A. Commissions paid to salespeople
B. Straight-line depreciation on the factory building
C. Salary of the plant supervisor
D. Wages of the assembly-line workers
E. Machine lubricant used in production activities
F. Engine casings used in production activities
G. Advertising placed in trade journals
H. Lease payments for the president's automobile
I. Property taxes paid on the factory facilities

56. Consider the following items:

A. Tomatoes used in the manufacture of Heinz ketchup
B. Administrative salaries of executives employed by Air Canada
C. Wages of assembly-line workers at a Ford plant
D. Marketing expenditures of the Toronto Blue Jays Baseball Club
E. Commissions paid to Coca-Cola's salespeople
F. Straight-line depreciation on manufacturing equipment owned by Dell Computer
G. Shipping charges incurred by Office Depot on out-going orders
H. Speakers used in Sony home-theater systems
I. Insurance costs related to a Mary Kay Cosmetics' manufacturing plant

Required:

Complete the table that follows and classify each of the costs listed as (1) a product or period cost and (2) a variable or fixed cost by placing an "X" in the appropriate column.

	Product or Period Cost		Variabl
Item	Product	Period	Variable
A			
B			
C			
D			
E			
F			
G			
H			
I			

57. The following selected costs were extracted from the accounting records of Brampton Machining:

1. Direct materials used in production
2. Wages of machine operators
3. Factory utilities
4. Sales commissions
5. Salary of Brampton's president
6. Factory depreciation
7. Wages of plant security guards
8. Uncollectible accounts expense
9. Machine lubricant used in production

Required:

By the use of numbers, identify the costs that would be used to calculate:

A. cost of goods manufactured.
B. manufacturing overhead.
C. total period costs.
D. total conversion costs.
E. total direct costs of Brampton's credit and collections department.
F. Brampton's inventory cost.

58. Draper Textiles Inc. had the following data for the period just ended.

Work in process – Jan 1	$ 40,0
Work in process – Dec 31	52,0
Finished goods – Jan 1	60,0
Finished goods – Dec 31	81,0
Direct materials used	106,0
Direct labour	300,0
Factory depreciation	90,0
Sales	1,000,0
Advertising expense	50,0
Factory utilities	20,0
Indirect materials	20,0
Indirect labour	30,0

Required:

A. Calculate Draper's cost of goods manufactured.
B. Calculate Draper's cost of goods sold.

59. Hampton Company had the following inventory balances at the beginning and end of the year:

	January 1
Raw materials	50,000
Work in process	130,000
Finished goods	280,000

During the year, the company purchased $100,000 of raw material and spent $340,000 on direct labour. Other data: manufacturing overhead incurred, $450,000; sales, $1,560,000; selling and administrative expenses, $90,000; income tax rate, 30%.

Required:

A. Calculate cost of goods manufactured.
B. Calculate cost of goods sold.
C. Determine Hampton's net income.

60.

The following selected information was extracted from the 2012 accounting records of Cooper Products.

Raw materials used	$320,C
Direct labour	120,C
Indirect labour	30,C
Selling & administrative salaries	200,C
Building depreciation*	350,C
Other selling & administrative expenses	90,C
Other factory costs	700,C

*Forty percent of the company's building was devoted to production activities; the remaining 60% was used for selling and administrative functions.

Cooper's beginning and ending work-in-process inventories amounted to $290,000 and $315,000, respectively. The company's beginning and ending finished-goods inventories were $404,000 and $450,000, respectively.

Required:

A. Calculate Cooper's manufacturing overhead for the year.
B. Calculate Cooper's cost of goods manufactured.
C. Compute the company's cost of goods sold.

61. The selected amounts that follow were taken from Shawville Corporation's accounting records:

Raw materials used	$ 27,0
Cost of goods available for sale	175,0
Direct labour	35,0
Total manufacturing costs	104,0
Work in process – Jan 1	19,0
Cost of goods manufactured	100,0
Finished goods inventory – Dec 31	60,0
Sales revenue	300,0
Selling & administrative expenses	125,0
Income tax expense	18,0

Required:

Compute the following:

A. Manufacturing overhead.
B. Work-in-process inventory on December 31.
C. Finished-goods inventory on January 1.
D. Cost of goods sold.
E. Gross margin.
F. Net income.

62. Sedgwick Corporation sold 12,500 units of its single product during the year, reporting a cost of goods sold that totaled $250,000. A review of the company's accounting records disclosed the following information.

Cost of goods sold as a percentage
of sales revenue
Finished goods inventory – Jan 1
Work in process – Dec 31
Cost of goods manufactured
Raw materials used
Direct labour
Manufacturing overhead
Selling & administrative expenses
Sedgwick is subject to a 30% income tax rate.

Required:

A. Determine the selling price per unit.
B. Management established a goal at the beginning of the year to reduce the company's investment in finished-goods inventory and work-in-process inventory.
1. Analyze cost of goods sold and determine if management's goal was achieved with respect to finished-goods inventory. Show computations.
2. Analyze the firm's manufacturing costs and determine if management's goal was achieved with respect to work-in-process inventory. Show computations.
C. Is the company profitable? Show calculations.

63.

Austin Muffler, Inc., operates an automobile service facility. The table below shows the cost incurred during a month when 500 mufflers were replaced.

Number of muffler replacements	400	
Total costs:		
Fixed costs	A	$
Variable costs	B	
Total costs	E	$1
Cost per muffler replacement:		
Fixed costs	G	
Variable costs	J	
Total cost per muffler replacement	M	

Required:

Insert the missing amounts, labelled A through O, in the table.

