Horngren's Accounting,11e (Miller-Nobles) Chapter 19 Job Order Costing

Learning Objective 19-1

 Cost accounting systems are used 		
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- A) to accumulate product cost information
- B) to accumulate and assign period costs to products
- C) by manufacturing companies, not service companies
- D) by stockholders for decision-making purposes

Answer: A Diff: 2 LO: 19-1

AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Manufacturing Companies Use Job Order and Process Costing Systems? (H1)

2) For each of the following types of business, indicate why the manager needs to know the unit cost information.

Managers of a	Need to know the cost to
Bakery	
Computer	
manufacturer	
Bank	
Seamstress	

Answer:

Managers of a	Need to know the cost to			Need to know the cost to		
Bakery	Make a cake					
Computer						
manufacturer	Make a computer					
Bank	Service a customer's account					
Seamstress	Make a garment					

Diff: 2 LO: 19-1

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: How Do Manufacturing Companies Use Job Order and Process Costing Systems? (H1)

3) Accounting firms, building contractors, and healthcare providers use process costing.

Answer: FALSE

Diff: 1 LO: 19-1

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Concept H2: Job Order Costing 4) A job order costing system is used by companies that manufacture batches of unique products or provide specialized services.

Answer: TRUE

Diff: 1 LO: 19-1

AICPA Functional: Measurement PE Question Type: Concept H2: Job Order Costing

- 5) Which one of the following companies is most likely to use job order costing?
- A) a gold refinery
- B) a law firm
- C) a surfboard manufacturer
- D) a soft drink company

Answer: B Diff: 2 LO: 19-1

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Application

H2: Job Order Costing

- 6) Which of the following is true about ERP systems?
- A) Because ERP systems are software based, they have given way to a more service-based economy.
- B) Because ERP systems track costs more efficiently, the benefit from the cost information outweighs the cost of obtaining the information.
- C) Because ERP systems track costs more efficiently, process costing systems are becoming more prevalent.
- D) Because ERP systems have the ability to trace all production costs to individual units, all product costs can now be classified as either direct materials or direct labor.

Answer: B Diff: 2 LO: 19-1

AACSB: Information technology AICPA Functional: Measurement PE Question Type: Concept

H2: Job Order Costing

- 7) Which of the following is a reason why a job order costing system is appropriate for a custom furniture manufacturer?
- A) The cost incurred for each job will differ as per the order specifications.
- B) The direct costs incurred for each job are the same, only indirect costs vary.
- C) The raw materials used have already been accounted for using process costing.
- D) Custom furniture manufacturers produce large quantities of similar products.

Answer: A Diff: 2 LO: 19-1

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: Job Order Costing

- 8) Which of the following statements is true of costing systems?
- A) A process costing system would be used by manufacturers of custom-made perfumes.
- B) A job order costing system would be used by manufacturers of baking utensils.
- C) A construction company would likely use a process costing system.
- D) An accounting firm would likely use a job order costing system.

Answer: D Diff: 2 LO: 19-1

AICPA Functional: Measurement PE Question Type: Concept H2: Job Order Costing

9) Define a job order costing system and list two types of businesses that would us a job order costing system.

Answer: A job order costing system is an accounting system that accumulates costs by job. Businesses that would use a job order costing system include accounting firms, music studios, health care providers, building contractors, and custom furniture manufacturers.

Diff: 1 LO: 19-1

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Job Order Costing

10) A process costing system is used when a company produces identical units through a series of production steps.

Answer: TRUE

Diff: 1 LO: 19-1

AICPA Functional: Measurement PE Question Type: Concept H2: Process Costing

- 11) Which of the following would use a process costing system rather than a job order costing system?
- A) a health-care service provider
- B) a music production studio
- C) a paint manufacturer
- D) a home remodeling contracting company

Answer: C Diff: 2 LO: 19-1

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Process Costing

- 12) Which of the following businesses is most likely to use a process costing system?
- A) a baker producing cakes to order
- B) a legal service provider
- C) an audit service provider
- D) a candy manufacturer

Answer: D Diff: 2 LO: 19-1

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: Process Costing

- 13) Which of the following is the correct order of the four steps of tracking product costs?
- A) assign \rightarrow accumulate \rightarrow allocate \rightarrow adjust
- B) accumulate \rightarrow assign \rightarrow allocate \rightarrow adjust
- C) adjust \rightarrow allocate \rightarrow accumulate \rightarrow assign
- D) allocate \rightarrow adjust \rightarrow accumulate \rightarrow assign

Answer: B Diff: 2 LO: 19-1

AICPA Functional: Measurement PE Question Type: Concept H2: Process Costing

14) Both job order and process costing systems use a four-step method to track product costs. List each of the four steps.

Answer:

- 1. Accumulate
- 2. Assign
- 3. Allocate
- 4. Adjust

Diff: 1 LO: 19-1

AICPA Functional: Measurement PE Question Type: Concept H2: Process Costing

15) Define a process costing system and list two types of businesses that would use a process costing system.

Answer: A process costing system is an accounting system that accumulates costs by process. Businesses that would use a process costing system include a soft drink company, medical equipment manufacturer, and surf board manufacturer.

Diff: 1 LO: 19-1

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Process Costing

Learning Objective 19-2

1) When direct materials are received on the production floor, they are recorded on the job cost record.

Answer: TRUE

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Materials and Labor Costs Flow Through the Job Order Costing System? (H1)

2) For each of the following accounts, indicate what *event* causes the account to increase and to decrease. The answer is not debit or credit.

Account	Is increased by:	Is decreased by:	
Raw Materials			
Inventory			
Work-in-Process			
Inventory			
Finished Goods			
Inventory			
Cost of Goods Sold			

Answer:

Account	Is increased by:	Is decreased by:	
Raw Materials Inventory	Materials purchased	Materials used	
Work-in-Process Inventory	Direct materials used		
	Direct labor incurred	Completion of jobs	
	Manufacturing overhead		
	allocated		
Finished Goods Inventory	Completion of jobs	Shipping of sold units	
Cost of Goods Sold	Shipping of sold units	Adjusting entry	
	Adjusting entry		

Diff: 2 LO: 19-2

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: How Do Materials and Labor Costs Flow Through the Job Order Costing System? (H1)

3) What is cost of goods manufactured? Describe the flow of this cost through the job order costing system. Your answer should include the accounts involved and whether the flow involves a debit or credit.

Answer: When a job is completed, the costs are transferred out of Work-in-Process with a credit and transferred into Finished Goods Inventory with a debit. This amount is called Cost of Goods Manufactured.

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Materials and Labor Costs Flow Through the Job Order Costing System? (H1)

4) What is cost of goods sold? Describe the flow of this cost through the job order costing system. Your answer should include the accounts involved and whether the flow involves a debit or credit.

Answer: When the job is sold, the costs are transferred out of Finished Goods Inventory with a credit and transferred into Cost of Goods Sold with a debit. This amount is the job's cost of goods sold. Cost of Goods Sold is an expense on the income statement.

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Materials and Labor Costs Flow Through the Job Order Costing System? (H1)

5) When raw materials are requisitioned for a job, the Raw Materials Inventory account is debited.

Answer: FALSE

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Materials

6) Manufacturing Overhead is a temporary account used to accumulate indirect production costs during the accounting period.

Answer: TRUE

Diff: 1 LO: 19-2

AICPA Functional: Measurement PE Question Type: Concept

H2: Materials

7) The cost of indirect materials is transferred out of the Manufacturing Overhead account and accumulated in the Raw Materials Inventory account.

Answer: FALSE

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

8) The entry to record the purchase of direct materials on account would include a
A) debit to the Raw Materials Inventory account
B) debit to the Work-in-Process Inventory account
C) credit to the Work-in-Process Inventory account
D) credit to the Raw Materials Inventory account
Answer: A
Diff: 1
LO: 19-2
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2: Materials
9) Which of the following accounts would be debited in the journal entry to record the issuance of direct
materials?
A) Cost of Goods Sold
B) Work-in-Process Inventory
C) Finished Goods Inventory
D) Raw Materials Inventory
Answer: B
Diff: 1
LO: 19-2
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2: Materials
10) Manufacturing Overhead is a temporary account used to indirect production costs during
the accounting period.
A) allocate
B) assign
C) accumulate
D) approximate
Answer: C
Diff: 1
LO: 19-2
AICPA Functional: Measurement
PE Question Type: Concept
H2: Materials
11) The journal entry to issue indirect materials to production should include a debit to the
A) Finished Goods Inventory account
B) Raw Materials Inventory account
C) Manufacturing Overhead account
D) Work-in-Process Inventory account
Answer: C
Diff: 1
LO: 19-2
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2: Materials

12) The journal ent	ry to is	ssue \$500 of	direc	ct materi	ials and \$	40 of i	indirect	mater	ials to prod	uction i	nvolves
debit(s) to the											
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A) Work-in-Process Inventory account for \$500 and Finished Goods Inventory account for \$40

B) Manufacturing Overhead account for \$540

C) Work-in-Process Inventory account for \$500 and Manufacturing Overhead account for \$40

D) Work-in-Process Inventory account for \$540

Answer: C Diff: 2 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Materials

13) Adelphia Manufacturing issued \$75,000 of direct materials and \$8,000 of indirect materials for production. Which of the following journal entries would correctly record the transaction?

A)

- - -)		
Raw Materials Inventory	83,000	
Finished Goods Inventory		75,000
Work-in-Process Inventory		8,000

B)

Work-in-Process Inventory	83,000	
Raw Materials Inventory		83,000

C)

Work-in-Process Inventory	75,000	
Manufacturing Overhead	8,000	
Raw Materials Inventory		83,000

D)

Manufacturing Overhead	83,000	
Raw Materials Inventory		83,000

Answer: C Diff: 2 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

14) Uniq Works purchased raw materials amounting to \$122,000 on account and \$20,000 for cash. The materials will be used to manufacture upholstery for furniture manufacturers on a contract basis. Which of the following journal entries correctly records this transaction?

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Accounts Payable	122,000	
Cash	20,000	
Raw Materials Inventory		142,000

B)

Finished Goods Inventory	142,000	
Accounts Payable		142,000

C)

Work-in-Process Inventory	142,000	
Accounts Payable		142,000

D)

Raw Materials Inventory	142,000	
Cash		20,000
Accounts Payable		122,000

Answer: D Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

15) The accounts of Delphinia Dreams, Inc. showed the following balances at the beginning of October:

Account	Debit
Raw Materials Inventory	\$31,000
Work-in-Process Inventory	42,000
Finished Goods Inventory	52,000
Manufacturing Overhead	20,000

During the month, direct materials amounting to \$22,000 and indirect materials amounting to \$5,000 were issued to production. What is the ending balance in the Work-in-Process Inventory account following these two transactions?

A) \$42,000

B) \$64,000

C) \$10,000 D) \$25,000

Answer: B Explanation: B)

Beginning balance in WIP\$42,000Add: Direct Materials transferred22,000Ending balance\$64,000

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

16) The accounts of Melissa Manufacturing showed the following balances at the beginning of December:

Account	Debit
Raw Materials Inventory	\$56,000
Work-in-Process Inventory	76,000
Finished Goods Inventory	36,000
Manufacturing Overhead	19,000

The following transactions took place during the month:

December 2: Issued direct materials \$23,000 and indirect materials \$6,000 to production.

December 15: Incurred \$6,000 and \$4,000 toward factory's direct labor cost and indirect labor cost, respectively.

What should be the balance in the Work-in-Process Inventory following these transactions?

A) \$105,000

B) \$82,000

C) \$59,000

D) \$80,000

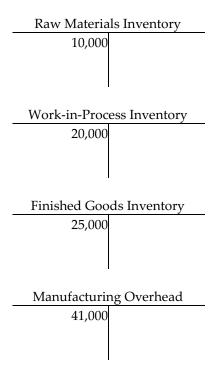
Answer: A Explanation: A)

Beginning balance in WIP \$76,000 Add: Direct materials transferred 23,000 Direct factory labor cost 6,000 Ending balance \$105,000

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

17) On June 1, Dalton Productions had beginning balances as shown in the T-accounts below.



During June, the following transactions took place:

June 2: Issued \$2,900 of direct materials and \$200 of indirect materials to production.

What was the balance in the Manufacturing Overhead account following this transaction?

A) \$44,100

B) \$43,900

C) \$41,200

D) \$41,000

Answer: C

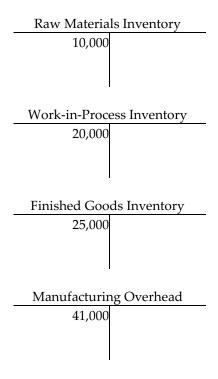
Explanation: C)

Beginning balance in Manufacturing OH \$41,000 Add: Indirect materials transferred 200 Ending balance \$41,200

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

18) On June 1, Westbrook Productions had beginning balances as shown in the T-accounts below.



During June, the following transactions took place:

June 2: Issued \$3,100 of direct materials and \$300 of indirect materials to production.

June 13: Incurred \$7,500 of direct factory labor cost and \$14,500 of indirect factory labor cost.

What was the balance in the Manufacturing Overhead account following these transactions?

A) \$41,300

B) \$55,800

C) \$55,500

D) \$58,600

Answer: B

Explanation: B)

Beginning balance in Manufacturing OH \$41,000
Add: Indirect materials transferred 300
Indirect labor 14,500
Ending balance \$55,800

Diff: 2 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

19) Broxsie Fabrication, Inc. issued \$60,000 of direct materials and \$15,500 of indirect materials to production. Prepare the journal entry to record the transaction.

Answer:

Work-in-Process Inventory	60,000	
Manufacturing Overhead	15,500	
Raw Materials Inventory		75,500

Diff: 2 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Materials

20) Pandora Manufacturing purchased \$95,000 of raw materials on account and \$5,000 of raw materials for cash. The materials will be used to produce furniture. Provide the journal entry for the purchase of materials.

Answer:

Raw Materials Inventory	100,000	
Accounts Payable		95,000
Cash		5,000

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Materials

21) Work-in-Process Inventory is debited when indirect labor costs are incurred in a job order costing system.

