## Horngren's Accounting,11e (Miller-Nobles)

Chapter 19 Job Order Costing

## Learning Objective 19-1

1) Cost accounting systems are used $\qquad$ .
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 <br> manufacturer |  |
| Bank |  |
| Seamstress |  |

Answer:

| Managers of a | Need to know the cost to |
| :--- | :--- |
| Bakery | Make a cake |
| Computer <br> 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 <br> Inventory |  |  |
| Work-in-Process <br> Inventory |  |  |
| Finished Goods <br> 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 <br> Direct labor incurred <br> Manufacturing overhead <br> allocated | Completion of jobs |
| Finished Goods Inventory | Completion of jobs | Shipping of sold units |
| Cost of Goods Sold | Shipping of sold units <br> 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
H2 : Materials
8) The entry to record the purchase of direct materials on account would include a $\qquad$ .
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 $\qquad$ 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 $\qquad$ .
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 entry to issue $\$ 500$ of direct materials and $\$ 40$ of indirect materials to production involves debit(s) to the $\qquad$ _.
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
H2 : Materials
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?
A)

| 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
H2 : Materials
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 \$42,000
Add: Direct Materials transferred $\underline{22,000}$
Ending balance $\$ \underline{64,000}$
Diff: 1
LO: 19-2
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Materials
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 $\underline{6,000}$
Ending balance $\quad \underline{\underline{\$ 105,000}}$
Diff: 1
LO: 19-2
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Materials
17) On June 1, Dalton Productions had beginning balances as shown in the T-accounts below.

Raw Materials Inventory

| Raw Materials Inventory |
| :---: |
| 10,000 |
| Work-in-Process Inventory |
| 20,000 |

Finished Goods Inventory

## 25,000

Manufacturing Overhead

$$
41,000
$$

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 $\mathrm{OH} \quad \$ 41,000$
Add: Indirect materials transferred $\underline{200}$
Ending balance $\underline{\underline{\$ 41,200}}$
Diff: 1
LO: 19-2
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Materials
18) On June 1, Westbrook Productions had beginning balances as shown in the T-accounts below.

| Raw Materials Inventory |  |
| ---: | :---: |
| 10,000 |  |
| Work-in-Process Inventory |  |
| 20,000 |  |
| Finished Goods Inventory |  |
| 25,000 |  |
| Manufacturing Overhead |  |
| 41,000 |  |

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 $\mathrm{OH} \quad \$ 41,000$
Add: Indirect materials transferred 300
Indirect labor $\quad \underline{14,500}$
Ending balance \$55,800
Diff: 2
LO: 19-2
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Materials
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 $\qquad$ .
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 $\qquad$ .
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
25) The journal entry to record $\$ 1,600$ of direct labor and $\$ 250$ of indirect labor incurred will include debit(s) to the $\qquad$ _.
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)

| 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 | $\$ 55,250$ |
| :--- | ---: |
| Materials requisitions: |  |
| $\quad$ Direct materials | 39,750 |
| Indirect materials |  |
| Labor incurred (not yet paid): | 51,000 |
| $\quad$ Direct 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 |  |
| $\quad$ Raw Materials Inventory |  | 53,450 |
|  |  |  |
| Work-In-Process Inventory | 51,000 |  |
| Manufacturing Overhead | 2,500 |  |
| $\quad$ 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 $\qquad$ -
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 cause 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 $\qquad$ .
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 $\qquad$ .
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 $\qquad$ .
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 $(B) \quad \underline{26,000}$
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 <br> 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 mamffacturing overhead

\$10) 2961
Estimatod direct labor houts $3,2(0) 0$ hours
Prodetermined overnead allocation rate (por difect 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 <br> of the year | $\$ 140,000$ |
| :--- | ---: |
| Total direct labor costs estimated at the beginning of the year | $\$ 320,000$ |
| Total direct labor hours estimated at the beginning of the year | 12,000 direct labor <br> hours |
| Actual manufacturing overhead costs for the year | $\$ 160,000$ |
| Actual direct labor costs for the year | $\$ 370,000$ |
|  | 11,200 direct labor <br> hours |
| Actual direct labor hours for the year |  |