64. Horne Builders began business on January 1 of the current year, producing a single product that is popular with contractors. Demand was very strong, allowing the company to sell its entire manufacturing output of 100,000 units. The following unit costs were incurred:

Manufacturing costs	
Direct materials	$
Direct labour	
Variable overhead	
Fixed overhead	
Selling & administrative costs	
Variable	
Fixed	

Horne anticipates an increase in productive output to 150,000 units and sales of 145,000 units in the next accounting period. The company uses appropriate drivers to determine cost behaviour and estimates.

Required:

A. Assuming that present cost behaviour patterns continue, compute the total expected costs in the upcoming accounting period.
B. The company Controller is about to prepare a graph that shows the <u>unit</u> cost behaviour for variable selling and administrative cost. If the graph's horizontal axis is volume and the vertical axis is dollars, briefly describe what the graph should look like.
C. Determine whether the following costs are variable or fixed in terms of behaviour:

1. Yearly lease payments for a state-of-the-art cutting machine.
2. A fee paid to a consultant who provided advice about quality issues. The fee was based on the number of consulting hours provided.
3. Cost of an awards dinner for "star" salespeople.

65. Waterdown Manufacturing, which began operations on January 1 of the current year, produces an industrial scraper that sells for $325 per unit. Information related to the current year's activities follows.

Number of scrapers produced	20,0
Number of scrapers sold	17,0
Variable costs per unit:	
Direct materials	$
Direct labour	
Manufacturing overhead	
Annual fixed costs:	
Manufacturing overhead	$400,0
Selling & administrative	140,0

Waterdown carries its finished-goods inventory at the average unit cost of production. There was no work in process at year-end.

Required:

A. Compute the company's average unit cost of production.
B. Determine the cost of the December 31 finished-goods inventory.
C. Compute the company's cost of goods sold.
D. If next year's production increases to 23,000 units and general cost behaviour patterns do not change, what is the likely effect on:

1. The direct-labour cost of $35 per unit? Why?
2. The fixed manufacturing overhead cost of $400,000? Why?

66.

The following terms are used to describe various economic characteristics of costs.

Opportunity cost	Differential cost
Out-of-pocket cost	Marginal cost
Sunk cost	Average cost

Required:

Choose one of the preceding terms to characterize each of the amounts described below. Each term may be used only once.

A. The cost of including one extra child in a day-care center.
B. The cost of merchandise inventory purchased five years ago. The goods are now obsolete.
C. The cost of feeding 300 children in a public school cafeteria is $450 per day, or $1.50 per child per day. What economic term describes this $1.50 cost?
D. The management of a high-rise office building uses 3,000 square feet of space in the building for its own administrative functions. This space could be rented for $30,000. What economic term describes this $30,000 of lost rental revenue?
E. The cost of building an automated assembly line in a factory is $700,000; a manually operated assembly line would cost $250,000. What economic term is used to describe the $450,000 variation between these two amounts?
F. Refer to the preceding question and assume that the firm is currently building the assembly line for $700,000. What economic term is used to describe the $700,000 construction cost?

67. TomKat Corporation has a single facility that it uses for manufacturing, sales, and administrative activities. Should the company's building depreciation charge be expensed in its entirety or is a different accounting procedure appropriate? Explain.

68. Manufacturers have established a cost classification called product costs. Define the term "product cost" and note where these costs appear in the financial statements. Be specific.

69. The income statements and balance sheets of service, retailing, and manufacturing businesses tend to differ.

Required:

A. Which of these businesses will disclose a cost-of-goods-sold figure on the income statement? Why?
B. Briefly describe the difference between a retailing firm and manufacturer's disclosure of inventories on the balance sheet.

70. Describe the economic characteristics of sunk costs and opportunity costs, and explain the impact that these costs may have on decisions.

c2 Key

1. *(p. 29)*

Which of the following statements is true?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #1
Learning Objective: 02-01 Explain the meaning of cost.

2. *(p. 29)*

Product costs are:

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #2
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.

3. *(p. 29)*

Which of the following is a product cost for external financial reporting purposes?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #3
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.

4.
(p. 30)

Which of the following is a period cost?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #4
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.

5.
(p. 29)

The accounting records of Niagara Manufacturing Company revealed the following costs: direct materials used, $120,000; direct labour, $275,000; manufacturing overhead, $350,000; and selling and administrative expenses, $400,000. Niagara's product costs total:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #5
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.

6.
(p. 30)

Costs that are expensed when incurred are called:

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #6
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.

7.
(p. 30)

Which of the following is a period cost?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #7
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.

8.
(p. 30)

The accounting records of Banff Corporation revealed the following selected costs: Sales commissions, $25,000; plant supervision, $88,600; and administrative expenses, $179,400. Banff Corporation's period costs total:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #8
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.

9.
(p. 31)

Chant Corporation recently computed total product costs of $647,000 and total period costs of $549,000. On the basis of this information, Chant's income statement should reveal operating expenses of:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Easy
Hilton - Chapter 02 #9
Learning Objective: 02-03 Describe the role of costs in financial statements.

10. *(p. 33)*

Which of the following entities would most likely have raw materials, work in process, and finished goods?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Medium
Hilton - Chapter 02 #10
Learning Objective: 02-03 Describe the role of costs in financial statements.

11. *(p. 33)*

Which of the following inventories would a discount retailer such as Zellers report as an asset?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Medium
Hilton - Chapter 02 #11
Learning Objective: 02-03 Describe the role of costs in financial statements.

12. *(p. 33)*

Which of the following inventories would a company ordinarily hold for sale?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #12
Learning Objective: 02-03 Describe the role of costs in financial statements.