Answer: FALSE

Diff: 2 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Concept

H2: Labor

22) The actual direct labor costs are assigned to individual jobs, and the actual direct labor cost is recorded with a debit to Work-in-Process Inventory.

Answer: TRUE

Diff: 1 LO: 19-2

AICPA Functional: Measurement PE Question Type: Concept

H2: Labor

23) The journal entry to record direct labor costs actually incurred involves a debit to the A) Work-in-Process Inventory account B) Wages Payable account C) Manufacturing Overhead account D) Raw Materials Inventory account Answer: A Diff: 1 LO: 19-2 AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application H2: Labor
24) The journal entry to record indirect labor costs incurred involves a debit to the A) Manufacturing Overhead account
B) Wages Payable account
C) Finished Goods Inventory account
D) Work-in-Process Inventory account
Answer: A Diff: 1
LO: 19-2
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application H2: Labor
112. Labor
25) The journal entry to record \$1,600 of direct labor and \$250 of indirect labor incurred will include debit(s) to the
A) Manufacturing Overhead account for \$1,850
B) Work-in-Process Inventory account for \$1,600 and Finished Goods Inventory account for \$250
C) Finished Goods Inventory account for \$1,850
D) Work-in-Process Inventory account for \$1,600 and Manufacturing Overhead account for \$250 Answer: D
Diff: 2
LO: 19-2
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application H2: Labor

26) Altec Designs makes fashion clothing and reports the following data for the month of September:

Salaries paid to seamstresses	\$130,000
Wages paid to fabric cutters	30,000
Indirect wages	7,000

What is the journal entry to record the total labor charges incurred during September?

A)

/		
Work-in-Process Inventory	160,000)
Manufacturing Overhead	7,000)
Wages Payable		167,000

B)

2)		
Work-in-Process Inventory	167,000	
Wages Payable		167,000

C)

Wages Payable	167,000	
Finished Goods Inventory		137,000
Work-in-Process Inventory		30,000

D)

Manufacturing Overhead	167,000	
Wages Payable		167,000

Answer: A Diff: 2 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Labor

27) Specialty Wood Products, Inc. had the following manufacturing labor costs last month:

Woodworkers' wages	\$100,000
Indirect laborers' wages	20,000
Maintenance personnel wages	10,000

Provide the journal entry to record the labor costs incurred, which will be paid at a later date.

Answer:

Work-in-Process Inventory	100,000	
Manufacturing Overhead	30,000	
Wages Payable		130,000

Diff: 1 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Labor

28) Norman Manufacturing reports the following data for the month:

Purchases of raw materials, on account
Materials requisitions:
Direct materials
Indirect materials
Labor incurred (not yet paid):
Direct labor
Indirect labor
2,500

Journalize the entries relating to materials and labor. Omit explanations.

Answer:

Raw Materials Inventory 55,250

Accounts Payable 55,250

Work-In-Process Inventory 49,750 Manufacturing Overhead 3,700

Raw Materials Inventory 53,450

Work-In-Process Inventory 51,000 Manufacturing Overhead 2,500

Wages Payable 53,500

Diff: 2 LO: 19-2

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Labor

Learning Objective 19-3

1) Actual manufacturing overhead costs are credited to the Manufacturing Overhead account.

Answer: FALSE

Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Overhead Costs Flow Through the Job Order Costing System? (H1)

2) In a manufacturing operation, depreciation of plant equipment should be debited to the Depreciation

Expense account. Answer: FALSE

Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Overhead Costs Flow Through the Job Order Costing System? (H1)

3) The amount of taxes and insurance incurred and paid for the plant of a manufacturing company should be debited to the Manufacturing Overhead account.

Answer: TRUE

Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Overhead Costs Flow Through the Job Order Costing System? (H1)

4) The total amount of manufacturing overhead costs incurred during the period is recorded on the credit side of the Manufacturing Overhead account.

Answer: FALSE

Diff: 1 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Overhead Costs Flow Through the Job Order Costing System? (H1)

5) When a job order costing system is used, actual manufacturing overhead costs are debited to ______

A) expense accounts

- B) the Manufacturing Overhead account
- C) the Cost of Goods Sold account
- D) the Work-In-Process Inventory account

Answer: B Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Overhead Costs Flow Through the Job Order Costing System? (H1)

- 6) Which of the following will be categorized as a manufacturing overhead cost?
- A) depreciation on factory plant and equipment
- B) wages paid to assembly line workers
- C) administration charges of showroom
- D) cost of direct materials used

Answer: A Diff: 1 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Overhead Costs Flow Through the Job Order Costing System? (H1)

- 7) Which of the following will be debited to the Manufacturing Overhead account of a watch manufacturer?
- A) office telephone costs
- B) salaries paid to accountants
- C) factory electricity costs
- D) cost of printing brochures

Answer: C Diff: 1 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Overhead Costs Flow Through the Job Order Costing System? (H1)

8) The accounting for the allocation of overhead costs is a three-step process and occurs at three different points in the accounting cycle. List each of the three steps. For each step indicate when the step occurs and why the step is needed.

Answer:

Step 1: The predetermined overhead allocation rate is calculated before the period begins. Managers cannot wait until the end of the period to know the actual total overhead costs. Companies use this predetermined rate to allocate estimated overhead cost to individual jobs.

Step 2: Overhead is allocated during the period. During the period, managers need to allocate overhead to all jobs completed during the period and to jobs still in process at the end of the period. Allocated overhead is added to assigned direct material and direct labor costs. This allows managers to know the total cost of jobs completed and of jobs still in process at the end of the period.

Step 3: Overhead is adjusted at the end of the period. Because the overhead costs have been allocated based on the predetermined overhead allocation rate, the actual overhead costs may not equal the amount of overhead allocated during the period. An adjustment is required to zero out the Manufacturing Overhead account.

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Overhead Costs Flow Through the Job Order Costing System? (H1)

- 9) Which of the following describes the allocation base for allocating manufacturing overhead costs?
- A) the primary cost driver of indirect manufacturing costs
- B) the estimated base amount of manufacturing overhead costs in a year
- C) the percentage used to allocate direct labor to Work-in-Process Inventory
- D) the main element that causes direct costs

Answer: A Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

- 10) Which of the following correctly describes the term cost driver?
- A) the inflation rate that causes costs to rise
- B) the average inventory costs incurred at any point of time
- C) the primary factor that causes a cost to be incurred
- D) the total material, labor, and overhead costs of a completed job

Answer: C Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

- 11) The predetermined overhead allocation rate is the rate used to ______.
- A) assign direct material costs to jobs
- B) allocate actual manufacturing overhead costs incurred during a period
- C) allocate estimated manufacturing overhead costs to jobs
- D) trace manufacturing and non manufacturing costs to jobs

Answer: C Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

- 12) The predetermined overhead allocation rate is calculated by dividing ______.
- A) the total estimated overhead costs by total number of days in a year
- B) the estimated amount of cost driver by actual total overhead costs
- C) the actual overhead costs by actual amount of the cost driver or allocation base
- D) the estimated overhead costs by total estimated quantity of the overhead allocation base

Answer: D Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

- 13) The predetermined overhead allocation rate for a given production year is calculated ______.
- A) at the end of the production year
- B) before the accounting period begins
- C) after completion of each job
- D) after the preparation of financial statements for the year

Answer: B Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

- 14) Aaron, Inc. estimates direct labor costs and manufacturing overhead costs for the coming year to be \$780,000 and \$510,000, respectively. Aaron allocates overhead costs based on machine hours. The estimated total labor hours and machine hours for the coming year are 19,000 hours and 7,000 hours, respectively. What is the predetermined overhead allocation rate? (Round your answer to the nearest cent.)
- A) \$111.43 per machine hour
- B) \$26.84 per labor hour
- C) \$1.53 per labor hour
- D) \$72.86 per machine hour

Answer: D

Explanation: D) Predetermined overhead allocation rate = Total estimated overhead costs / Total estimated quantity of the overhead allocation base

 $Predetermined\ overhead\ allocation\ rate = \$510,000\ /\ 7,000\ machine\ hours = \$72.86\ per\ machine\ hour$

Diff: 1 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

- 15) Zephyros Corporation had estimated manufacturing overhead costs for the coming year to be \$312,000. The total estimated direct labor hours and machine hours for the coming year are 6,000 and 11,000, respectively. Manufacturing overhead costs are allocated based on direct labor hours. What is the predetermined overhead allocation rate? (Round your answer to the nearest cent.)
- A) \$28.36 per machine hour
- B) \$18.35 per direct labor hour
- C) \$52.00 per direct labor hour
- D) \$1.83 per machine hour

Answer: C

Explanation: C) Predetermined overhead allocation rate = Total estimated overhead costs / Total estimated quantity of the overhead allocation base

Predetermined overhead allocation rate = \$312,000 / 6,000 labor hours = \$52.00 per labor hour

Diff: 1 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

- 16) Arabica Manufacturing uses a predetermined overhead allocation rate based on the number of machine hours. At the beginning of the year, it estimated total manufacturing overhead costs to be \$1,000,000, total number of direct labor hours to be 4,500, and total number of machine hours to be 26,000 hours. What was the predetermined overhead allocation rate? (Round your answer to the nearest cent.)
- A) \$222.22 per machine hour
- B) \$32.79 per direct labor hour
- C) \$38.46 per machine hour
- D) \$46.51 per direct labor hour

Answer: C Explanation: C)

Estimated manufacturing overhead costs for the year (A) \$1,000,000

Estimated total number of machine hours (B) 26,000

Predetermined overhead allocation rate per machine hour (A / B) \$38.46

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

17) The Equinox Fabrication Plant suffered a fire incident in August, and most of the records for the year were destroyed. The following accounting data for the year were recovered:

Total manufacturing overhead estimated at the beginning of the	
year	\$100,960
Total direct labor costs estimated at the beginning of the year	\$184,000
Total direct labor hours estimated at the beginning of the year	3,200 direct labor hours
Actual manufacturing overhead costs for the year	\$99,100
Actual direct labor costs for the year	\$140,000
Actual direct labor hours for the year	2,500 direct labor hours

The company bases its manufacturing overhead allocation on the number of direct labor hours. What was the predetermined overhead allocation rate for the year? (Round your answer to the nearest cent.)

A) \$40.38

B) \$1.86

C) \$31.55

D) \$73.60

Answer: C

Explanation: C)

Estimated manufacturing overhead \$100,960
Estimated direct labor hours 3,200 hours
Predetermined overhead allocation rate (per direct labor hour)* \$31.55

*(\$100,960 / 3,200 direct labor hours)

Diff: 1 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

18) Archangel Manufacturing calculated a predetermined overhead allocation rate at the beginning of the year based on a percentage of direct labor costs. The production details for the year are given below:

Total manufacturing overhead costs estimated at the beginning	
of the year	\$140,000
Total direct labor costs estimated at the beginning of the year	\$320,000
	12,000 direct labor
Total direct labor hours estimated at the beginning of the year	hours
Actual manufacturing overhead costs for the year	\$160,000
Actual direct labor costs for the year	\$370,000
	11,200 direct labor
Actual direct labor hours for the year	hours

Calculate the manufacturing overhead allocation rate for the year based on the above data. (Round your final answer to two decimal places.)

A) 43.75%

B) 264.29%

C) 11.43%

D) 25.00%

Answer: A

Explanation: A)

Total manufacturing overhead estimated at the beginning of the year
Total direct labor costs estimated at the beginning of the year
Predetermined overhead allocation rate
\$140,000
/320,000
43,75%

Diff: 1 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Before the Period - Calculating The Predetermined Overhead Allocation Rate

19) Manufacturing overhead costs are allocated to the Work-in-Process Inventory account by a debit to the Manufacturing Overhead account.

Answer: FALSE

Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: During the Period - Allocating Overhead

20) Manufacturing overhead is allocated by debiting the Finished Goods Inventory account.

Answer: FALSE

Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

21) Manufacturing overhead is allocated by debiting the Work-in-Process Inventory account and crediting the Manufacturing Overhead account.

Answer: TRUE

Diff: 1 LO: 19-3

AICPA Functional: Measurement PE Question Type: Concept

H2: During the Period - Allocating Overhead

22) Sybil, Inc. uses a predetermined overhead allocation rate to allocate manufacturing overhead costs to jobs. The company recently completed Job 300X. This job used 10 machine hours and 3 direct labor hours. The predetermined overhead allocation rate is calculated to be \$45 per machine hour. What is the amount of manufacturing overhead allocated to Job 300X using machine hours as the allocation base?

A) \$450

B) \$135

C) \$585

D) \$315

Answer: A

Explanation: A) Allocated manufacturing overhead cost = Predetermined overhead allocation rate × Actual quantity of the allocation base used by each job

Allocated manufacturing overhead cost = $$45 \times 10$ machine hours = \$450.

Diff: 1 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: During the Period - Allocating Overhead

23) Jeremy Corporation estimated manufacturing overhead costs for the year to be \$490,000. Jeremy also estimated 7,000 machine hours and 1,000 direct labor hours for the year. It bases the predetermined overhead allocation rate on machine hours. On January 31, Job 25 was completed. It required 4 machine hours and 6 direct labor hours. What is the amount of manufacturing overhead allocated to the completed job? (Round your answer to the nearest dollar.)

A) \$70

B) \$700

C) \$280

D) \$1,960

Answer: C

Explanation: C) Predetermined overhead allocation rate = Total estimated overhead costs / Total estimated quantity of the overhead allocation base

Predetermined overhead allocation rate = \$490,000 / 7,000 machine hours = \$70 per machine hour

Allocated manufacturing overhead cost = Predetermined overhead allocation rate \times Actual quantity of the allocation base used by each job

Allocated manufacturing overhead $cost = 70×4 machine hours = \$280

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

24) The journal entry to record allocation of manufacturing overhead to a particular job includes a

A) debit to the Finished Goods Inventory account and credit to the Manufacturing Overhead account

A) debit to the Finished Goods inventory account and credit to the Manufacturing Overhead account

B) debit to the Work-in-Process Inventory account and credit to the Cash account

C) debit to the Manufacturing Overhead account and credit to the Finished Goods Inventory account

D) debit to the Work-in-Process Inventory account and credit to the Manufacturing Overhead account

\$2,680

Answer: D Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: During the Period - Allocating Overhead

25) Iglesias, Inc. completed Job 12 on November 30. The details of Job 12 are given below:

Direct labor cost	\$860
Direct materials cost	\$1,100
Machine hours	9 hours
Direct labor hours	23 hours
Predetermined overhead allocation rate	\$80 per machine hour

What is the total cost of Job 12?