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 $\$ 140,000$
Total direct labor costs estimated at the beginning of the year $\quad \angle 320,000$
Predetermined overhead allocation rate $43.75 \%$
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
H2 : During the Period - Allocating Overhead
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 $\times$ 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 $=\$ 70 \times 4$ machine hours $=\$ 280$
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
24) The journal entry to record allocation of manufacturing overhead to a particular job includes a
$\qquad$ .
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 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 \$\%0
Direct materials cost 1,160
Marufacturing overinead ( $\$ 90 \times 9$ machine hours) 720
Total cost of job 12
$\$ 3,6 \times x$
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 $\quad \angle 4,000$ hours
Predetermined overhead allocation rate (per direct labor hour)
$\$ 79.50$
Times. Direct labor hours used by Job A33
$\times 20$ 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 $\operatorname{DLHr} \times 24$ hours $=\$ 1,632$
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 <br> 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)
Direct labor cost \$2,140
Direct materials cost
80
Manufacturing overhead allocated
(\$34 $\times 71$ direct labor hours)
$\underline{2,414}$
Job cost of Job 10B \$4,634
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 <br> 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)
Dírect labor cost $\$ 210$
Dinect matcrials cost
Mamulacturing overhead
$\$ 71 \times 5$ direct labor hours)
355
Fob cost of Job GHE (A) $\$ 2541$
Number of units of finished product (B)
Cost per unit of firished product of Job © HH 6 (A/B)
Diff: 3
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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)
Dírect labor cost \$800
Dinect matcrials cost $\quad 100$
Marmlacturing overhead
(㐌5 $\times 8$ nuchine hours) 680
Eb cosk of Job 12 (A)
$\$ 1,580$
Number of units of finished product (B)
27 units
Cost per unit of finished product of job 12 (A/B) \$58.52
Diff: 3
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 total direct labor costs
$\$ 830,000$
Predetemuned overthead allecation rate as a percentage of direct $\quad(\$ 13,000) * 123 \%$ )
助ur cost $(\$ 1,020,000 / \$ 831,410)$
$123 \%$

Calculation of marufacturing overhead cost9 allocated to job 511:

## Dinect labor cest

Marufacturing overhead costs allocated to Job 511
$\$ 13,001$
\$15,976

Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 mannlacturing overtread wosts for the year \$1, wot,000
Estimated total direct labor costs
\$820,00)
Predetermined overtead alocation rate as a percentage of direct ( $\$ 10,0)(128 \%)$
lab or cast $(\$ 1,050,700 / \$(20,014)$
128\%

Catalation of total job cost of Job 511:
Direct materials cost $\$ 36,500$
Direct labor cost $\quad 10,000$
Marufacturing overhead costs allocated to Job 511
Total job cost of Job 511 \$49.310
Diff: 3
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 mansfacturing onerhead costs for the year
$\$ 1,000,000$
Estimated total direct labor costs 820,000
Predetermined overhead allocaton rate as a
percentage of direct lakor cost ( $\$ 1,000,000 / 820,6 x 0)$
peran
122 \%

Calcutation of cost per unj:
Dinect materials cost
$\$ 20,500$
Direct labor cost
11,000
Manufacturing overhead cosk allocated to Job 711
Total job cost of Job $711(\mathrm{~A})$
13,420
Number of units produced (B)
\$44,920
Cost per unit (A/B)
200