13.
(p. 34)

Scott Corporation engages in mass customization and direct sales, the latter by accepting customer orders over the Internet. As a result, Scott:

A.
B.
C.
D.
E.

Bloom's: Understand
Difficulty: Medium
Hilton - Chapter 02 #13
Learning Objective: 02-04 List five types of manufacturing operations and describe one of them: mass customization.

14.
(p. 34)

Companies that engage in mass customization:

A.
B.
C.
D.
E.

Bloom's: Understand
Difficulty: Medium
Hilton - Chapter 02 #14
Learning Objective: 02-04 List five types of manufacturing operations and describe one of them: mass customization.

15.
(p. 36)

ElizabethtownMotors Ltd. manufactures all-wheel drive (AWD) automobiles. Which of the following would not be classified as direct materials by the company?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Medium
Hilton - Chapter 02 #15
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

16.
(p. 37)

Should direct materials be classified as a part of any or all of the following: conversion cost, manufacturing cost, and prime cost?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Medium
Hilton - Chapter 02 #16
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

17.
(p. 36)

Ranges Ltd. produces refrigerators and stoves in an assembly-line process. Labour costs incurred during a recent period were: corporate executives, $100,000; assembly-line workers, $80,000; security guards, $18,000. The total of Ranges' direct labour cost was:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Easy
Hilton - Chapter 02 #17
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

18.
(p. 36)

Depreciation of factory equipment is classified as:

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Medium
Hilton - Chapter 02 #18
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

19.
(p. 36)

Which of the following costs is <u>not</u> a component of manufacturing overhead?

A.
B.
<u>C.</u>
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #19
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

20.
(p. 36)

The accounting records of Perth Company revealed the following costs, among others:

Factory insurance	$ 32,0(
Raw materials used	256,0(
Customer entertainment	15,0(
Indirect labour	45,0(
Depreciation on salespersons' cars	22,0(
Production equipment rental costs	72,0(

Costs that would be considered in the calculation of manufacturing overhead total:

<u>A.</u>
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #20
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

21.
(p. 37)

Which of the following statements is correct?

<u>A.</u>
B.
C.
D.
E.

Bloom's: Understand
Difficulty: Medium
Hilton - Chapter 02 #21
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

22.
(p. 37)

Conversion costs are:

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #22
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

23.
(p. 37)

Prime costs are comprised of:

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #23
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

24.
(p. 37)

Which of the following statements is true?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Medium
Hilton - Chapter 02 #24
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

25.
(p. 37)

In a manufacturing company, the cost of goods manufactured during the period would include which of the following elements?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Medium
Hilton - Chapter 02 #25
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a

manufacturer.

26.
(p. 39)

Which of the following equations is used to calculate the cost of goods sold during the period?

A.
B.
C.
D.
E.

Bloom's: Understand
Difficulty: Medium
Hilton - Chapter 02 #26
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

27.
(p. 38)

Work-in-process inventory is composed of:

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Medium
Hilton - Chapter 02 #27
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

28.
(p. 39)

The accounting records for Ferguson Manufacturing revealed that the company began the month of September with a finished-goods inventory of $150,000. The finished-goods inventory at the end of September was $70,000 and the cost of goods sold during the month was $125,000. The cost of goods manufactured during September was:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #28
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

29.
(p. 39)

Mike's Machinery Ltd. reported the cost of goods manufactured of $300,000, and the firm's year-end balance sheet reported work in process and finished goods of $50,000 and $67,000, respectively. If supplemental information disclosed raw materials used in production of $25,000, direct labour of $80,000, and manufacturing overhead of $90,000, the company's beginning work in process must have been:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #29
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

30.
(p. 39)

Maplewood Company reported manufacturing overhead of $300,000 with the company's year-end balance sheet revealing work in process and finished goods of $80,000 and $150,000, respectively. If supplemental information disclosed raw materials used in production of $70,000, direct labour of $130,000, and beginning work in process of $30,000, the company's cost of goods manufactured have been:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #30
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

31.
(p. 39)

The accounting records of Dauphin Company revealed the following information:

Total manufacturing costs	$530,00
Work in process inventory – Jan 1	56,00
Work in process inventory – Dec 31	78,00
Finished goods inventory – Jan 1	146,00
Finished goods inventory – Dec 31	123,00

Dauphin's cost of goods sold is:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #31
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

32.
(p. 39)

The accounting records of Greenwood Company revealed the following information:

Work in process inventory – Jan 1	$58,0(
Work in process inventory – Dec 31	49,0(
Finished goods inventory – Jan 1	125,0(
Finished goods inventory – Dec 31	158,0(
Cost of goods manufactured	754,0(

Greenwood's cost of goods sold is:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #32
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

33.
(p. 39)

An employee accidentally understated the year's advertising expense by $150,000. Which of the following correctly depicts the effect of this error?

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #33
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

34.
(p. 40)

Which of the following would likely be a suitable cost driver for the amount of direct materials used?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #34
Learning Objective: 02-07 Understand the importance of identifying an organization's cost drivers.

35.
(p. 40)

The choices below depict five costs of Benton Corporation and a possible driver for each cost. Which of these choices likely contains an inappropriate cost driver?

A.
B.
C.
D.
E.

Bloom's: Understand
Difficulty: Easy
Hilton - Chapter 02 #35
Learning Objective: 02-07 Understand the importance of identifying an organization's cost drivers.

36.
(p. 41)

Variable costs are those costs that:

A.
<u>B.</u>
C.
D.
E.

Bloom's: Understand
Difficulty: Easy
Hilton - Chapter 02 #36
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

37.
(p. 41)

Which of the following is <u>not</u> an example of a variable cost?

<u>A.</u>
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #37
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

38.
(p. 41 and 42)

Which costs will change with a decrease in activity?