A) \$2,680

B) \$1,960

C) \$1,580

D) \$1,820

Answer: A

Explanation: A)

Direct labor cost \$860 Di rect materials cost 1,100

Manufacturing overhead (\$80 × 9 machine hours) 720

Total cost of Job 12

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

26) Gardner Machine Shop estimates manufacturing overhead costs for the coming year at \$318,000. The manufacturing overhead costs will be allocated based on direct labor hours. Gardner estimates 4,000 direct labor hours for the coming year. In January, Gardner completed Job A33, which used 70 machine hours and 20 direct labor hours. What was the amount of manufacturing overhead allocated to Job A33? (Round any intermediate calculations to the nearest cent, and your final answer to the nearest dollar.)

A) \$1,590

B) \$5,565

C) \$7,155

D) \$4,543

Answer: A

Explanation: A)

Estimated manufacturing overhead costs for the year

\$318,000

Divided by: Estimated direct labor hours

/4,000 hours

Predetermined overhead allocation rate (per direct labor hour)

\$79.50

Times: Direct labor hours used by Job A33

× 20 hours

Manufacturing overhead allocated to Job A33

\$1,590

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: During the Period - Allocating Overhead

- 27) Midtown, Inc. uses a predetermined overhead allocation rate of \$68 per direct labor hour. In January, the company completed Job A23 which utilized 24 direct labor hours. Which of the following correctly describes the journal entry to allocate overhead to the job?
- A) debit Finished Goods Inventory \$1,632 and credit Manufacturing Overhead \$1,632
- B) debit Manufacturing Overhead \$68 and credit Work-in-Process Inventory \$68
- C) debit Work-in-Process Inventory \$1,632 and credit Manufacturing Overhead \$1,632
- D) debit Cost of Goods Sold \$68 and credit Finished Goods Inventory \$68

Answer: C

Explanation: C) Allocated manufacturing overhead cost = Predetermined overhead allocation rate \times Actual quantity of the allocation base used by each job

Allocated manufacturing overhead cost = \$68 per DLHr × 24 hours = \$1,632

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

28) Halcyon, Inc. completed Job 10B last month. The cost details of Job 10B are shown below.

Direct labor cost	\$2,140
Direct materials cost	\$80
Machine hours	7 hours
Direct labor hours	71 hours
Predetermined overhead allocation rate per direct labor	
hour	\$34

Calculate the total job cost for Job 10B.

A) \$2,458

B) \$4,634

C) \$2,220

D) \$4,872

Answer: B

Explanation: B)

\$2,140 Direct labor cost 80

Direct materials cost

Manufacturing overhead allocated

($$34 \times 71 \text{ direct labor hours}$) 2,414

Job cost of Job 10B \$4,634

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

29) Haddows, Inc. completed Job GH6 last month. The cost details of GH6 are shown below.

Direct labor cost	\$2,100
Direct materials cost	\$86
Direct labor hours	5 hours
Predetermined overhead allocation rate per direct labor	
hour	\$71
Number of units of finished product	32

Calculate the cost per unit of the finished product of Job GH6. (Round your answer to the nearest cent.)

A) \$441.00

B) \$13.78

C) \$76.72

D) \$79.41

Answer: D

Explanation: D)

Direct labor cost \$2,100

Direct materials cost 86

Manufacturing overhead

\$71 × 5 direct labor hours) 355

job cost of Job GH6 (A) \$2,541

Number of units of finished product (8) 32 units
Cost per unit of finished product of Job GH6 (A / B) \$79.41

Diff: 3 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

30) Jezebel, Inc. completed Job 12 and several other jobs in the last week. The cost details of Job 12 are shown below.

Direct labor cost	\$800
Direct materials cost	\$100
Machine hours	8 hours
Direct labor hours	17 hours
Predetermined overhead allocation rate per machine hour	\$85
Number of units of finished product	27 units

What is the cost per unit of finished product produced under Job 12? (Round your answer to the nearest cent.)

A) \$33.33

B) \$58.52

C) \$92.94

D) \$86.85

Answer: B

Explanation: B)

Direct labor cost

\$800

Direct materials cost

100

Manufacturing overhead (\$85 x 8 machine hours)

680

job cost of Job 12 (A)

\$1,580

Number of units of finished product (8)

27 units \$58.52

Cost per unit of finished product of Job 12 (A / B)

Diff: 3 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

31) Olympia Manufacturing uses a predetermined overhead allocation rate based on a percentage of direct labor cost. At the beginning of the year, Olympia estimated total manufacturing overhead costs at \$1,020,000 and total direct labor costs at \$830,000. In June, Job 511 was completed. The details of Job 511 are shown below.

Direct materials cost	\$25,000
Direct labor cost	\$13,000
Direct labor hours	500 hours
Units of product produced	200 hours

What is the amount of manufacturing overhead costs allocated to Job 511? (Round any percentages to two decimal places and your final answer to the nearest dollar.)

A) \$15,976

B) \$30,723

C) \$10,578

D) \$20,343

Answer: A Explanation: A)

Estimated manufacturing overhead costs for the year \$1,020,000 Estimated total direct labor costs \$830,000 Predetermined overhead allocation rate as a percentage of direct $(\$13,000 \times 123\%)$ Expor cost (\$1,020,000/\$830,000) 123%

Calculation of manufacturing overhead costs allocated to Job 511:

Direct labor cost \$13,000

Manufacturing overhead costs allocated to Job 511 \$15,976

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

32) Gill Manufacturing uses a predetermined overhead allocation rate based on a percentage of direct labor cost. At the beginning of the year, Gill estimated total manufacturing overhead costs at \$1,050,000 and total direct labor costs at \$820,000. In June, Gill completed Job 511. The details of Job 511 are shown below. (Round to 2 decimal places.)

Direct materials cost	\$26,500
Direct labor cost	\$10,000
Direct labor hours	300 hours
Units of product produced	200 units

How much was the total job cost of Job 511? (Round any percentages to two decimal places and your final answer to the nearest dollar.)

A) \$36,884

B) \$49,300

C) \$70,420

D) \$36,756

Answer: B

Explanation: B)

Estimated manufacturing overhead costs for the year \$1,050,000 Estimated total direct labor costs \$820,000 Predetermined overhead allocation rate as a percentage of direct $($10,000 \times 128\%)$ labor cost (\$1,050,000 / \$820,000) 128%

Calculation of total job cost of Job 511:

Direct materials cost \$26,500 Direct labor cost \$10,000

Manufacturing overhead costs allocated to Job 511

12,800 \$49,300

Total job cost of Job 511

Diff: 3 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

33) Irene Manufacturing uses a predetermined overhead allocation rate based on a percentage of direct labor cost. At the beginning of the year, the company estimated total manufacturing overhead costs at \$1,000,000 and total direct labor costs at \$820,000. In June, Job 711 was completed. The details of Job 711 are shown below.

Direct materials cost	\$20,500
Direct labor cost	\$11,000
Direct labor hours	500 hours
Units of product produced	200 units

How much was the cost per unit of finished product? (Round any percentages to two decimal places and your final answer to the nearest cent.)

A) \$157.50

B) \$202.60

C) \$169.60

D) \$224.60

Answer: D

Explanation: D)

Estimated manufacturing overhead costs for the year \$1,000,000 Estimated total direct labor costs 820,000 Predetermined overhead allocation rate as a $(\$11,000 \times 122\%)$ percentage of direct labor cost (\$1,000,000 / 820,000) 122%

Calculation of cost per unit:

Direct materials cost	\$20,500
Direct labor cost	11,000

Manufacturing overhead costs allocated to Job 711

 13,420

 Total job cost of Job 711(A)
 \$44,920

 Number of units produced (B)
 200

 Cost per unit (A / B)
 \$224.60

Diff: 3 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

34) Venus Manufacturing uses a predetermined overhead allocation rate based on a percentage of direct labor cost. At the beginning of the year, it estimated the manufacturing overhead rate to be 20% of the direct labor cost. In the month of June, Venus completed Job 13C and its details are as follows:

<u>\$34,280</u>

Direct materials cost	\$6,680
Direct labor cost	\$23,000
Direct labor hours	34 hours
Units of product produced	250

What is the total cost incurred for Job 13C?

A) \$31,016

B) \$27,600

C) \$11,280

D) \$34,280

Answer: D

Explanation: D)

 $\begin{array}{ll} \mbox{Direct materials cost} & \$6,680 \\ \mbox{Direct labor cost} & 23,000 \\ \mbox{Manufacturing overhead ($23,000 \times 0.2)} & \underline{4,600} \end{array}$

Total cost of Job 13C Diff: 2

LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

35) Jordan Manufacturing uses a predetermined overhead allocation rate based on a percentage of direct labor cost. At the beginning of the year, it estimated the manufacturing overhead rate to be 30% times the direct labor cost. In the month of June, Jordan completed Job 13C, and its details are as follows:

Direct materials cost	\$6,020
Direct labor cost	\$25,000
Direct labor hours	30 hours
Units of product produced	250

What is the cost per unit of finished product of Job 13C? (Round your answer to the nearest cent.)

A) \$154.08

B) \$131.30

C) \$124.12

D) \$130.00

Answer: A

Explanation: A)

 $\begin{array}{ll} \mbox{Direct materials cost} & \$6,020 \\ \mbox{Direct labor cost} & 25,000 \\ \mbox{Manufacturing overhead (25,000 <math>\times$ 30%)} & 7,500 \\ \mbox{Total cost of Job 13C} & 38,520 \\ \end{array}

Cost per unit (\$38,520 / 250 units) <u>\$154.08</u>

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

36) Happy Clicks, Inc. uses a predetermined overhead allocation rate of \$5.25 per machine hour. Actual overhead costs incurred during the year are as follows:

Indirect materials	\$5,600
Indirect labor	\$2,000
Plant depreciation	\$4,300
Plant utilities and insurance	\$9,900
Other plant overhead costs	\$12,100
Total machine hours used during year	7,100 hours

What is the amount of manufacturing overhead cost allocated to Work-in-Process Inventory during the year?

A) \$41,000

B) \$7,600

C) \$33,400

D) \$37,275 Answer: D

Explanation: D)

Total machine hours used during the year 7,100 hours
Predetermined overhead allocation rate \$5.25
Allocated manufacturing overhead cost (7,100 hours x \$5.25)
\$37,275

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

37) Doric Agricultural Corporation uses a predetermined overhead allocation rate based on the direct labor cost. The manufacturing overhead cost allocated during the year is \$280,000. The details of production and costs incurred during the year are as follows:

Actual direct materials cost	\$812,000
Actual direct labor cost	\$180,000
Actual overhead costs incurred	\$264,000
Total direct labor hours	5,600 hours

What is the predetermined overhead allocation rate applied by the corporation? (Round your answer to two decimal places.)

A) 94.29%

B) 68.18 %

C) 155.56%

D) 34.48%

Answer: C Explanation: C)

Actual direct labor cost

\$180,000

Allocated manufacturing overhead cost

\$280,000

Predetermined overhead allocation rate (\$280,000 / 180,000) = 155.56%

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

38) The Quadrangle Fabrication Plant suffered a fire incident at the beginning of the year, which resulted in the loss of property including the accounting records. Some data for the year were retrieved, and extracts from it are shown below:

Total manufacturing overhead costs estimated at the beginning	
of the year	\$105,420
Total direct labor costs estimated at the beginning of the year	\$185,000
Total direct labor hours estimated at the beginning of the year	3,200 direct labor hours
Actual manufacturing overhead costs for the year	\$99,440
Actual direct labor costs for the year	\$150,000
Actual direct labor hours for the year	2,450 direct labor hours

The company's manufacturing overhead allocation is based on direct labor hours. How much manufacturing overhead was allocated to production during the year? (Round any intermediate calculations to two decimal places, and your final answer to the nearest dollar.)

\$80,703

A) \$105,420 B) \$80,703

C) \$137,691

D) \$185,000 Answer: B

Explanation: B)

Estimated manufacturing overhead

\$105,420 Estimated direct labor hours /3,200 hours

Predetermined overhead allocation rate (per direct labor hour) \$32,94

Actual direct labor hours for the year. \times 2,450 hours

Manufacturing overhead allocated to production

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

39) The Carlin Fabrication Plant suffered a fire incident at the beginning of the year, which resulted in the loss of property including the accounting records. Some data for the year were retrieved, and extracts from it are shown below:

Total manufacturing overhead costs estimated at the beginning	
of the year	\$105,000
Total direct labor costs estimated at the beginning of the year	\$186,000
Total direct labor hours estimated at the beginning of the year	3,400 direct labor hours
Total machine hours estimated at the beginning of the year	9,000 machine hours
Actual manufacturing overhead costs for the year	\$96,500
Actual direct labor costs for the year	\$146,000
Actual direct labor hours for the year	2,250 direct labor hours
Actual machine hours for the year	10,000 machine hours

The company's manufacturing overhead allocation is based on the number of machine hours. What is the amount of manufacturing overhead cost allocated to Work-in-Process Inventory during the year? (Round any intermediate calculations to two decimal places, and your final answer to the nearest dollar.)