Diff: 3
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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:

| 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)
Direct materials cost \$6,680
Direct labor cost 23,000
Manufacturing overhead $(\$ 23,000 \times 0.2) \quad \underline{4,600}$
Total cost of Job 13C $\$ 34,280$
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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)
Direct materials cost $\$ 6,020$
Direct labor cost 25,000
Manufacturing overhead (25,000 $\times 30 \%$ ) $\underline{7,500}$
Total cost of Job 13C $\quad \underline{38,520}$
Cost per unit (\$38,520 / 250 units) $\$ 154.08$
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 $\quad 7,100$ hours
Predetermined overhead allocation rate
$\$ 5.25$
Allocated manufacturing overhead cost ( 7,100 hours $\times \$ 5,25$ )
$\$ 37,275$
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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
H2 : During the Period - Allocating Overhead
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 <br> 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.)
A) $\$ 105,420$
B) $\$ 80,703$
C) $\$ 137,691$
D) $\$ 185,000$

Answer: B
Explanation: B)
Estmated mamufacturtrg overhead
Estimated direct labor hours
$\$ 105420$
Predetermined overkead allocation rate (per dinect labor hout)
Actual direct labor hours for the year
Marnufacturing overthead allucated to production
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 <br> 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 $\$ 105,000$
$\begin{array}{ll}\text { Estimated machine hours } & \boxed{9,000}\end{array}$
Predetermined overhead allocation rate (per machine hour) \$11.67
Actual madhine hours for the year
Manufacturing overhead allocated to production
$\times 10,000$
$\$ 116,700$
Diff: 3
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 <br> 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 $\quad \$ 140,000$
Total direct labor costs estimated at the beginning of the year $\quad \angle \$ 330,000$
Predetermined overhead allocation rate $(\$ 140,000 / \$ 330,000)$
$42.42 \%$
Actual direct labor costs for the year
$\begin{array}{r} \\ \times \$ 370,000 \\ \hline\end{array}$
Manufacturing over head costs allocated to production $\quad \underline{\underline{\$ 156,954}}$
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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
Actual direct labor hours
Predetermined overhead allocation rate per direct labor hour
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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)
Predetermined overhead allocation rate (A) / (B) $\$ 1.44$
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 $\quad \boxed{250,000}$
Predetermined overhead allocation rate per labor hour (A) \$4.40
Allocated manufacturing overhead (B) \$900,000
Number of direct labor hours worked (B/A) $\underline{\underline{204,545}}$
Diff: 3
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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 $\qquad$ . (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 matuifacturting mothead nosts <br> $\$ 1,150,0(1)$ <br> Esrimated direct labor hours $\quad$ 240,000) <br> Predetermined overhead allocation rate per direct labor hour (A) <br> $\$ 479$ <br> Allocated mamafacturing overhead (B) <br> S900,0UU <br> Namber of direct babor founts worked (B/A) <br> 187891

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
Prodetermined overhead allocation rate on direct labor cost $\quad 85 \%$
Allocated mantacturing overhoad ( $11,000 \times 85 \%$ ) 9,351$\}$

## Direct material cost <br> $\$ 12,100$

Dirext latwo cost
Allocated mansfacturing overtead
Cost of jobNo. 110
11,000
9350
$\$ 32,350$
Diff: 2
LO: 19-3
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : During the Period - Allocating Overhead
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:

| 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 $)$ | $\underline{\$ 200}$ |
| Diff: 2 |  |
| LO: $19-3$ |  |
| AACSB: Application of knowledge |  |
| AICPA Functional: Measurement |  |
| PE Question Type: Application |  |
| H2 : During the Period - Allocating Overhead |  |

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 $=\underline{\underline{\$ 43,800}}$
2. Allocated manufacturing overhead costs are credited to the Manufacturing Overhead account.

Allocated manufacturing overhead $=\underline{\$ 45,500}$
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:

| Work-in-Process Inventory | 1,500 |  |
| :---: | ---: | ---: |
| Manufacturing Overhead |  | 1,500 |

Explanation:
$\$ 75$ per DLHr $\times 20$ 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
H2 : Transferring Costs To Finished Goods Inventory
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 balande in Work-in-Process Inventory $\$ 30,600$
Add:
Direct materials 58,300
Direct labor 64,500
Mamufacturing overhead (121\% $\times 464,500) \quad 77,408$
Less: Transfer to Finished Goods Inventory $\quad$ (220,500)
Ending balance in Work-ir-Process Inventory
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-inProcess Inventory is $\qquad$ .
A) $\$ 65,800$
B) $\$ 320,400$
C) $\$ 432,600$
D) $\$ 79,400$