A.
<u>B.</u>
C.
D.
E.

Bloom's: Understand
Difficulty: Easy
Hilton - Chapter 02 #38
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

39.
(p. 42)

Which of the following is an example of a fixed cost?

A.
B.
C.
D.
<u>E.</u>

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #39

Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

40. *(p. 41)*

The variable costs per unit are $4 when a company produces 10,000 units of product. What are the variable costs per unit when 8,000 units are produced?

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #40
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

41. *(p. 42)*

The fixed costs per unit are $20 when a company produces 10,000 units of product. What are the fixed costs per unit when 25,000 units are produced?

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #41
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

42. *(p. 42)*

Total costs are $200,000 when 20,000 units are produced; of this amount, variable costs are $84,000. What are the total costs when 26,000 units are produced?

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Hard
Hilton - Chapter 02 #42
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

43.
(p. 42)

Which of the following would <u>not</u> be characterized as a cost object?

A.
B.
C.
D.
<u>E.</u>

Bloom's: Understand
Difficulty: Easy
Hilton - Chapter 02 #43
Learning Objective: 02-09 Distinguish among direct; indirect; controllable; and uncontrollable costs.

44.
(p. 42)

Costs that can be easily traced to a specific department are called:

<u>A.</u>
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #44
Learning Objective: 02-09 Distinguish among direct; indirect; controllable; and uncontrollable costs.

45.
(p. 42)

Which of the following would <u>not</u> be considered a direct cost with respect to the service department of a new car dealership?

A.
<u>B.</u>
C.
D.
E.

Bloom's: Understand
Difficulty: Medium
Hilton - Chapter 02 #45
Learning Objective: 02-09 Distinguish among direct; indirect; controllable; and uncontrollable costs.

46.
(p. 42)

Indirect costs:

A.
<u>B.</u>
C.
D.
E.

Bloom's: Understand
Difficulty: Medium

Hilton - Chapter 02 #46
Learning Objective: 02-09 Distinguish among direct; indirect; controllable; and uncontrollable costs.

47.
(p. 46)

The salary that is sacrificed by a college student who pursues a degree full time is a(n):

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #47
Learning Objective: 02-10 Define and give examples of an opportunity cost; an out-of-pocket cost; a sunk cost; a differential cost; a marginal cost; and an average cost per unit.

48.
(p. 46)

The tuition fee that will be paid next semester by a college student who pursues a degree is a(n):

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Medium
Hilton - Chapter 02 #48
Learning Objective: 02-10 Define and give examples of an opportunity cost; an out-of-pocket cost; a sunk cost; a differential cost; a marginal cost; and an average cost per unit.

49.
(p. 47)

Which of the following costs should be ignored when choosing among alternatives?

A.
B.
C.
D.
E.

Bloom's: Remember
Difficulty: Easy
Hilton - Chapter 02 #49
Learning Objective: 02-10 Define and give examples of an opportunity cost; an out-of-pocket cost; a sunk cost; a differential cost; a marginal cost; and an average cost per unit.

50.
(p. 47)

If the total cost of alternative A is $600,000 and the total cost of alternative B is $200,000, then $400,000 is termed the:

A.
B.
C.
D.
E.

Bloom's: Understand
Difficulty: Easy
Hilton - Chapter 02 #50
Learning Objective: 02-10 Define and give examples of an opportunity cost; an out-of-pocket cost; a sunk cost; a differential cost; a marginal cost; and an average cost per unit.

51.
(p. 47)

Tiny Totts is a nursery school for kindergarten children. When there are twenty children enrolled, total revenues and total costs are $6,000 and $3,200, respectively. When there are twenty-one children enrolled, total revenues and total costs are $6,300 and $3,255, respectively. The marginal cost when the twenty-first student enrolls in the school is:

A.
B.
C.
D.
E.

Bloom's: Apply
Difficulty: Hard
Hilton - Chapter 02 #51
Learning Objective: 02-10 Define and give examples of an opportunity cost; an out-of-pocket cost; a sunk cost; a differential cost; a marginal cost; and an average cost per unit.

52.
(p. 48)

Tiny Totts is a nursery school for kindergarten children. When there are twenty children enrolled, total revenues and total costs are $6,000 and $3,200, respectively. When there are twenty-one children enrolled, total revenues and total costs are $6,300 and $3,255, respectively. The average cost when there are twenty children enrolled in the school is:

A.
B.
C.
D.
E.

Bloom's: Apply

Difficulty: Easy
Hilton - Chapter 02 #52
Learning Objective: 02-10 Define and give examples of an opportunity cost; an out-of-pocket cost; a sunk cost; a differential cost; a marginal cost; and an average cost per unit.

53.
(p. 31, and 41)

Consider the three firms that follow: (1) Air Canada, (2) Chrysler Canada and (3) Zellers. These firms, examples of service providers, manufacturers, and merchandisers, tend to have different characteristics with respect to costs and financial-statement disclosures.

Required:

Determine which of the preceding firms (1, 2, and/or 3) would likely:

A. Disclose operating expenses on the income statement.
B. Have product costs.
C. Have period costs.
D. Disclose cost of goods sold on the income statement.
E. Have no meaningful investment in inventory.
F. Maintain raw-material, work-in-process, and finished-goods inventories.
G. Have variable and fixed costs.

A. 1, 2, 3
B. 2, 3
C. 1, 2, 3
D. 2, 3
E. 1
F. 2
G. 1, 2, 3.

Bloom's: Analyze
Bloom's: Understand
Difficulty: Medium
Hilton - Chapter 02 #53
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.
Learning Objective: 02-03 Describe the role of costs in financial statements.
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

54.
(p. 31 and 38)

Consider the following cost items:

1. Sales commissions earned by a company's sales force.
2. Raw materials purchased during the period.
3. Current year's depreciation on a firm's manufacturing facilities.
4. Year-end completed production of a carpet manufacturer.
5. The cost of products sold to customers of an apparel store.
6. Wages earned by machine operators in a manufacturing plant.
7. Income taxes incurred by an airline.
8. Marketing costs of an electronics manufacturer.
9. Indirect labour costs incurred by a manufacturer of office equipment.