A) \$26,250 B) \$308,823 C) \$116,700 D) \$206,666

Answer: C Explanation: D)

Estimated manufacturing overhead \$105,000
Estimated machine hours /9,000
Predetermined overhead allocation rate (per machine hour) \$11.67
Actual machine hours for the year × 10,000
Manufacturing overhead allocated to production \$116,700

Diff: 3 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

40) Clinton Manufacturing uses a predetermined overhead allocation rate based on a percentage of direct labor costs. The following are the details of production during the year:

Total manufacturing overhead costs estimated at the beginning	
of the year	\$140,000
Total direct labor costs estimated at the beginning of the year	\$330,000
Total direct labor hours estimated at the beginning of the year	12,000 direct labor hours
Actual manufacturing overhead costs for the year	\$160,000
Actual direct labor costs for the year	\$370,000
Actual direct labor hours for the year	11,800 direct labor hours

Calculate the amount of manufacturing overhead costs allocated to production. (Round any percentages to two decimal places and your final answer to the nearest dollar.)

A) \$140,000 B) \$179,394 C) \$156,954 D) \$160,000 Answer: C

Explanation: C)

Total manufacturing overhead estimated at the beginning of the year

Total direct labor costs estimated at the beginning of the year

Predetermined overhead allocation rate (\$140,000 / \$330,000)

Actual direct labor costs for the year

Manufacturing overhead costs allocated to production

\$140,000 / \$330,000

42.42%

\$370,000

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

41) Q-dot Manufacturing uses a predetermined overhead allocation rate based on direct labor hours. It has provided the following information for the year:

Manufacturing overhead costs allocated to production	\$185,000
Actual direct materials cost	\$540,000
Actual direct labor cost	\$2,470,000
Actual direct labor hours	9,020 direct labor hours
Estimated machine hours	180,000 machine hours

Based on the above information, calculate Q-dot's predetermined overhead allocation rate. (Round your answer to two decimal places.)

- A) \$1.03 per machine hour
- B) 7.49% of direct labor cost
- C) 34.26% of direct materials cost
- D) \$20.51 per direct labor hour

Answer: D Explanation: D)

Manufacturing overhead costs allocated to production

\$185,000

Actual direct labor hours

/9,020 hours

Predetermined overhead allocation rate per direct labor hour

\$20.51

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

42) Felton Quality Productions uses a predetermined overhead allocation rate based on machine hours. It has provided the following information for the year:

Actual manufacturing overhead costs incurred	\$100,000
Manufacturing overhead costs allocated to production	\$46,000
Actual direct materials cost	\$230,000
Actual direct labor cost	\$50,000
Actual machine hours	32,000 hours

Based on the above information, calculate the predetermined overhead allocation rate applied by Felton Quality. (Round your answer to the nearest cent.)

A) \$1.44 per machine hour

B) \$3.13 per machine hour

C) \$7.19 per machine hour

D) \$1.56 per machine hour

Answer: A Explanation: A)

Manufacturing overhead costs allocated to production (A) \$46,000

Actual machine hours (B) 32,000

Predetermined overhead allocation rate (A) / (B) \$1.44

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

43) Davie, Inc. used estimated direct labor hours of 250,000 and estimated manufacturing overhead costs of \$1,100,000 in establishing its predetermined overhead allocation rate for the year. Actual results showed the following:

Actual manufacturing overhead	\$800,000
Allocated manufacturing overhead	\$900,000

What was the number of direct labor hours worked during the year? (Round any intermediate calculations to two decimal places, and your final answer to the nearest whole number.)

A) 181,818 hours

B) 281,250 hours

C) 250,000 hours

D) 204,545 hours

Answer: D Explanation: D)

Estimated manufacturing overhead costs \$1,100,000
Estimated direct labor hours /250,000
Predetermined overhead allocation rate per labor hour (A) \$4.40
Allocated manufacturing overhead (B) \$900,000
Number of direct labor hours worked (B / A) 204,545

Diff: 3 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

44) Forsyth, Inc. uses estimated direct labor hours of 240,000 and estimated manufacturing overhead costs of \$1,150,000 in establishing its predetermined overhead allocation rate for the year. Actual results showed the following:

Actual manufacturing overhead	\$800,000
Allocated manufacturing overhead	\$900,000

The number of direct labor hours worked during the period was ______. (Round any intermediate calculations to two decimal places, and your final answer to the nearest whole number.)

A) 240,000 hours

B) 187,891 hours

C) 167,015 hours

D) 213,333 hours

Answer: B Explanation: B)

Estimated manufacturing overhead costs \$1,150,000
Estimated direct labor hours /240,000
Predetermined overhead allocation rate per direct labor hour (A) \$4.79
Allocated manufacturing overhead (B) \$900,000
Number of direct labor hours worked (B / A) 187,891

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: During the Period - Allocating Overhead

45) The records at Smith and Jones, Inc. show that Job 110 is charged with \$12,000 of direct materials and \$11,000 of direct labor. Smith and Jones, Inc. allocate manufacturing overhead at 85% of direct labor cost. What is the total cost of Job No. 110?

A) \$33,200

B) \$32,350

C) \$23,000

D) \$11,000

Answer: B

Explanation: B)

Direct labor cost incurred \$11,000
Predetermined overhead allocation rate on direct labor cost 85%
Allocated manufacturing overhead (\$11,000 x 85%) 9,350

Direct material cost \$12,000
Direct labor cost 11,000
Allocated manufacturing overhead 9,350
Cost of Job No. 110 \$32,350

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

46) Haverhill Products completed Job 440 and several other jobs during the year. In addition to direct labor and direct materials cost, Haverhill allocated \$450 of manufacturing overhead to the job. Provide the journal entry for the allocation of manufacturing overhead.

Answer:

Work-in-Process Inventory	450	
Manufacturing Overhead		450

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: During the Period - Allocating Overhead

47) Melinda, Inc. estimates manufacturing overhead costs for the coming year at \$225,000, which will be allocated based on direct labor hours. Melinda estimates 9,000 direct labor hours for the coming year. In January, Job A33 was completed, which required 8 direct labor hours and 34 machine hours. Provide the journal entry to allocate manufacturing overhead to the job.

Answer:

Manufacturing Overhead 200	Work-in-Process Inventory	200	
	Manufacturing Overhead		200

Estimated manufacturing overhead costs \$225,000 Estimated direct labor hours 9,000 hours Predetermined overhead allocation rate (\$225,000 / 9,000 hours) \$25 Number of direct labor hours worked on Job A33 8 hours Allocated manufacturing overhead ($$25 \times 8$ hours) \$200

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

48) Metropolitan Enterprises reports the following information at December 31:

Manufacturing Overhead

\$4,300\$45,500

21,000

18,500

Requirements

- 1. What is the actual manufacturing overhead of Metropolitan Enterprises?
- 2. What is the allocated manufacturing overhead?
- 3. Is manufacturing overhead underallocated or overallocated? By how much?

Answer:

1. Actual manufacturing overhead costs are debited to the Manufacturing Overhead account.

Actual manufacturing overhead = \$4,300 + 21,000 + 18,500

Actual manufacturing overhead = \$43,800

2. Allocated manufacturing overhead costs are credited to the Manufacturing Overhead account. Allocated manufacturing overhead = \$45,500

3. Allocated manufacturing overhead costs of \$45,500 are greater than actual manufacturing overhead costs of \$43,800. Thus manufacturing overhead is overapplied by \$1,700.

Diff: 2 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: During the Period - Allocating Overhead

49) Ivade, Inc. uses a predetermined overhead allocation rate of \$75 per direct labor hour. In January, Ivade completed Job B23, which utilized 20 direct labor hours. Provide the journal entry to allocate overhead to the job.

Answer:

1110 // 01/		
Work-in-Process Inventory	1,500	
Manufacturing Overhead		1,500

Explanation:

\$75 per DLHr × 20 DLHrs = \$1,500

Diff: 1 LO: 19-3

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: At the End of the Period - Adjusting for Overallocaed and Underallocated Overhead

Learning Objective 19-4

1) The cost of goods manufactured is recorded with a debit to the Work-in-Process Inventory account and a credit to the Cost of Goods Manufactured account.

Answer: FALSE

Diff: 1 LO: 19-4

AICPA Functional: Measurement PE Question Type: Concept

H2: Transferring Costs To Finished Goods Inventory

2) The cost of goods manufactured is recorded with a debit to the Finished Goods Inventory account and a credit to the Work-in-Process Inventory account.

Answer: TRUE

Diff: 1 LO: 19-4

AICPA Functional: Measurement PE Question Type: Concept

H2: Transferring Costs To Finished Goods Inventory

3) When a job is completed, the total cost of the job is recorded with a debit to Finished Goods Inventory and a credit to Work-in-Process Inventory.

Answer: TRUE

Diff: 1 LO: 19-4

AICPA Functional: Measurement PE Question Type: Concept

4) On January 1, Biden, Inc.'s Work-in-Process Inventory account had a balance of \$30,600. During the year, \$58,300 of direct materials was placed into production. Manufacturing wages incurred amounted to \$84,000, of which \$64,500 were for direct labor. Manufacturing overhead is allocated on the basis of 120% of direct labor cost. Actual manufacturing overhead was \$90,400. Jobs costing \$220,500 were completed during the year. What is the December 31 balance of Work-in-Process Inventory?

A) \$153,400 B) \$30,600

C) \$230,800

D) \$10,300 Answer: D

Explanation: D)

Beginning balance in Work-in-Process Inventory \$30,600 Add:
Direct materials 58,300 Direct labor 64,500

Manufacturing overhead (120% \times \$64,500)77,400Less: Transfer to Finished Goods Inventory(220,500)Ending balance in Work-in-Process Inventory\$10,300

Diff: 2 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Transferring Costs To Finished Goods Inventory

5) On January 1, Jackson, Inc.'s Work-in-Process Inventory account showed a balance of \$65,800. During the year, materials requisitioned for use in production amounted to \$71,900, of which \$67,600 represented direct materials. Factory wages for the period were \$210,000 of which \$187,000 were for direct labor. Manufacturing overhead is allocated on the basis of 60% of direct labor cost. Actual overhead was \$116,340. Jobs costing \$353,200 were completed during the year. The December 31 balance in Work-in-Process Inventory is ______.

\$79,400

A) \$65,800

B) \$320,400

C) \$432,600

D) \$79,400

Answer: D

Explanation: D)

Beginning balance in Work-in-Process Inventory \$65,800
Add:
Direct materials 67,600
Direct labor 187,000
Manufacturing overhead (60% of \$187,000) 112,200
Less: Transfer to Finished Goods Inventory (353,200)

Diff: 2 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Transferring Costs To Finished Goods Inventory

Ending balance in Work-in-Process Inventory

6) Caltran, Inc. completed manufacturing Job 445. It included \$390 of direct materials cost, \$1,220 of direct labor cost, and \$500 of allocated manufacturing overhead. Which of the following is the correct journal entry needed to record the completed job?

٨	`
Α	1

Work-in-Process Inventory	2,110	
Finished Goods Inventory		2,110

B)

Finished Goods Inventory	2,110	
Materials Inventory		2,110

C)

Work-in-Process Inventory	1,610	
Cost of Goods Sold		1,610

D)

Finished Goods Inventory	2,110	
Work-in-Process Inventory		2,110

Answer: D

Explanation: D) Cost of Job 445:

Direct materials \$390
Direct labor 1,220
Manufacturing overhead allocated 500
Job cost for Job 445 \$2,110

Journal entry:

Finished Goods Inventory	2,110	
Work-in-Process Inventory		2,110

Diff: 1 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

- 7) Altima, Inc. finished Job A40 on the last working day of the year. It utilized \$300 of direct materials and \$3,380 of direct labor. Altima uses a predetermined overhead allocation rate based on a percentage of direct labor costs, which has been fixed at 40%. The entry to record the completion of the job should involve a
- A) debit to Finished Goods Inventory \$5,032 and a credit to Materials Inventory \$5,032
- B) debit to Cost of Goods Sold \$5,032 and a credit to Finished Goods Inventory \$5,032
- C) debit to Finished Goods Inventory \$5,032 and a credit to Work-in-Process Inventory \$5,032
- D) debit to Work-in-Process Inventory \$5,032 and a credit to Finished Goods Inventory \$5,032

Answer: C Explanation: C) Cost of Job A40:

Direct materials utilized \$300
Direct labor 3,380
Manufacturing overhead allocated (\$3,380 × 40%) 1,352
Job cost for Job A40 \$5,032

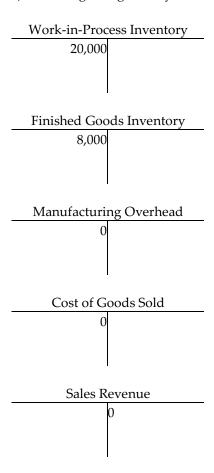
Journal entry:

Finished Goods Inventory	5,032	
Work-in-Process Inventory		5,032

Diff: 2 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

8) At the beginning of the year, Conway Manufacturing had the following account balances:



The following additional details are provided for the year:

Direct materials placed in production	\$82,000
Direct labor incurred	190,100
Manufacturing overhead incurred	300,600
Manufacturing overhead allocated to	
production	297,700
Cost of jobs completed and transferred	500,800

The ending balance in the Work-in-Process Inventory account is a ______.

- A) credit of \$71,000
- B) debit of \$2,000
- C) credit of \$2,000
- D) debit of \$71,000

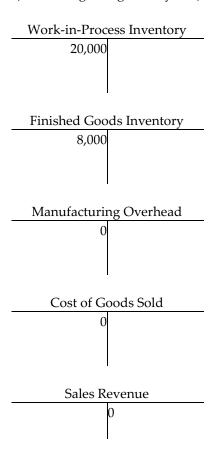
Answer: D

Explanation: D)		
Beginning balance in Work-in-Process Inventory	\$2,000	Debit
Add:		
Direct materials used	82,000	Debit
Direct labor	190,100	Debit
Manufacturing overhead allocated to production	297,700	Debit
Less: Transfer to Finished Goods Inventory	(500,800)	Credit
Ending balance in Work-in-Process Inventory	\$71,000	Debit

Diff: 2 LO: 19-4

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

9) At the beginning of the year, Judge Manufacturing had the following account balances:



The following additional details are provided for the year:

Direct materials placed in production	\$83,800
Direct labor incurred	191,800
Manufacturing overhead incurred	300,900
Manufacturing overhead allocated to	
production	295,700
Cost of jobs completed and transferred	501,200

The ending balance in the Finished Goods Inventory account is a _____.