Answer: D
Explanation: D)

Add:
Direct materials $\quad 67,600$
Direct labor 187,1006
Marmacturing overhead ( $60 \%$ of $\$ 187,00 \mathrm{~m}) \quad 112,200$
Less. Transfer to Finished Goods Inventory $\quad$ (359,200)
Ending balance in Work-in-Process lnventory $\$ 79.400$
Diff: 2
LO: 19-4
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Transferring Costs To Finished Goods 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?
A)

| 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 $\underline{500}$
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
H2 : Transferring Costs To Finished Goods Inventory
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 $\qquad$ .
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\%) $\underline{1,352}$
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
H2 : Transferring Costs To Finished Goods Inventory
8) At the beginning of the year, Conway Manufacturing had the following account balances:
$\frac{\text { Work-in-Process Inventory }}{20,000}$


Manufacturing Overhead


Sales Revenue


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 <br> production | 297,700 |
| Cost of jobs completed and transferred | 500,800 |

The ending balance in the Work-in-Process Inventory account is a $\qquad$ .
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 Invertory Add:
$\begin{array}{lrr}\text { Direct materials used } & 82,000 & \text { Debit } \\ \text { Direct labor } & 190,100 & \text { Debit } \\ \text { Mantacturing overhead allocated to production } & 297,700 & \text { Debit } \\ \text { Less: Transfer to Finished Goods Invertory } & (500,8001 & \text { Credit } \\ \text { Ending balance in Work-in-Process Inventory } & \$ 71,000 & \text { Debit }\end{array}$
Diff: 2
LO: 19-4
AACSB: Analytical thinking
AICPA Functional: Measurement
PE Question Type: Critical thinking
H2 : Transferring Costs To Finished Goods Inventory
9) At the beginning of the year, Judge Manufacturing had the following account balances:

| Work-in-Process Inventory |
| :---: |
| 20,000 |

Finished Goods Inventory
8,000

Manufacturing Overhead


Cost of Goods Sold


Sales Revenue


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 <br> production | 295,700 |
| Cost of jobs completed and transferred | 501,200 |

The ending balance in the Finished Goods Inventory account is a $\qquad$ .
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 $\quad \$ 8,000$
Add: Transfer of finished goods $\quad \underline{501,200}$
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, $\qquad$ _.
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
H2 : Transferring Costs To Finished Goods Inventory
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 $\quad \$ 1,500$
Direct Labor 900
Allocated Mfg. Overhead
Ending balance in Work-in-Process Inventory (Job 5)
500

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
H2 : Transferring Costs To Finished Goods Inventory
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 cost
Predetermined overhead allocation rate on direct labor cost $\quad \times 40 \%$
Manufacturing overhead allocated $\underline{\underline{\$ 240}}$

Iob cost of Job A40:
Direct materials \$4,000
Direct labor 600
Manufacturing overhead $\underline{240}$
Total cost of Job A40 $\underline{\underline{\$ 4,840}}$
Diff: 2
LO: 19-4
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Transferring Costs To Finished Goods Inventory
14) At the beginning of the year, Barrington Manufacturing had the following account balances:
$\frac{\text { Work-in-Process Inventory }}{2,000}$


Manufacturing Overhead


Cost of Goods Sold


Sales Revenue


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: | 80,000 |
| Direct materials placed in production | 190,000 |
| Direct labor incurred | 295,000 |
| Manufacturing overhead allocated to production |  |
| Less: | $\underline{(500,000)}$ |
| Cost of jobs completed | $\underline{\$ 67,000}$ |

Finished Goods Inventory:

| Beginning balance | $\$ 8,000$ |
| :--- | ---: |
| Add: Finished goods transferred from Work-in-Process Inventory | $\underline{500,000}$ |
| Ending balance | $\underline{5508,000}$ |