Required:

A. Evaluate the costs just cited and determine whether the associated dollar amounts would be found on the firm's balance sheet, income statement, or schedule of cost of goods manufactured. (Note: In some cases, more than one answer will apply.)
B. What major asset will normally be insignificant for service enterprises and relatively substantial for retailers, wholesalers, and manufacturers? Briefly discuss.
C. Briefly explain the similarity and difference between the merchandise inventory of a retailer and the finished-goods inventory of a manufacturer.

1. Income statement
2. Schedule of cost of goods manufactured, Balance Sheet, Income Statement.
3. Schedule of cost of goods manufactured, Balance Sheet, Income Statement.
4. Balance sheet
5. Income statement
6. Schedule of cost of goods manufactured
7. Income statement
8. Income statement
9. Schedule of cost of goods manufactured, Balance Sheet, Income Statement.

B. The asset that differs among these businesses is inventory. Service businesses typically carry no (or very little) inventory and generally refer to the costs of producing services as operating expenses. Retailers and wholesalers normally stock considerable inventory. Manufacturers also carry significant inventories, typically subdivided in three categories: raw materials, work in process, and finished goods.

C. The similarity: Both inventories are carried for sale by the respective businesses. The difference: Retailers purchase merchandise inventory; in contrast, manufacturing firms produce their goods.

Bloom's: Analyze
Bloom's: Evaluate
Bloom's: Understand
Difficulty: Hard
Hilton - Chapter 02 #54
Learning Objective: 02-03 Describe the role of costs in financial statements.
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

55.
(p. 29, 36, 41, and 42)

Eastside Manufacturing produces small electric engines. Identify the following costs as direct materials (DM), direct labour (DL), manufacturing overhead (MOH), or a period cost (PC). Also indicate whether the cost is variable (V) or fixed (F) with respect to behaviour.

A. Commissions paid to salespeople
B. Straight-line depreciation on the factory building
C. Salary of the plant supervisor
D. Wages of the assembly-line workers
E. Machine lubricant used in production activities
F. Engine casings used in production activities
G. Advertising placed in trade journals
H. Lease payments for the president's automobile
I. Property taxes paid on the factory facilities

A. PC, V
B. MOH, F
C. MOH, F
D. DL, V
E. MOH, V
F. DM, V
G. PC, F
H. PC, F
I. MOH, F.

Bloom's: Analyze
Bloom's: Understand
Difficulty: Medium
Hilton - Chapter 02 #55
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.
Learning Objective: 02-05 Give examples of three types of manufacturing costs.
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

56.
(p. 29, 36, 41, and 42)

Consider the following items:

A. Tomatoes used in the manufacture of Heinz ketchup
B. Administrative salaries of executives employed by Air Canada
C. Wages of assembly-line workers at a Ford plant
D. Marketing expenditures of the Toronto Blue Jays Baseball Club
E. Commissions paid to Coca-Cola's salespeople
F. Straight-line depreciation on manufacturing equipment owned by Dell Computer
G. Shipping charges incurred by Office Depot on out-going orders
H. Speakers used in Sony home-theater systems
I. Insurance costs related to a Mary Kay Cosmetics' manufacturing plant

Required:

Complete the table that follows and classify each of the costs listed as (1) a product or period cost and (2) a variable or fixed cost by placing an "X" in the appropriate column.

	Product or Period Cost		Variabl
Item	Product	Period	Variable
A			
B			
C			
D			
E			
F			
G			
H			
I			

Bloom's: Analyze
Bloom's: Understand
Difficulty: Hard
Hilton - Chapter 02 #56
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.
Learning Objective: 02-05 Give examples of three types of manufacturing costs.
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

57.
(p. 29, 36, 38, and 41)

The following selected costs were extracted from the accounting records of Brampton Machining:

1. Direct materials used in production
2. Wages of machine operators
3. Factory utilities
4. Sales commissions
5. Salary of Brampton's president
6. Factory depreciation
7. Wages of plant security guards
8. Uncollectible accounts expense
9. Machine lubricant used in production

Required:

By the use of numbers, identify the costs that would be used to calculate:

A. cost of goods manufactured.
B. manufacturing overhead.
C. total period costs.
D. total conversion costs.
E. total direct costs of Brampton's credit and collections department.
F. Brampton's inventory cost.

A. 1, 2, 3, 6, 7, 9
B. 3, 6, 7, 9
C. 4, 5, 8
D. 2, 3, 6, 7, 9
E. 8
F. 1, 2, 3, 6, 7, 9.

Bloom's: Analyze
Bloom's: Understand
Difficulty: Hard
Hilton - Chapter 02 #57
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.
Learning Objective: 02-05 Give examples of three types of manufacturing costs.
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

58.
(p. 38)

Draper Textiles Inc. had the following data for the period just ended.

Work in process – Jan 1	$ 40,0
Work in process – Dec 31	52,0
Finished goods – Jan 1	60,0
Finished goods – Dec 31	81,0
Direct materials used	106,0
Direct labour	300,0
Factory depreciation	90,0
Sales	1,000,0
Advertising expense	50,0
Factory utilities	20,0
Indirect materials	20,0
Indirect labour	30,0

Required:

A. Calculate Draper's cost of goods manufactured.
B. Calculate Draper's cost of goods sold.

A.