- A) debit of \$509,200
- B) debit of \$501,200
- C) debit of \$8,000
- D) debit of \$571,300

Answer: A

Explanation: A)

Beginning balance in Finished Goods Inventory Add: Transfer of finished goods 501,200

Ending balance in Finished Goods Inventory (debit balance) \$509,200

Diff: 2 LO: 19-4

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: Transferring Costs To Finished Goods Inventory

10) When goods are transferred from the Work-in-Process Inventory account to the Finished Goods Inventory account, __

\$8,000

- A) total assets and total liabilities increase by the same amount
- B) total assets of the company remain constant
- C) total equity and total assets increase by the same amount
- D) total liabilities increase and total equity decreases by the same amount

Answer: B Diff: 2 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

11) Jupiter Manufacturing began business on January 1. During its first year of operation, Jupiter worked on five industrial jobs and reported the following information at year-end:

	Job 1	Job 2	Job 3	Job 4	Job 5
Direct Materials	1,000	7,500	4,000	3,500	1,500
Direct Labor	12,000	20,000	13,000	12,000	900
Allocated Mfg. Overhead	1,500	6,000	2,500	7,500	500
					Not
Job completed:	Jun 30	Sep 1	Oct 15	Nov 1	completed
Job sold:	Jul 10	Sep 12	Not sold	Not sold	N/A
Revenues:	25,000	39,000	N/A	N/A	N/A

What was the balance in Work-in-Process Inventory at year-end?

A) \$2,900

B) \$2,400

C) \$2,000

D) \$1,400

Answer: A

Explanation: A) Job 5 is the only job on which work is in process at the end of the year.

Ending balance in Work-in-Process Inventory (Job 5):

 Direct Materials
 \$1,500

 Direct Labor
 900

 Allocated Mfg. Overhead
 500

 Ending balance in Work-in-Process Inventory (Job 5)
 \$2,900

Diff: 2 LO: 19-4

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: Transferring Costs To Finished Goods Inventory

12) Kalliste, Inc. completed Job C50. Job C50 required \$3,000 of direct materials cost, \$2,000 of direct labor cost, and \$600 of allocated manufacturing overhead. Provide the journal entry needed to record completion and transfer of the job.

Answer:

Finished Goods Inventory	5,600	
Work-in-Process Inventory		5,600

Diff: 1 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

13) Hosanna Furnishings finished Job A40, which involved \$4,000 of direct materials and \$600 of direct labor. Hosanna uses a predetermined overhead allocation rate based on 40% of direct labor costs. Provide the journal entry needed to record the completion of the job.

Answer:

Finished Goods Inventory	4,840	
Work-in-Process Inventory		4,840

Explanation:

Direct labor costs\$600Predetermined overhead allocation rate on direct labor cost $\times 40\%$ Manufacturing overhead allocated\$240

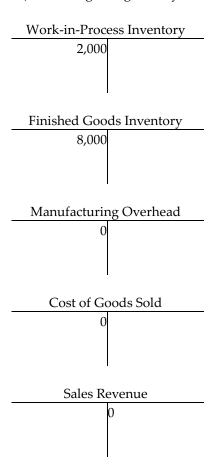
<u>Job cost of Job A40:</u>

Direct materials\$4,000Direct labor600Manufacturing overhead240Total cost of Job A40\$4,840

Diff: 2 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

14) At the beginning of the year, Barrington Manufacturing had the following account balances:



The following additional details are provided for the year:

Direct materials placed in production	\$80,000
Direct labor incurred	190,000
Manufacturing overhead incurred	300,000
Manufacturing overhead allocated to production	295,000
Cost of jobs completed	500,000

Record these transactions in the T-accounts and calculate the ending balances for Work-in-Process Inventory, Finished Goods Inventory, and Manufacturing Overhead accounts (unadjusted).

Answer:

Work-in-Process Inventory:

Beginning balance	\$2,000

Add:

Direct materials placed in production 80,000
Direct labor incurred 190,000
Manufacturing overhead allocated to production 295,000

Less:

Cost of jobs completed (500,000)
Ending balance in Work-in-Process Inventory \$67,000

Finished Goods Inventory:

Beginning balance	\$8,000
Add: Finished goods transferred from Work-in-Process Inventory	500,000
Ending balance	\$508,000

Manufacturing Overhead:

Manufacturing overhead incurred	\$300,000
Less: Manufacturing overhead allocated to production	(295,000)
Ending balance	\$5,000

Work-in-Process Inventory		
2,000	500,000	
80,000		
190,000		
295,000		
67,000		

Finished Goods Inventory		
8,000		
500,000		
508,000		

	Manufacturing Overhead		
0			
	300,000295,000		
	5,000		

Diff: 2 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

15) When goods are transferred from the Finished Goods Inventory account to the Cost of Goods Sold account, the product costs move from the balance sheet to the income statement.

Answer: TRUE

Diff: 1 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Transferring Costs to Cost of Goods Sold

- 16) On June 30, Caroline, Inc. finished Job 750 with total job costs of \$4,300 and transferred the costs to Finished Goods Inventory. On July 6, Caroline completed the sale of the goods from Job 750 to a customer for \$5,700 cash. Which of the following is the correct entry needed to record the revenue earned?
- A) debit Finished Goods Inventory \$4,300 and credit Sales Revenue \$4,300
- B) debit Cash \$5,700 and credit Sales Revenue \$5,700
- C) debit Sales Revenue \$5,700 and credit Cash \$5,700
- D) debit Cost of Goods Sold \$4,300 and credit Sales Revenue \$4,300

Answer: B

Explanation: B) Journal entry:

Cash	5,700	
Sales Revenue		5,700

Diff: 1 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Transferring Costs to Cost of Goods Sold

- 17) On June 30, Coral, Inc. finished Job 750 with total job costs of \$4,200, and transferred the costs to Finished Goods Inventory. On July 6, it completed the sale of the goods to a customer for \$5,900 cash. Which of the following is the correct journal entry to record the cost of goods sold?
- A) debit Finished Goods Inventory \$4,200 and credit Cost of Goods Sold \$4,200
- B) debit Cost of Goods Sold \$4,200 and credit Work-in-Process Inventory \$4,200
- C) debit Work-in-Process Inventory \$4,200 and credit Cost of Goods Sold \$4,200
- D) debit Cost of Goods Sold \$4,200 and credit Finished Goods Inventory \$4,200

Answer: D

Explanation: D) Journal entry:

Cost of Goods Sold	4,200	
Finished Goods Inventory		4,200

Diff: 1 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

18) On January 1, Feldstein Manufacturing had a beginning balance in Work-in-Process Inventory of \$82,400 and a beginning balance in Finished Goods Inventory of \$20,500. During the year, Feldstein incurred manufacturing costs of \$350,700.

During the year, the following transactions occurred:

Job A-12 was completed for a total cost of \$120,000 and was sold for \$125,500.

Job A-13 was completed for a total cost of \$200,100 and was sold for \$210,800.

Job A-15 was completed for a total cost \$66,000 but was not sold as of year-end.

What was the balance in Finished Goods Inventory at the end of the year?

- A) \$406,600 debit balance
- B) \$86,500 credit balance
- C) \$86,500 debit balance
- D) \$386,100 debit balance

Answer: C Explanation: C)

Beginning balance in Finished Goods Inventory \$20,500

Add: Transfer of completed jobs:

. ,		
job A-12	\$120,000	
job A-13	200,100	
job A-15	<u>66,000</u>	386,100
		406,600

Less: Goods sold

job A-12 (120,000)

Job A=13 (200,100) (320,100)
Ending balance in Finished Goods Inventory (debit) \$86,500

Diff: 1 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

19) Warren Manufacturing began business on January 1. During its first year of operation, Warren worked on five industrial jobs and reported the following information at year-end:

	Job 1	Job 2	Job 3	Job 4	Job 5
Direct Materials	1,000	7,500	5,000	3,300	1,500
Direct Labor	12,000	20,000	13,400	12,000	800
Allocated Mfg. Overhead	1,500	6,000	2,300	7,600	200
					Not
Job completed:	Jun 30	Sep 1	Oct 15	Nov 1	completed
Job sold:	Jul 10	Sep 12	Not sold	Not sold	N/A
Revenues:	25,000	39,000	N/A	N/A	N/A

What was the balance in Finished Goods Inventory at year-end?

A) \$33,700

B) \$20,700

C) \$43,600

D) \$22,900

Answer: C

Explanation: C) Job 3 and Job 4 are the jobs that are completed and not sold at year end.

Ending balance in Finished Goods Inventory:

job 3:

,		
Direct Materials	\$5,000	
Direct Labor	13,400	
Allocated Mfg. Overhead	<u>2,300</u>	\$20,700
Job 4:		
Direct Materials	3,300	
Direct Labor	12,000	
Allocated Manufacturing Overhead	<u>7,600</u>	22,900
Ending Balance in Finished Goods Inventory		\$43,600

Diff: 2 LO: 19-4

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: Transferring Costs to Cost of Goods Sold

20) On June 30, Cleopatra, Inc. finished Job 70 with total job costs of \$40,000 and transferred the costs to Finished Goods Inventory. On July 6, Cleopatra completed the sale of the goods to a customer for \$55,000 on account. Provide the journal entry to record the sales revenue.

Answer:

Accounts Receivable	55,000	
Sales Revenue		55,000

Diff: 1 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

21) On June 30, Greenville, Inc. finished Job 70 with total job costs of \$40,000 and transferred the costs to Finished Goods Inventory. On July 6, Greenville completed the sale of the goods to a customer for \$55,000 on account. Provide the entry to record the cost of goods sold.

Answer:

Cost of Goods Sold	40,000	
Finished Goods Inventory		40,000

Diff: 1 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Transferring Costs to Cost of Goods Sold

22) Oxford Manufacturing Company completed jobs that cost \$48,000 to produce. In the same period, the company sold jobs for \$102,000 that cost \$53,000 to produce. Prepare the journal entries for the completion and sales of the jobs. All sales are on account. Omit explanations.

Answer:

Finished Goods Inventory 48,000

Work-in-Process Inventory 48,000

Accounts Receivable 102,000

Sales Revenue 102,000

Cost of Goods Sold 53,000

Finished Goods Inventory 53,000

Diff: 2 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Transferring Costs to Cost of Goods Sold

23) Leonard Manufacturing Systems uses job order costing and a perpetual inventory system. When recording the sale of a job, which account(s) is(are) debited?

Answer: Accounts Receivable and Cost of Goods Sold accounts are debited.

Diff: 1 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Transferring Costs to Cost of Goods Sold

24) Patrick Manufacturing Systems uses job order costing and a perpetual inventory system. When recording the sale of a job, which account(s) is(are) credited?

Answer: Sales Revenue and Finished Goods Inventory accounts are credited.

Diff: 2 LO: 19-4

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

Learning Objective 19-5

1) Manufacturing overhead costs allocated to a job amounted to \$491,000. The actual manufacturing costs incurred during the year were \$580,000. Overhead costs have been underallocated.

Answer: TRUE

Diff: 1 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Is the Manufacturing Overhead Account Adjusted? (H1)

2) During the year, a company incurred \$500,000 of manufacturing overhead costs and allocated \$510,000 of manufacturing overhead costs. At the year-end, the adjustment entry needed to adjust the Manufacturing Overhead account balance to zero will include a debit to Cost of Goods Sold.

Answer: FALSE

Diff: 1 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Is the Manufacturing Overhead Account Adjusted? (H1)

3) During the year, a company incurred \$533,000 of manufacturing overhead costs and allocated \$463,000 of manufacturing overhead costs. At year-end, the adjustment entry needed to adjust the Manufacturing Overhead account balance to zero will include a debit to Cost of Goods Sold.

Answer: TRUE

Diff: 1 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Is the Manufacturing Overhead Account Adjusted? (H1)

4) Overallocated manufacturing overhead occurs when the manufacturing overhead allocated to Workin-Process Inventory is less than the amount actually incurred.

Answer: FALSE

Diff: 2 LO: 19-5

AICPA Functional: Measurement PE Question Type: Concept

H2: How Is the Manufacturing Overhead Account Adjusted? (H1)

5) Overallocated manufacturing overhead is adjusted by debiting the Cost of Goods Sold account.

Answer: FALSE

Diff: 2 LO: 19-5

AICPA Functional: Measurement PE Question Type: Concept

6) If the debit side of the Manufacturing Overhead account totals more than the credit side of the account the manufacturing overhead is overallocated. Answer: FALSE Diff: 1 LO: 19-5 AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application H2: How Is the Manufacturing Overhead Account Adjusted? (H1)	- 7
7) The journal entry for adjustment of overallocated manufacturing overhead includes a A) credit to Finished Goods Inventory B) credit to Manufacturing Overhead C) debit to Work-in-Process Inventory D) credit to Cost of Goods Sold Answer: D Diff: 2 LO: 19-5 AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application H2: How Is the Manufacturing Overhead Account Adjusted? (H1)	
8) The journal entry for adjustment of underallocated manufacturing overhead includes a A) credit to Finished Goods Inventory B) credit to Manufacturing Overhead C) debit to Work-in-Process Inventory D) credit to Cost of Goods Sold Answer: B Diff: 2 LO: 19-5 AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application H2: How Is the Manufacturing Overhead Account Adjusted? (H1)	
9) Underallocated overhead occurs when A) allocated overhead costs are less than actual overhead costs B) actual overhead costs are less than allocated overhead costs C) estimated overhead costs are greater than budgeted overhead costs D) estimated overhead costs are greater than actual overhead costs Answer: A Diff: 2 LO: 19-5 AICPA Functional: Measurement PE Question Type: Concept H2: How Is the Manufacturing Overhead Account Adjusted? (H1)	

10) Neptune Fabrication Plant has provided you with the following information:

Total manufacturing overhead costs estimated at the	
beginning of the year	\$252,000
Total direct labor costs estimated at the beginning of the	, , , , , , , , , , , , , , , , , , , ,
year	\$129,000
Total direct labor hours estimated at the beginning of the	
year	5,250 direct labor hours
Actual manufacturing overhead costs for the year	\$242,000
Actual direct labor costs for the year	\$134,000
Actual direct labor hours for the year	4,800 direct labor hours

The company bases its manufacturing overhead allocation on direct labor hours. What was the unadjusted ending balance in the Manufacturing Overhead account?