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

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

Finished Goods Inventory

| 8,000 |  |
| ---: | ---: |
| 500,000 |  |
| 508,000 |  |


| Manufacturing Overhead |  |
| ---: | ---: |
| 0 |  |
| 300,000 | 295,000 |
| 5,000 |  |

Diff: 2
LO: 19-4
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Transferring Costs To Finished Goods Inventory
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
H2 : Transferring Costs to Cost of Goods Sold
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)
Heginning halande in Finished Goods liventory $\quad \$ 20,500$
Add: Transfer of completed jobs:

| Yb A-12 | $\$ 120,000$ |  |
| :--- | ---: | ---: |
| Fb A-13 | 200,100 |  |
| fo A-15 | $\underline{66,000}$ | $\underline{386,70 M}$ |
|  |  |  |

## Less! Goods soid

bl A-12
Eb A-13
(120,000)
Ending balande in Finished Guods Inventory (detrit)
(200,100) (320,100)

Diff: 1
LO: 19-4
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Transferring Costs to Cost of Goods Sold
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 Inventery: kb 3: |  |  |
| :---: | :---: | :---: |
| Direct Materials | \$5, 1000 |  |
| Direct Labor | 13,401 |  |
| Allocated Mifg Overhead | 2,300 | \$ $20, \pi \times 0$ |
| Job 4: |  |  |
| Direct Materials | 3,300 |  |
| Ditect Labor | 12,000 |  |
| Atlocated Manufacturing Overtead | 7,600 | 22.900 |
| Ending Balame in Finished Gouds Invertery |  | \$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
H2 : Transferring Costs to Cost of Goods Sold
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
H2 : Transferring Costs to Cost of Goods Sold

## 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 Work-in-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
H2 : How Is the Manufacturing Overhead Account Adjusted? (H1)
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) The journal entry for adjustment of overallocated manufacturing overhead includes a $\qquad$ .
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 $\qquad$ -
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 $\qquad$ .
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 <br> beginning of the year | $\$ 252,000$ |
| :--- | ---: |
| Total direct labor costs estimated at the beginning of the <br> year | $\$ 129,000$ |
| Total direct labor hours estimated at the beginning of the <br> 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 $\quad \$ 252,000$
Divided by: Estimated total direct labor hours $\quad 5,250$
Predetermined overhead allocation rate per direct labor hour $\$ 48$
Actual direct labor hours
Manufacturing overhead costs allocated ( $\$ 48 \times 4,800 \mathrm{hrs}$.) (A)
4,800
$\$ 230,400$
Actual manufacturing overhead costs incurred (B)
Manufacturing overhead costs underallocated ( $A-B$ )
Unadjusted balance in Manufacturing Overhead account
242,000

Diff: 3
LO: 19-5
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : How Is the Manufacturing Overhead Account Adjusted? (H1)
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
$\qquad$ . (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 Mambfacturing overhead costs $\quad \$ 378,0 \mathrm{NH}$
Estimated botal direct tibor hariss $\quad[182,() \times()$
Predetermined overhead allocation rate per direct labor hour $\quad \$ 2,08$
Achual direct labor hours
198,000
Mantulacturing overhead costs allocated ( $\$ 2 \mathrm{FW} \times 193,000 \mathrm{hrs}$ ) $\quad \$ 401,440$
Less: Actual Mamifacturing overhead posts incured $\$ 391.0 \mathrm{MO}$
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
$\qquad$ _.
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
H2 : How Is the Manufacturing Overhead Account Adjusted? (H1)
13) At the beginning of the year, Tea Tree Manufacturing had the following account balances:
$\frac{\text { Work-in-Process Inventory }}{2,000}$

Finished Goods Inventory 8,000

Manufacturing Overhead


Cost of Goods Sold


Sales Revenue


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 <br> production | 295,200 |
| Cost of jobs completed and transferred | 500,800 |