Direct materials used	$106,0
Direct labour	300,0
Manufacturing overhead	
Factory depreciation	90,0
Factory utilities	20,0
Indirect materials	20,0
Indirect labour	30,0
Total manufacturing costs	566,0
Add: work in process – Jan 1	40,0
	606,0
Deduct: work in process – Dec 31	52,0
Cost of goods manufactured	$554,0

B.

Finished goods – Jan 1	$ 60,0
Add: cost of goods manufactured	554,0
Cost of goods available for sale	614,0
Deduct: Finished goods – Dec 31	81,0
Cost of goods sold	$533,0

Bloom's: Analyze
Bloom's: Apply
Difficulty: Hard
Hilton - Chapter 02 #58
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

59.
(p. 38)

Hampton Company had the following inventory balances at the beginning and end of the year:

	January 1
Raw materials	50,000
Work in process	130,000
Finished goods	280,000

During the year, the company purchased $100,000 of raw material and spent $340,000 on direct labour. Other data: manufacturing overhead incurred, $450,000; sales, $1,560,000; selling and administrative expenses, $90,000; income tax rate, 30%.

Required:

A. Calculate cost of goods manufactured.
B. Calculate cost of goods sold.
C. Determine Hampton's net income.

A.

Direct materials used		
Raw materials – Jan 1	$50,000	
Add: purchases	100,000	
Raw materials available for use	150,000	
Deduct: Raw materials – Dec 31	35,000	$1
Direct labour		3
Manufacturing overhead		4
Total manufacturing costs		9
Add: work in process – Jan 1		1
		1,0
Deduct: work in process – Dec 31		1
Cost of goods manufactured		$8

B.

Finished goods – Jan 1	$2
Add: cost of goods manufactured	8
Cost of goods available for sale	1,1
Deduct: Finished goods – Dec 31	2
Cost of goods sold	$8

C.

Sales revenue
Less: cost of goods sold
Gross margin
Less: selling & administrative expenses
Income before taxes
Income tax expense ($580,000 x 30%)
Net income

Bloom's: Analyze
Bloom's: Apply
Difficulty: Hard
Hilton - Chapter 02 #59
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

60.
(p. 36 and 38)

The following selected information was extracted from the 2012 accounting records of Cooper Products.

Raw materials used	$320,0
Direct labour	120,0
Indirect labour	30,0
Selling & administrative salaries	200,0
Building depreciation*	350,0
Other selling & administrative expenses	90,0
Other factory costs	700,0

*Forty percent of the company's building was devoted to production activities; the remaining 60% was used for selling and administrative functions.

Cooper's beginning and ending work-in-process inventories amounted to $290,000 and $315,000, respectively. The company's beginning and ending finished-goods inventories were $404,000 and $450,000, respectively.

Required:

A. Calculate Cooper's manufacturing overhead for the year.
B. Calculate Cooper's cost of goods manufactured.
C. Compute the company's cost of goods sold.

A.

Indirect labour	$
Building depreciation ($350,000 x 40%)	1
Other factory costs	7
Total	$8

B.

Raw materials used
Direct labour
Manufacturing overhead
Total manufacturing costs
Add: work in process – Jan 1

Deduct: work in process – Dec 31
Cost of goods manufactured

C.

Finished goods – Jan 1
Add: cost of goods manufactured
Cost of goods available for sale
Deduct: Finished goods – Dec 31
Cost of goods sold

Bloom's: Analyze
Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #60
Learning Objective: 02-05 Give examples of three types of manufacturing costs.
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

61.
(p. 38)

The selected amounts that follow were taken from Shawville Corporation's accounting records:

Raw materials used	$ 27,0
Cost of goods available for sale	175,0
Direct labour	35,0
Total manufacturing costs	104,0
Work in process – Jan 1	19,0
Cost of goods manufactured	100,0
Finished goods inventory – Dec 31	60,0
Sales revenue	300,0
Selling & administrative expenses	125,0
Income tax expense	18,0

Required:

Compute the following:

A. Manufacturing overhead.
B. Work-in-process inventory on December 31.
C. Finished-goods inventory on January 1.
D. Cost of goods sold.
E. Gross margin.
F. Net income.

A.

Total manufacturing costs		$1
Less raw materials used	$ 27,000	
Direct labour	35,000	
Manufacturing overhead		$

B.

Total manufacturing costs	$ 1
Add: work in process – Jan 1	
	1
Less: cost of goods manufactured	1
Work in process – Dec 31	$

C.

Cost of goods available for sale	$
Less cost of goods manufactured	
Finished goods inventory – Jan 1	$

D.

Cost of goods available for sale	
Less finished goods inventory – Dec 31	
Cost of goods sold	

E.

Sales revenue	
Less: cost of goods sold	
Gross margin	

F.

Gross margin	
Less: selling & administrative expenses	$125,000
income tax expense	18,000
Net income	

Bloom's: Analyze
Bloom's: Apply
Difficulty: Medium
Hilton - Chapter 02 #61
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

62.
(p. 38)

Sedgwick Corporation sold 12,500 units of its single product during the year, reporting a cost of goods sold that totaled $250,000. A review of the company's accounting records disclosed the following information.

Cost of goods sold as a percentage
of sales revenue
Finished goods inventory – Jan 1
Work in process – Dec 31
Cost of goods manufactured
Raw materials used
Direct labour
Manufacturing overhead
Selling & administrative expenses
Sedgwick is subject to a 30% income tax rate.

Required:

A. Determine the selling price per unit.
B. Management established a goal at the beginning of the year to reduce the company's investment in finished-goods inventory and work-in-process inventory.
1. Analyze cost of goods sold and determine if management's goal was achieved with respect to finished-goods inventory. Show computations.
2. Analyze the firm's manufacturing costs and determine if management's goal was achieved with respect to work-in-process inventory. Show computations.
C. Is the company profitable? Show calculations.