- A) \$19,767 credit balance
- B) \$19,767 debit balance
- C) \$11,600 credit balance
- D) \$11,600 debit balance

Answer: D Explanation: D)

Estimated manufacturing overhead costs	\$252,000
Divided by: Estimated total direct labor hours	5,250
Predetermined overhead allocation rate per direct labor hour	\$48
Actual direct labor hours	4,800
Manufacturing overhead costs allocated (\$48 × 4,800 hrs.) (A)	\$230,400
Actual manufacturing overhead costs incurred (B)	242,000
Manufacturing overhead costs underallocated (A - B)	-\$11,600
Unadjusted balance in Manufacturing Overhead account	\$11,600(Dr.)

Diff: 3 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

- 11) Lakeside, Inc. estimated manufacturing overhead costs for the year at \$378,000, based on 182,000 estimated direct labor hours. Actual direct labor hours for the year totaled 193,000. The manufacturing overhead account contains debit entries totaling \$391,000. The Manufacturing Overhead for the year was ______. (Round any intermediate calculations to two decimal places, and your final answer to the nearest dollar.)
- A) \$34,544 underallocated
- B) \$34,544 overallocated
- C) \$10,440 underallocated
- D) \$10,440 overallocated

Answer: D Explanation: D)

Estimated Manufacturing overhead costs	\$378,000
Estimated total direct labor hours	/182,000
Predetermined overhead allocation rate per direct labor hour	\$2 ,08
Actual direct labor hours	193,000
Manufacturing overhead costs allocated (\$2.08 x 193,000 hrs.)	\$401,440
Less: Actual Manufacturing overhead costs incurred	<u>\$391,000</u>
Manufacturing overhead costs overallocated	\$10,440

Diff: 2 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

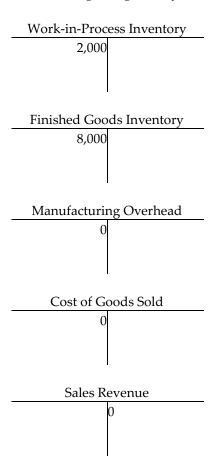
H2: How Is the Manufacturing Overhead Account Adjusted? (H1)

- 12) At the end of the year, Beta, Inc. has an unadjusted debit balance in the Manufacturing Overhead account of \$3,990. The adjusting journal entry needed to adjust the balance to zero will include a
- A) debit to Cost of Goods Sold \$3,990 and credit to Manufacturing Overhead \$3,990
- B) debit to Manufacturing Overhead \$3,990 and credit to Cost of Goods Sold \$3,990
- C) debit to Work-in-Process Inventory \$3,990 and credit to Manufacturing Overhead \$3,990
- D) debit to Gross Profit \$3,990 and credit to Cost of Goods Sold \$3,990

Answer: A Diff: 1 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

13) At the beginning of the year, Tea Tree Manufacturing had the following account balances:



The following additional details are provided for the year:

Direct materials placed in production	\$82,400
Direct labor incurred	192,000
Manufacturing overhead incurred	301,500
Manufacturing overhead allocated to	
production	295,200
Cost of jobs completed and transferred	500,800

The unadjusted balance in the Manufacturing Overhead account is a _____.

- A) credit of \$295,200
- B) credit of \$6,300
- C) debit of \$6,300
- D) debit of \$301,500

Answer: C Explanation: C)

Manufacturing overhead incurred \$301,500
Less: Manufacturing overhead allocated to production (295,200)
Balance in Manufacturing Overhead (debit) \$6,300

Diff: 2 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Is the Manufacturing Overhead Account Adjusted? (H1)

- 14) At the end of the year, Metro, Inc. has an unadjusted credit balance in the Manufacturing Overhead account of \$750. Which of the following is the year-end adjusting entry needed to adjust the account?
- A) A debit to Cost of Goods Sold of \$750 and a credit to Finished Goods Inventory of \$750
- B) A debit to Manufacturing Overhead of \$750 and a credit to Finished Goods Inventory of \$750
- C) A debit to Manufacturing Overhead of \$750 and a credit to Cost of Goods Sold of \$750
- D) A debit to Cost of Goods Sold of \$750 and a credit to Manufacturing Overhead of \$750

Answer: C Diff: 1 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Is the Manufacturing Overhead Account Adjusted? (H1)

15) At the end of the year, Delta, Inc. has an unadjusted debit balance in the Manufacturing Overhead account of \$3,950. Provide the year-end adjusting entry needed to adjust the account.

Answer:

Cost of Goods Sold	3,950	
Manufacturing Overhead		3,950

Diff: 1 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Is the Manufacturing Overhead Account Adjusted? (H1)

16) At the end of the year, Martin, Inc. has an unadjusted credit balance in the Manufacturing Overhead account of \$95. Provide the year-end adjusting entry needed to adjust the account.

Answer:

Manufacturing Overhead	95	
Cost of Goods Sold		95

Diff: 1 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

17) What causes manufacturing overhead to be underallocated? When manufacturing overhead is underallocated, will the Manufacturing Overhead account have a debit or a credit balance? Answer: Manufacturing overhead is underallocated when the manufacturing overhead allocated to Work-in-Process Inventory was less than the actual overhead cost. Manufacturing Overhead will have a debit balance.

Diff: 2 LO: 19-5

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: How Is the Manufacturing Overhead Account Adjusted? (H1)

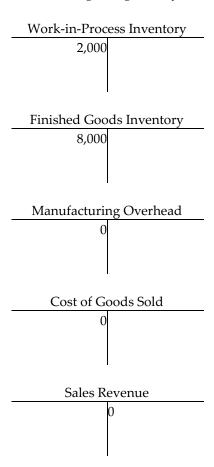
18) What causes manufacturing overhead to be overallocated? When manufacturing overhead is overallocated, will the Manufacturing Overhead account have a debit or a credit balance?

Answer: Manufacturing overhead is overallocated when the actual manufacturing overhead costs are less than allocated manufacturing costs. Manufacturing Overhead will have a credit balance.

Diff: 2 LO: 19-5

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

19) At the beginning of the year, Green Street Manufacturing had the following account balances:



The following additional details are provided for the year:

Direct materials placed in production	\$83,000
Direct labor incurred	192,000
Manufacturing overhead incurred	301,000
Manufacturing overhead allocated to production	290,000
Cost of jobs completed and transferred	500,000
Total revenue	750,000
Cost of goods sold	441,000

After adjusting the balance in Manufacturing Overhead, the ending balance in the Finished Goods Inventory account is a _____.

- A) credit of \$51,000
- B) debit of \$59,000
- C) credit of \$433,000
- D) debit of \$67,000

Answer: D Explanation: D)

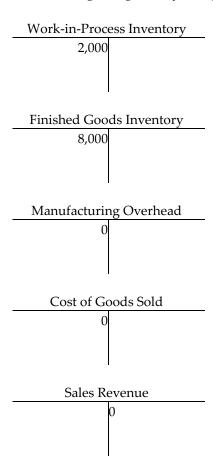
Beginning balance in Finished Goods Inventory\$8,000Add: Transfer of completed goods500,000Less: Cost of jobs sold(441,000)Ending balance in Finished Goods Inventory (debit)\$67,000

Diff: 3 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Summary

20) At the beginning of the year, Springfield Manufacturing had the following account balances:



The following additional details are provided for the year:

Direct materials placed in production	\$80,000
Direct labor incurred	192,000
Manufacturing overhead incurred	304,000
Manufacturing overhead allocated to production	292,000
Cost of jobs completed and transferred	505,000
Total revenue	755,000
Cost of goods sold	442,700

After recording all these transactions and adjusting for the over/underallocated overhead, the ending balance in the Cost of Goods Sold account is a ______.

- A) debit of \$430,700
- B) debit of \$454,700
- C) credit of \$454,700
- D) debit of \$442,700

Answer: B
Explanation: B)
Cost of goods sold

\$442,700

Adjustment to manufacturing overhead account:

Manufacturing overhead incurred

304,000

Manufacturing overhead allocated to production Balance in Cost of Goods Sold after adjusting

292,000 12,000 \$454,700

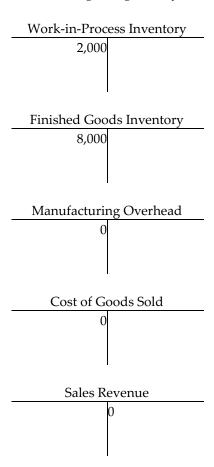
underallocated overhead

Diff: 2 LO: 19-5

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: Summary

21) At the beginning of the year, Berkshire Manufacturing had the following account balances:



The following additional details are provided for the year:

Direct materials placed in production	\$80,000
Direct labor incurred	192,000
Manufacturing overhead incurred	300,000
Manufacturing overhead allocated to production	291,000
Cost of jobs completed and transferred	501,000
Total revenue	760,000
Cost of goods sold	441,300

Calculate the gross profit Berkshire will report for the year.

- A) \$259,000
- B) \$309,700
- C) \$318,700
- D) \$450,300

Answer: B
Explanation: B)

Total revenue \$760,000

Less: Cost of Goods Sold:

Cost of Goods sold \$441,300

Adjustment to Manufacturing Overhead:

Manufacturing overhead incurred \$300,000

Manufacturing overhead allocated to production 291,000 9,000

 Cost of Goods Sold
 450,300

 Gross Profit
 \$309,700

Diff: 2 LO: 19-5

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

H2: Summary

22) On January 1 Primary Manufacturing had a beginning balance in Work-in-Process Inventory of \$80,400 and a beginning balance in Finished Goods Inventory of \$22,000. During the year, Primary incurred manufacturing costs of \$352,000.

In addition, the following transactions occurred during the year:

Job A-12 was completed for a total cost of \$121,000 and was sold for \$125,000.

Job A-13 was completed for a total cost of \$201,000 and was sold for \$213,000.

Job A-15 was completed for a total cost \$64,000 but was not sold as of year-end.

The Manufacturing Overhead account had an unadjusted credit balance of \$11,000, and was adjusted to zero at year-end.

What was the final balance in the Cost of Goods Sold account?

A) \$311,000 debit balance

B) \$333,000 debit balance

C) \$322,000 debit balance

D) \$11,000 credit balance

Answer: A
Explanation: A)
Cost of Goods Sold:

Job A-12 \$121,000 Job A-13 201,000

Adjustment to Manufacturing Overhead account:

Overhead cost overallocated to be reduced from COGS (11,000)

Balance in Cost of Goods Sold (debit) \$311,000

Diff: 1 LO: 19-5

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

23) On January 1, Standard Manufacturing had a beginning balance in Work-in-Process Inventory of \$80,900 and a beginning balance in Finished Goods Inventory of \$21,000. During the year, Standard incurred manufacturing costs of \$354,000.

During the year, the following transactions occurred:

Job A-12 was completed for a total cost of \$124,000 and was sold for \$128,000.

Job A-13 was completed for a total cost of \$202,000 and was sold for \$211,000.

Job A-15 was completed for a total cost \$63,000 but was not sold as of year-end.

The Manufacturing Overhead account had an unadjusted credit balance of \$12,000 and was adjusted to zero at year-end.

What was the amount of gross profit reported by Standard at the end of the year?

A) \$9,000

B) \$25,000

C) \$4,000

D) \$13,000

Answer: B

Explanation: B)

Total revenue:

job A-12 \$128,000 job A-13 \$121,000

Less: Cost of Goods Sold:

Job A-12 \$124,000 Job A-13 \$202,000

Overhead overallocated to be reduced from COGS (12,000)
Gross Profit \$25,000

Diff: 2 LO: 19-5

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

24) SES Manufacturing has finished production activities for the year. The company allocates manufacturing overhead based on a percentage of direct labor costs. The company has provided the following information:

Total manufacturing overhead costs estimated at the	
beginning of the year	\$144,000
Total direct labor costs estimated at the beginning of the	
year	\$320,000
Total direct labor hours estimated at the beginning of the	
year	16,000 direct labor hours
Actual manufacturing overhead costs for the year	\$159,800
Actual direct labor costs for the year	\$366,000
Actual direct labor hours for the year	12,400 direct labor hours

Based on the above data, calculate the unadjusted ending balance in the Manufacturing Overhead account.

- A) \$20,700 credit balance
- B) \$20,700 debit balance
- C) \$4,900 credit balance
- D) \$4,900 debit balance

Answer: D Explanation: D)

Total manufacturing overhead estimated at the beginning of the year	\$144,000
Total direct labor costs estimated at the beginning of the year	/320,000
Manufacturing overhead allocation rate based on percentage of	
direct labor costs	45%
Actual direct labor costs for the year	x 366,000
Manufacturing overhead costs allocated to production	\$164,700
Less: Actual manufacturing overhead costs for the year	(159,800)
Unadjusted ending balance in Manufacturing Overhead account (debit)	<u>\$4,900</u>

Diff: 3 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

25) On January 1, Frederic Manufacturing had a beginning balance in Work-in-Process Inventory of \$161,000 and a beginning balance in Finished Goods Inventory of \$24,000. During the year, Frederic incurred manufacturing costs of \$203,000.

During the year, the following transactions occurred:

Job C-62 was completed for a total cost of \$142,000 and was sold for \$157,000.

Job C-63 was completed for a total cost of \$181,000 and was sold for \$214,000.

Job C-64 was completed for a total cost \$84,000 but was not sold as of year-end.

The Manufacturing Overhead account had an unadjusted credit balance of \$25,000 and was adjusted to zero at year-end.

What was the final balance in the Cost of Goods Sold account?