A. Let X = sales revenue
0.4X = $250,000
X = $625,000
Sales revenue ($625,000) ÷ units sold (12,500) = $50 selling price

B.1

Cost of goods sold
Finished goods – Jan 1
Add: cost of goods manufactured
Cost of goods available for sale
Deduct: Finished goods – Dec 31
Cost of goods sold

Ending finished-goods inventory totals $78,000 ($328,000 - $250,000), which means that inventory was reduced by $9,000 ($87,000 - $78,000) and management was successful in achieving its goal.

B.2

Cost of goods manufactured:
Raw materials used
Direct labour
Manufacturing overhead
Total manufacturing costs
Add work in process – Jan 1

Deduct: Work in process – Dec 31
Cost of goods manufactured:

Let X = work in process, Jan. 1
$236,000 + X - $55,000 = $241,000
X = $60,000

Yes, management achieved its goal because work-in-process inventory fell by $5,000 ($60,000 - $55,000).
C.

Sales revenue
Less: cost of goods sold
Gross margin
Less: selling & administrative expenses
Income before taxes
Income tax expense ($65,000 x 30%)
Net income

Yes, the company is profitable.

Bloom's: Analyze
Bloom's: Apply
Difficulty: Hard
Hilton - Chapter 02 #62
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.

63.
(p. 41)

Austin Muffler, Inc., operates an automobile service facility. The table below shows the cost incurred during a month when 500 mufflers were replaced.

Number of muffler replacements	400	
Total costs:		
Fixed costs	A	$
Variable costs	B	
Total costs	E	$]
Cost per muffler replacement:		
Fixed costs	G	
Variable costs	J	
Total cost per muffler replacement	M	

Required:

Insert the missing amounts, labelled A through O, in the table.

Number of muffler replacements	400	
Total costs:		
Fixed costs	$ 9,000	$
Variable costs	4,800	
Total costs	$ 13,800	$]
Cost per muffler replacement:		
Fixed costs	$ 22.50	$
Variable costs	12.00	
Total cost per muffler replacement	$ 34.50	$

Explanatory notes:

A and C each equal $9,000, since fixed costs do not vary with activity.
J, K, and L each equal $12 ($6,000 ÷ 500), since variable cost per replacement remains constant.
B equals $4,800 (400 × $12)
D equals $7,200 (600 × $12)
G equals $22.50 ($9,000 ÷ 400)
H equals $18.00 ($9,000 ÷ 500)
I equals $15.00 ($9,000 ÷ 600)

Bloom's: Analyze
Bloom's: Apply
Bloom's: Understand
Difficulty: Hard
Hilton - Chapter 02 #63

Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

64.
(p. 40 and 41)

Horne Builders began business on January 1 of the current year, producing a single product that is popular with contractors. Demand was very strong, allowing the company to sell its entire manufacturing output of 100,000 units. The following unit costs were incurred:

Manufacturing costs	
Direct materials	$
Direct labour	
Variable overhead	
Fixed overhead	
Selling & administrative costs	
Variable	
Fixed	

Horne anticipates an increase in productive output to 150,000 units and sales of 145,000 units in the next accounting period. The company uses appropriate drivers to determine cost behaviour and estimates.

Required:

A. Assuming that present cost behaviour patterns continue, compute the total expected costs in the upcoming accounting period.
B. The company Controller is about to prepare a graph that shows the unit cost behaviour for variable selling and administrative cost. If the graph's horizontal axis is volume and the vertical axis is dollars, briefly describe what the graph should look like.
C. Determine whether the following costs are variable or fixed in terms of behaviour:

1. Yearly lease payments for a state-of-the-art cutting machine.
2. A fee paid to a consultant who provided advice about quality issues. The fee was based on the number of consulting hours provided.
3. Cost of an awards dinner for "star" salespeople.

Direct materials (150,000 x $20)
Direct labour (150,000 x $13)
Variable overhead (150,000 x $16)
Fixed overhead
Variable selling & administrative expenses (145,000 x $10)
Fixed selling & administrative expenses (100,000 x $7)
Total costs

B. The variable selling and administrative costs are constant at $10 per unit. Thus, the graph is a straight, horizontal line.

C. 1. Fixed
2. Variable
3. Variable

Bloom's: Analyze
Bloom's: Apply
Bloom's: Understand
Difficulty: Hard
Hilton - Chapter 02 #64
Learning Objective: 02-07 Understand the importance of identifying an organization's cost drivers.
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.

65.
(p. 36, 38, 41, and 48)

Waterdown Manufacturing, which began operations on January 1 of the current year, produces an industrial scraper that sells for $325 per unit. Information related to the current year's activities follows.

Number of scrapers produced	20,0
Number of scrapers sold	17,0
Variable costs per unit:	
Direct materials	$
Direct labour	
Manufacturing overhead	
Annual fixed costs:	
Manufacturing overhead	$400,0
Selling & administrative	140,0

Waterdown carries its finished-goods inventory at the average unit cost of production. There was no work in process at year-end.

Required:

A. Compute the company's average unit cost of production.
B. Determine the cost of the December 31 finished-goods inventory.
C. Compute the company's cost of goods sold.
D. If next year's production increases to 23,000 units and general cost behaviour patterns do not change, what is the likely effect on:

1. The direct-labour cost of $35 per unit? Why?
2. The fixed manufacturing overhead cost of $400,000? Why?

A.