A) \$298,000 debit balance

B) \$348,000 debit balance

C) \$348,000 credit balance

D) \$298,000 credit balance

Answer: A
Explanation: A)
Cost of Goods Sold:

Job C-62 \$142,000 Job C-63 181,000

Adjustment to Manufacturing Overhead account:

Overhead overallocated to be reduced from COGS (25,000)

Balance in Cost of Goods Sold (debit) \$298,000

Diff: 1 LO: 19-5

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

26) On January 1, Alistair Manufacturing had a beginning balance in Work-in-Process Inventory of \$160,000 and a beginning balance in Finished Goods Inventory of \$24,000. During the year, Alistair incurred manufacturing costs of \$202,000.

During the year, the following transactions occurred:

Job C-62 was completed for a total cost of \$141,000 and was sold for \$157,000.

Job C-63 was completed for a total cost of \$183,000 and was sold for \$210,000.

Job C-64 was completed for a total cost \$81,000 but was not sold as of year-end.

The Manufacturing Overhead account had an unadjusted credit balance of \$24,000 and was adjusted to zero at year-end.

What was the amount of gross profit reported by Alistair at the end of the year?

A) \$43,000

B) \$67,000

C) \$16,000

D) \$27,000

Answer: B

Explanation: B) **Total revenue:**

 job C-62
 \$157,000

 job C-63
 210,000

Less: Cost of Goods Sold:

Job C-62 \$141,000 Job C-63 \$183,000

Manufacturing overhead overallocated to production (24,000) (300,000)

Gross Profit \$67,000

Diff: 2 LO: 19-5

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

27) Connecticut Manufacturing began business on January 1. During its first year of operation, Connecticut worked on five industrial jobs and reported the following information at year-end:

	Job 1	Job 2	Job 3	Job 4	Job 5
Direct Materials	2,300	8,100	4,000	3,500	1,500
Direct Labor	12,000	20,200	13,000	12,000	800
Allocated Mfg. Overhead	1,500	6,200	2,500	7,500	200
					Not
Job completed:	Jun 30	Sep 1	Oct 15	Nov 1	completed
Job sold:	Jul 10	Sep 12	Not sold	Not sold	N/A
Revenues:	44,000	42,000	N/A	N/A	N/A

Connecticut's allocation of overhead costs left a debit balance of \$1,300 in the Manufacturing Overhead account, which was adjusted to zero at year-end. What was the final balance in Cost of Goods Sold for the year ended December 31?

A) \$50,300

B) \$51,600

C) \$49,000

D) \$15,800 Answer: B

Explanation: B)

Cost of Goods Sold:

 Job 1 (\$2,300 + \$12,000 + \$1,500)
 \$15,800

 Job 2 (\$8,100 + \$20,200 + \$6,200)
 34,500

 Underallocated overhead costs
 1,300

 Balance in Cost of Goods Sold
 \$51,600

Diff: 2 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

28) South Bay Manufacturing began business on January 1. During its first year of operation, South Bay worked on five industrial jobs and reported the following information at year-end:

	Job 1	Job 2	Job 3	Job 4	Job 5
Direct Materials	1,500	7,900	4,000	3,500	1,500
Direct Labor	15,000	21,500	13,000	12,000	800
Allocated Mfg. Overhead	1,500	7,800	2,500	7,500	200
					Not
Job completed:	Jun 30	Sep 1	Oct 15	Nov 1	completed
Job sold:	Jul 10	Sep 12	Not sold	Not sold	N/A
Revenues:	44,000	39,000	N/A	N/A	N/A

South Bay's allocation of overhead costs left a debit balance of \$1,100 in the Manufacturing Overhead account, which was adjusted to zero at year-end. What was the amount of gross profit earned during the year?

A) \$26,700

B) \$700

C) \$27,800

D) \$24,900

Answer: A Explanation: A)

Sales Revenue:

Job 1 \$44,000

Job 2 <u>39,000</u> \$83,000

Less: Cost of Goods Sold:

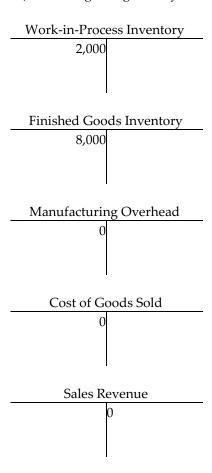
Job 1 (\$1,500 + \$15,000 + \$1,500) \$18,000 Job 2 (\$7,900 + \$21,500 + \$7,800) 37,200

Underallocated overhead costs 1,100 (56,300)
Gross profit \$26,700

Diff: 3 LO: 19-5

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

29) At the beginning of the year, Rupert Manufacturing had the following account balances:



The following additional details are provided for the year:

Direct materials placed in production	\$ 80,000
Direct labor incurred	190,000
Manufacturing overhead incurred	300,000
Manufacturing overhead allocated to production	295,000
Cost of jobs completed	500,000
Jobs sold for total revenue of	750,000
Cost of jobs sold	440,000

The remaining balance of Manufacturing Overhead was adjusted to zero. Calculate the ending balances in Work-in-Process Inventory, Finished Goods Inventory, Manufacturing Overhead (unadjusted), and Cost of Goods Sold (after adjustment.)

Answer:

Work-in-Process Inventory:

Beginning balance \$2,000

Add:

Direct materials placed in production 80,000
Direct labor incurred 190,000
Manufacturing overhead allocated to production 295,000

Less:

Cost of jobs completed (500,000)
Ending balance in Work-in-Process Inventory \$67,000 (Dr.)

Finished Goods Inventory:

Beginning balance \$8,000
Add: Finished goods transferred from Work-in-Process Inventory
Less: Cost of Goods Sold (440,000)
Ending balance \$68,000 (Dr.)

Manufacturing Overhead:

Manufacturing overhead incurred300,000Less: Manufacturing overhead allocated to production(295,000)Unadjusted balance5,000 (Dr.)

Cost of Goods Sold \$440,000

Adjustment to manufacturing overhead account:

Manufacturing overhead incurred \$300,000

Manufacturing overhead allocated to production 295,000 5,000
Balance in Cost of Goods Sold (after adjustments) 445,000 (Dr.)

Diff: 3 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

- 30) Journalize the following transactions for Malone Custom Furniture Manufacturing:
- a. Incurred and paid advertising expenses, \$3,500.
- b. Incurred manufacturing wages of \$30,000, 60% of which was direct labor and 40% of which was indirect labor.
- c. Purchased raw materials on account, \$27,000.
- d. Used in production: direct materials, \$12,000; indirect materials, \$5,500
- e. Recorded manufacturing overhead: depreciation on plant, \$14,000; plant insurance (previously paid), \$1,800; plant property tax, \$4,500 (credit Property Tax Payable).
- f. Allocated manufacturing overhead to jobs, 150% of direct labor costs.
- g. Completed production on jobs with costs of \$55,000.
- h. Sold inventory on account, \$64,000; cost of goods sold, \$35,000.
- i. Adjusted for overallocated or underallocated overhead.

Answer:			
<u>Item</u>	Accounts and Explanation Advertising Expenses	<u>Debit</u> 3,500	<u>Credit</u>
a.	Cash	3,300	3,500
	Cuci		2,200
b.	Work-in-Process Inventory	18,000	
	Manufacturing Overhead	12,000	
	Wages Payable		30,000
c.	Raw Materials Inventory	27,000	
-	Accounts Payable	,	27,000
	·		
d.	Work-in-Process Inventory	12,000	
	Manufacturing Overhead	5,500	15 500
	Raw Materials Inventory		17,500
e.	Manufacturing Overhead	14,000	
	Accumulated Depreciation—Plant	·	14,000
	Manufacturing Overhead	1,800	4 000
	Prepaid Insurance		1,800
	Manufacturing Overhead	4,500	
	Property Tax Payable		4,500
f.	Work-in-Process Inventory (\$18,000 × 150%)	27,000	27,000
	Manufacturing Overhead		27,000
g.	Finished Goods Inventory	55,000	
J	Work-in-Process Inventory		55,000
,	A	(4.000	
h.	Accounts Receivable	64,000	(4,000
	Sales Revenue		64,000
	Cost of Goods Sold	35,000	
	Finished Goods Inventory		35,000
	C-1-(C1-C-11	10.000	
i.	Cost of Goods Sold	10,800	10 000
	Manufacturing Overhead		10,800

Diff: 3 LO: 19-5

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: Summary

Learning Objective 19-6

1) Dezire Travel Services provided the following information:

Direct labor rate: \$87 per hour

Predetermined overhead allocation rate for indirect costs: \$23 per direct labor hour

If Dezire earns \$1,900 for a job requiring 10 hours of direct labor, then Dezire will make a profit of \$1,030.

Answer: FALSE Explanation:

Revenue \$1,900

Less costs:

Direct labor ($\$87 \times 10$ hours) (870) Indirect labor ($\$23 \times 10$ hours) (230) Profit \$800

Diff: 1 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Service Companies Use a Job Order Costing System? (H1)

2) Mumbai Travel Services provided the following information:

Direct labor rate: \$40 per hour

Predetermined overhead allocation rate for indirect costs: \$30 per direct labor hour

If Mumbai Travel earns \$600 for a job requiring 8 hours of direct labor, then Mumbai Travel will make a profit of \$40.

Answer: TRUE Explanation:

Revenue \$600

Less costs:

Direct labor ($$40 \times 8$ hour)$ (320) Indirect labor ($$30 \times 8$ hours)$ (240) Profit \$40

Diff: 1 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

3) Pluto Travel Services provided the following information:

Direct labor rate: \$45 per hour

Predetermined overhead allocation rate for indirect costs: \$24 per direct labor hour

Pluto is negotiating a job with a new client. The job will require 10 hours of direct labor. If Pluto wishes to have at least a 15% gross profit on the revenues, it needs to earn \$716 of revenues.

Answer: FALSE Explanation:

Costs:

 $\begin{array}{ll} \text{Direct labor ($45 \times 10 \text{ hours)}} & \$450 \\ \text{Indirect labor ($24 \times 10 \text{ hours)}} & \underline{240} \\ \text{Total costs} & \underline{690} \end{array}$

Revenues - Total Costs = Gross Profit

If Revenues = X then,

X - \$690 = 0.15X

Or, 0.85X = \$690

Therefore, X = 811.76

Diff: 2 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Service Companies Use a Job Order Costing System? (H1)

4) Job order costing is well suited for the service industry.

Answer: TRUE

Diff: 1 LO: 19-6

AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Service Companies Use a Job Order Costing System? (H1)

5) When job order costing is used in the service industry, the allocation of indirect costs is normally based on machine hours.

Answer: FALSE

Diff: 1 LO: 19-6

AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Service Companies Use a Job Order Costing System? (H1)

6) For a service company, such as an accounting firm, each client is considered a job.

Answer: TRUE

Diff: 1 LO: 19-6

AICPA Functional: Measurement PE Question Type: Concept

7) Unlike manufacturing companies, service companies use an allocation base for allocating both direct and indirect costs.

Answer: FALSE

Diff: 1 LO: 19-6

AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Service Companies Use a Job Order Costing System? (H1)

8) Process costing rather than job order costing is more appropriate for service companies.

Answer: FALSE

Diff: 1 LO: 19-6

AICPA Functional: Measurement PE Question Type: Concept

H2: How Do Service Companies Use a Job Order Costing System? (H1)

9) Highland, Inc., an engineering firm, uses a job order costing system to accumulate client-related costs. The predetermined overhead allocation rate is 50% of staff labor cost. The work by engineers is charged to jobs at a rate of \$33 per staff labor hour. A recent job for a client used 70 staff labor hours. How much was the total job cost?

A) \$1,155 B) \$2,310 C) \$3,465 D) \$35

Answer: C Explanation: C)

Direct labor ($$70 \times 33$$ staff labor hours) \$2,310 Indirect costs ($$2,310 \times 50\%$) $\frac{1,155}{50}$ Total job cost $\frac{$3,465}{50}$

Diff: 1 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

10) Bass Accounting Services expects its accountants to work a total of 29,000 direct labor hours per year. The company's estimated total indirect costs are \$348,000. The company uses direct labor hours as the allocation base for indirect costs. What is the indirect cost allocation rate?

A) \$12 per hour

B) \$24 per hour

C) \$120 per hour

D) \$14.40 per hour

Answer: A Explanation: A)

Predetermined overhead allocation rate = Expected indirect costs / Expected direct labor hours

Expected Indirect costs

\$348,000

Divided by: Expected direct labor hours

/ 29,000 bours

Predetermined overhead allocation rate per direct labor hour.

\$12

Diff: 1 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Service Companies Use a Job Order Costing System? (H1)

11) Neptune Accounting Services expects its accountants to work for 28,000 direct labor hours per year. The company's estimated total indirect costs are \$220,000. The direct labor rate is \$70 per hour. The company uses direct labor hours as the allocation base for indirect costs. If Neptune performs a job requiring 20 hours of direct labor, what is the total job cost? (Round any intermediate calculations to the nearest cent, and your final answer to the nearest dollar.)

A) \$220,000

B) \$157

C) \$1,557

D) \$1,400

Answer: C Explanation: C)

Expected indirect costs

\$220,000

Divided by: Expected direct labor hours

/28,000 hours

Predetermined overhead allocation rate per direct labor hour.

\$7.86

Costs:

Direct labor (20 hours \times \$70) \$1,400 In direct labor (20 hours \times \$7.86) \$157 Total job cost \$1,557

Diff: 2 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

12) Baptiste Accounting Services expects its accountants to work a total of 32,000 direct labor hours per year. The company's estimated total indirect costs are \$155,000. The direct labor rate is \$105 per hour. The company uses direct labor hours as the allocation base for indirect costs. If Baptiste performs a job requiring 49 hours of direct labor and bills the client using a standard markup of 40% of costs, calculate the amount of the client's bill. (Round any intermediate calculations to the nearest cent, and your final answer to the nearest dollar.)