Fixed manufacturing cost per unit:
$400,000 ÷ 20,000 scrapers produced = $20

Average unit manufacturing cost:
Direct materials
Direct labour
Variable manufacturing overhead
Fixed manufacturing overhead
Average unit cost

B.

Production (in units)
Sales (in units)
Ending finished goods inventory – Dec 31

3,000 units x $140

C.

Finished goods – Jan 1
Add: cost of goods manufactured (20,000 units x $14)
Cost of goods available for sale
Deduct: Finished goods – Dec 31
Cost of goods sold

D. 1. No change. Direct labour is a variable cost, and the cost per unit will remain constant.
2. No change. Despite the increase in the number of units produced, this is a fixed cost, which remains the same in total.

Bloom's: Analyze
Bloom's: Apply
Bloom's: Understand
Difficulty: Hard
Hilton - Chapter 02 #65
Learning Objective: 02-05 Give examples of three types of manufacturing costs.
Learning Objective: 02-06 Prepare a schedule of cost of goods manufactured; a schedule of cost of goods sold; and an income statement for a manufacturer.
Learning Objective: 02-08 Describe the behaviour of variable and fixed costs; in total and on a per-unit basis.
Learning Objective: 02-10 Define and give examples of an opportunity cost; an out-of-pocket cost; a sunk cost; a differential cost; a marginal cost; and an average cost per unit.

66.
(p. 48)

The following terms are used to describe various economic characteristics of costs.

Opportunity cost	Differential cost
Out-of-pocket cost	Marginal cost
Sunk cost	Average cost

Required:

Choose one of the preceding terms to characterize each of the amounts described below. Each term may be used only once.

A. The cost of including one extra child in a day-care center.
B. The cost of merchandise inventory purchased five years ago. The goods are now obsolete.
C. The cost of feeding 300 children in a public school cafeteria is $450 per day, or $1.50 per child per day. What economic term describes this $1.50 cost?
D. The management of a high-rise office building uses 3,000 square feet of space in the building for its own administrative functions. This space could be rented for $30,000. What economic term describes this $30,000 of lost rental revenue?
E. The cost of building an automated assembly line in a factory is $700,000; a manually operated assembly line would cost $250,000. What economic term is used to describe the $450,000 variation between these two amounts?
F. Refer to the preceding question and assume that the firm is currently building the assembly line for $700,000. What economic term is used to describe the $700,000 construction cost?

A. Marginal cost
B. Sunk cost
C. Average cost
D. Opportunity cost
E. Differential cost
F. Out-of-pocket cost

Bloom's: Evaluate
Difficulty: Hard
Hilton - Chapter 02 #66
Learning Objective: 02-10 Define and give examples of an opportunity cost; an out-of-pocket cost; a sunk cost; a differential cost; a marginal cost; and an average cost per unit.

67.
(p. 29)

TomKat Corporation has a single facility that it uses for manufacturing, sales, and administrative activities. Should the company's building depreciation charge be expensed in its entirety or is a different accounting procedure appropriate? Explain.

The company's depreciation charge is, in part, a period cost and, in part, a product cost. The portion that relates to selling and administrative activities should be expensed when incurred. In contrast, the portion that relates to manufacturing should be attached to the goods produced, with the costs now inventoried on the balance sheet.

Bloom's: Evaluate
Difficulty: Medium
Hilton - Chapter 02 #67
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.

68.
(p. 29 and 36)

Manufacturers have established a cost classification called product costs. Define the term "product cost" and note where these costs appear in the financial statements. Be specific.

Product costs are costs that relate to the manufacturing process and consist of direct materials, direct labour, and manufacturing overhead. Simply stated, these are costs incurred to make a product.

Product costs are attached to the units produced (i.e., work in process) and, thus, inventoried on the balance sheet. These costs are later charged to finished goods when the goods are completed. Another transfer occurs when the finished units are sold, with the costs now transferred to cost of goods sold on the income statement.

Bloom's: Evaluate
Difficulty: Medium
Hilton - Chapter 02 #68
Learning Objective: 02-02 Distinguish among product costs; period costs; and expenses.
Learning Objective: 02-05 Give examples of three types of manufacturing costs.

69.
(p. 36 and 42)

The income statements and balance sheets of service, retailing, and manufacturing businesses tend to differ.

Required:

A. Which of these businesses will disclose a cost-of-goods-sold figure on the income statement? Why?
B. Briefly describe the difference between a retailing firm and manufacturer's disclosure of inventories on the balance sheet.

A. Retailers and manufacturers will disclose a cost-of-goods-sold figure because both of these entities sell goods. Service businesses, in contrast, do not given that such firms provide services.
B. A retailer will typically disclose inventories as one-line item entitled merchandise inventories. Manufacturers, on the other hand, carry three different types of inventories: raw materials, work in process, and finished goods.

Bloom's: Evaluate
Difficulty: Medium
Hilton - Chapter 02 #69
Learning Objective: 02-05 Give examples of three types of manufacturing costs.
Learning Objective: 02-09 Distinguish among direct; indirect; controllable; and uncontrollable costs.

70.
(p. 48)

Describe the economic characteristics of sunk costs and opportunity costs, and explain the impact that these costs may have on decisions.

Sunk costs have already been incurred. They are part of history and cannot be altered. Therefore, sunk costs are not relevant for any current or future management decision.

Opportunity costs, in contrast, are relevant for current and future decisions. Such costs are defined as the net benefits from a decision alternative that was not selected—that is, the benefits were sacrificed to pursue another option.

Bloom's: Evaluate
Difficulty: Medium
Hilton - Chapter 02 #70

Learning Objective: 02-10 Define and give examples of an opportunity cost; an out-of-pocket cost; a sunk cost; a differential cost; a marginal cost; and an average cost per unit.

c2 Summary