A) \$5,145 B) \$205,800 C) \$2,153 D) \$7,535 Answer: D Explanation: D)

Expected indirect costs \$155,000
Expected direct labor hours /32,000
Predetermined overhead allocation rate per direct labor hour \$4.84

 Direct labor (49 hours × \$105/hour)
 \$5,145

 Indirect labor (49 hours × \$4.84/hour)
 \$237.16

 Total job cost (A)
 \$5,382.16

 Times: Mark up percentage
 * 40%

 Mark up on total job cost (B)
 \$2,152.86

 Total amount of client's bill (A + B)
 \$7,535

Diff: 2 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Service Companies Use a Job Order Costing System? (H1)

- 13) Bacon Financial Advisors provides accounting and finance assistance to customers in the retail business. Bacon has four professionals on staff and an office with six clerical staff. Total compensation, including benefits, for the professional staff runs about \$574,000 per year, and normal billable hours are 8,300 hours per year. The professional staff keep detailed time sheets organized by client number. The total office and administrative costs for the year are \$754,000. What is the direct labor rate for the professional staff? (Round your answer to the nearest cent.)
- A) \$90.84 per hour
- B) \$21.69 per hour
- C) \$69.16 per hour
- D) \$160.00 per hour

Answer: C Explanation: C)

Total compensation to professional staff (A) \$574,000

Total number of hours billed by professional staff (B) 8,300 hours

Direct labor rate (A / B) \$69.16

Diff: 1 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

14) Seal Financial Advisors provides accounting and finance assistance to customers in the retail business. Seal has four professionals on staff and an office with six clerical staff. Total compensation, including benefits, for the professional staff runs about \$572,000 per year, and normal billable hours are 8,000 hours per year. The professional staff keep detailed time sheets organized by client number. The total office and administrative costs for the year are \$754,000. Seal allocates office and administrative costs to clients monthly, using a predetermined overhead allocation rate based on billable hours. What is the predetermined overhead allocation rate that Seal will use for office and administrative costs? (Round your answer to the nearest cent.)

A) \$94.25 per hour

B) \$22.75 per hour

C) \$71.50 per hour

D) \$165.75 per hour

Answer: A Explanation: A)

Office and administrative costs per year (A)

\$754,000

Total number of hours billed by professional staff (B)

8,000 hours

Predetermined overhead allocation rate used for office and administrative costs (A / B)

\$94.25

Diff: 1 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

15) Summit Financial Advisors provides accounting and finance assistance to customers in the retail business. Summit has four professionals on staff and an office with six clerical staff. Total compensation, including benefits, for the professional staff run about \$731,000 per year, and it normally has about 8,500 billable hours per year. The professional staff keep detailed time sheets organized by client number. The total office and administrative costs for the year are \$561,000.

Summit allocates office and administrative costs to clients monthly, using a predetermined overhead allocation rate based on billable hours. During July, Summit's professionals spent 43 hours on their client. What is the total amount of cost that Summit will record for the client for the month? (Round any intermediate calculations to the nearest cent, and your final answer to the nearest dollar.)

A) \$3,698

B) \$2,838

C) \$1,292,000

D) \$6,536

Answer: D

Explanation: D)

Total compensation to professional staff (A) \$731,000 Total number of hours billed by professional staff (B) 8,500 Direct labor rate (A / B) \$86

Office and administrative costs per year (A) \$561,000
Total number of hours billed by professional staff (B) 8,500 hours
Predetermined overhead allocation rate used for indirect costs (A / B) \$66

Costs:

 Direct labor (43 x \$86/hour)
 \$3,698

 Indirect labor (43 x \$66/hour)
 2,838

 Total job cost
 \$6,536

Diff: 2 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

16) Mira Financial Advisors provides accounting and finance assistance to customers in the retail business. Mira has four professionals on staff, plus an office with six clerical staff. Total compensation, including benefits, for the professional staff runs about \$753,000 per year, and it normally has about 8,300 billable hours per year. The professional staff keep detailed time sheets organized by client number. The total office and administrative costs for the year are \$575,000.

Mira allocates office and administrative costs to clients monthly, using a predetermined overhead allocation rate based on billable hours. During July, Mira's professionals spent 38 hours on their client, Riley Sales. Mira adds a 25% markup on its costs to calculate the amount billed to the customer. How much should the company charge Riley Sales for the month of July? (Round your intermediate calculations to the nearest cent, and your final answer to the nearest dollar.)

A) \$1,328,000

B) \$178,000

C) \$7,600

D) \$6,080

Answer: C

Explanation: C)

Total compensation to professional staff (A)	\$75 3,0(N)
Total number of hours billed by professional staff (B)	<u>8,300 hours</u>
Cost allocation rate used for direct labor (A / B)	\$90.72

Office and administrative costs per year (A)	\$575,000
Total number of hours billed by professional staff (B)	8,300 hours
Cost allocation rate used for office and administrative costs (A / B)	\$69. 2 8

Costs:

Direct labor (\$90.72/hour × 38 hours)	\$3,447.36
In direct labor (\$69.28/hour x 38 hours)	2,632.64
Total job cost (A)	\$6,080.00
Mark up percentage	<u>× 25%</u>
Mark up on total job cost (B)	\$1,520.00

Total amount of client's bill (A + B) \$7,600

Diff: 3 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

17) Brink Financial Advisors provides accounting and finance assistance to customers in the retail business. Brink has four professionals on staff, plus an office with six clerical staff. Total compensation, including benefits, for the professional staff runs up to \$800,000 per year, and normal billable hours are about 3,400 billable hours per year. The professional staff keep detailed time sheets organized by client number. The total office and administrative costs for the year are \$290,000.

Brink allocates office and administrative costs to clients monthly, using a predetermined overhead allocation rate based on billable hours. During July, Brink's professionals spent 43 hours on their client, Waseca Sales. Brink adds a 30% markup on its costs to calculate the amount billed to the customer. How much gross profit did Brink earn from Waseca Sales in July? (Round any intermediate calculations to two decimal places, and your final answer to the nearest whole number.)

A) \$13,784.94

B) \$3,035.241

C) \$3,667

D) \$4,135

Answer: D

Explanation: D) Gross profit is the mark-up charged on costs incurred.

Total compensation to professional staff (A)	\$8(XXXXX)
Total number of hours billed by professional staff (B)	3,400 hours
Cost allocation rate used for direct labor (A / B)	\$235.29

Office and administrative costs per year (A) \$290,000
Total number of hours billed by professional staff (B) 3,400 hours
Cost allocation rate used for office and administrative costs (A / B) \$85,29

Costs:

Di rect labor (\$235.29/hour \times 43 hours) \$10,117.47 Indirect labor (\$85.29/hour \times 43 hours) \$3,667.47 Total job cost \$13,784.94 Mark up percentage \times 30% Mark up on total job cost \$4,135

Diff: 3 LO: 19-6

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

18) Fogelin Promotional Services uses a job order system for costing and billing promotional services for dance and ballet performances. Fogelin has four public relations specialists and office staff. At the beginning of the year, Fogelin estimated the total cost of salaries and benefits for the public relations specialists at \$403,200 and a total of 7,000 billable hours for the year. The office and administrative costs were estimated at \$679,000. What direct labor rate would Fogelin use for the cost of its specialists? (Round your answer to the nearest cent.)

A) \$97.00 per hour

B) \$154.60 per hour

C) \$39.40 per hour

D) \$57.60 per hour

Answer: D Explanation: D)

Total compensation to specialists (A) \$403,200
Total number of hours billed by specialists (B) 7,000 hours
Cost of specialists per hour (A / B) \$57.60

Diff: 1 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Service Companies Use a Job Order Costing System? (H1)

19) Saber Promotional Services uses a job order system for costing and billing promotional services for dance and ballet performances. Saber has four public relations specialists and office staff. At the beginning of the year, Saber estimated the total cost of salaries and benefits for the public relations specialists at \$403,900 and a total of 7,100 billable hours for the year. The office and administrative costs were estimated at \$675,000. The allocation base for office and administrative costs is billable hours. What rate would Saber use for allocating the cost of its office and administrative staff? (Round your answer to the nearest cent.)

A) \$95.07 per hour

B) \$151.96 per hour

C) \$38.18 per hour

D) \$56.89 per hour

Answer: A Explanation: A)

Office and administrative costs per year \$675,000

Total number of hours billed by specialists /7,100 hours

Predetermined overhead allocation rate used for indirect costs \$95.07

Diff: 1 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

20) Groot Promotional Services uses a job order system for costing and billing promotional services for dance and ballet performances. Groot has four public relations specialists plus an office staff. At the beginning of the year, Groot estimated the total cost of salaries and benefits for the public relations specialists at \$658,000 and a total of 7,000 billable hours for the year. All remaining office and administrative costs were estimated at \$392,000. The allocation base for office and administrative costs is billable hours. In June, Groot signed a contract for a Russian ballet performance. It estimated the new contract would require 34 hours of specialist time. What is the total cost estimate for this contract?

A) \$1,904

B) \$5,100

C) \$3,196

D) \$1,292

Answer: B

Explanation: B)

Total compensation to specialists (A) \$658,000 Total number of hours billed by specialists (B) $\frac{7,000 \text{ hours}}{2,000 \text{ hours}}$ Direct labor rate (A / B) \$94

Office and administrative costs per year (A) \$392,000
Total number of hours billed by specialists (B) 7,000 hours
Predetermined overhead allocation rate used for indirect costs (A / B) \$56

Costs:

 Direct labor (\$94/hour × 34 hours)
 \$3,196

 In direct labor (\$56/hour × 34 hours)
 1,904

 Total job cost
 \$5,100

Diff: 2 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

21) Island Promotional Services uses a job order system for costing and billing promotional services for dance and ballet performances. Island has four public relations specialists and office staff. At the beginning of the year, Island estimated the total cost of salaries and benefits for the public relations specialists at \$663,000 and a total of 7,800 billable hours for the year. The office and administrative costs were estimated at \$390,000. The allocation base for office and administrative costs is billable hours. In June, Island signed a contract for a Russian ballet performance. It negotiated a price of \$6,300 for its services. When the job was complete, Island's records showed that it had logged 37.0 billable hours. What was the actual total cost of the job for Island?

A) \$4,995

B) \$1,850

C) \$3,145

D) \$1,295

Answer: A Explanation: A)

Total compensation to specialists \$66 3,000

Total number of hours billed by specialists 7,800 hours

Direct labor rate (\$663,000/7,800) \$85

Office and administrative costs per year \$390,000
Total number of hours billed by specialists 7,800 hours
Predetermined overhead allocation rate used for indirect costs \$50
(\$390,000/7,800)

Costs:

 Di rect labor (\$85/hour × 37.0 hours)
 \$3,145

 In direct labor (\$50/hour × 37.0 hours)
 1,850

 Total job cost
 \$4,995

Diff: 2 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

22) Lake Country Promotional Services uses a job order system for costing and billing promotional services for dance and ballet performances. Lake Country has four public relations specialists plus an office staff. At the beginning of the year, Lake Country estimated the total cost of salaries and benefits for the public relations specialists at \$656,000 and a total of 8,000 billable hours for the year. The office and administrative costs were estimated at \$392,000. The allocation base for office and administrative costs is billable hours. In June, Lake Country signed a contract for a Russian ballet performance. It negotiated a price of \$6,700 for its services. When the job was complete, Lake Country's records showed that it had logged 37.5 billable hours. What was the amount of gross profit that Lake Country made on the job?

A) \$6,700 B) \$3,075

C) \$1,787

D) \$1,838

Answer: C Explanation: C)

Total compensation to specialists \$656,000

Total number of hours billed by specialists 8,000 hours

Direct labor rate per hour (\$656,000/8,000) \$82

Office and administrative costs per year \$392,000
Total number of hours billed by specialists 8,000 hours
Predetermined overhead allocation rate used for indirect costs \$49
\$392,000/8,000)

Revenue \$6,700

Less costs:

 Direct labor (\$82/hour x 37.5 hours)
 (\$3,175)

 Indirect labor (\$49/hour x 37.5 hours)
 (1,838)

 Gross profit
 \$1,787

Diff: 3 LO: 19-6

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking

23) Littleton Promotional Services uses a job order system for costing and billing promotional services for dance and ballet performances. Littleton has four public relations specialists and office staff. At the beginning of 2016, Littleton estimated the total cost of salaries and benefits for the public relations specialists at \$660,000 and a total of 7,500 billable hours for the year. The office and administrative costs were estimated at \$390,000. The allocation base for office and administrative costs is billable hours. A new client is contracting with Littleton to promote a ballet tour in the United States Littleton estimates that the job will require 40 billable hours of specialist time. If Littleton wishes to have a 25% mark up on cost on the job, what price should Littleton quote to the client?

A) \$3,520 B) \$2,080 C) \$7,000 D) \$1,400

Answer: C Explanation: C)

Total compensation to specialists \$660,000

Total number of hours billed by specialists 7,500 hours

Direct labor rate per hour (\$660,000/7,500) \$88

Office and administrative costs per year \$390,000
Total number of hours billed by specialists 7,500 hours
Predetermined overhead allocation rate used for indirect costs \$52
(\$390,000/7,500)

Costs:

 $\begin{array}{lll} \mbox{Direct labor ($88/hour \times 40 hours)} & \$3,520 \\ \mbox{Indirect labor ($52/hour \times 40 hours)} & \underline{2,080} \\ \mbox{Total job cost (A)} & \$5,600 \\ \mbox{Mark up percentage} & \underline{\times 25\%} \\ \mbox{Mark up on total job cost (B)} & \$1,400 \\ \mbox{Amount of clients' bill (A + B)} & \$7,000 \\ \end{array}$

Diff: 3 LO: 19-6

AACSB: Application of knowledge AICPA Functional: Measurement PE Question Type: Application

H2: How Do Service Companies Use a Job Order Costing System? (H1)

24) Why would the manager of a service company need to use job order costing?

Answer: Service companies, like manufacturing companies, work on individual, unique jobs and need to know the cost of the jobs. Knowing the full cost of a job allows for better pricing decisions.

Diff: 2 LO: 19-6

AACSB: Analytical thinking AICPA Functional: Measurement PE Question Type: Critical thinking