The unadjusted balance in the Manufacturing Overhead account is a $\qquad$ .
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 $\quad(295,200)$
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
H2 : How Is the Manufacturing Overhead Account Adjusted? (H1)
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
H2 : How Is the Manufacturing Overhead Account Adjusted? (H1)
19) At the beginning of the year, Green Street Manufacturing had the following account balances:
$\frac{\text { Work-in-Process Inventory }}{2,000}$

Finished Goods Inventory 8,000

Manufacturing Overhead


Sales Revenue


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 $\qquad$ _.
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 Sint
Addi Transfer of cumpleted goods 510,1000
Lessi: 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:
$\frac{\text { Work-in-Process Inventory }}{2,000}$

Finished Goods Inventory
8,000

Manufacturing Overhead


Sales Revenue


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 $\qquad$ .
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 grodes sold
$\$ 442,700$
Adjustmont to manufacturing ovenhead account:
Marnafacturing overhead incurred
Marnufacturing over head allocated to production $\quad \underline{292,(x) 01} \quad 12,006$
Balame in Cost of Gouds Sold after adjusting $\$ 454.71011$
underallucated 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:
$\frac{\text { Work-in-Process Inventory }}{2,000}$

Finished Goods Inventory 8,000

Manufacturing Overhead


Cost of Goods Sold


Sales Revenue


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 revelut $\quad$ \$70)
Less Cost of Goods Sold:
Cost of Coods sold
Adjustment to Manufacturing Overhead;
Marnafacturing overhead incurred $\$ 300$,0010
Marmfacturing, overhead allocated to production 291,000 , 9,000
Cost of Geods Sold
Gross l'rufit
$\$ 441,300$

450,304
$\$ 309,700$

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 $\quad(11,000)$
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
H2 : Summary
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 reverite:
Wh A-12 \$128,000
Fab A-13 211, 200
Les: Cost of Goods Sold:
Kb A-12 $\$ 124,000$
Kb A-13 202,00U
Overhead overallucated to be reduced from CORS
Gross l'rofit
$\$ 25,000$
Diff: 2
LO: 19-5
AACSB: Analytical thinking
AICPA Functional: Measurement
PE Question Type: Critical thinking
H2 : Summary
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 <br> beginning of the year |  |
| :--- | ---: |
| Total direct labor costs estimated at the beginning of the <br> year | $\$ 144,000$ |
| Total direct labor hours estimated at the beginning of the <br> year | $\$ 320,000$ |
| Actual manufacturing overhead costs for the year | 16,000 direct labor hours |
| Actual direct labor costs for the year | $\$ 159,800$ |
| Actual direct labor hours for the year | $\$ 366,000$ |

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 $\$ 144,0100$
Total direst labor costs estimated at the begraning of the year (32,000)
Manufacturing overhead allocation rate hased on percentage of
direct labor cosis.
45\%
Achual direct lahor costs for the year $\times 366,00 \mathrm{O}$
Mantufacturing overkead cosbs allocated to production \$164,700
Less. Actual marufacturing overhead costs for the year $\quad$ (159,800)
Unadjusted ending balance in Manufacturing Overhead account (debit)
$\$ 4,900$
Diff: 3
LO: 19-5
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Summary
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 $\$ 142,000$
$\begin{array}{ll}\text { Job C-63 } & 181,000\end{array}$
Adjustment to Manufacturing Overhead account:
Overhead overallocated to be reduced from COGS $\quad(25,000)$
Balance in Cost of Goods Sold (debit) $\underline{\underline{\$ 298}, 000}$
Diff: 1
LO: 19-5
AACSB: Analytical thinking
AICPA Functional: Measurement
PE Question Type: Critical thinking
H2 : Summary
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 revernue:
job C-62 \$157,600
fo C-63 210,000
Less: Cost of Goods Sold:
加 C-62 \$141,000
Job C-63
Marnufacturing overhead vverallucated to pruduction
183,000
Gross Profit
124,0001 (300,000)

Diff: 2
LO: 19-5
AACSB: Analytical thinking
AICPA Functional: Measurement
PE Question Type: Critical thinking
H2 : Summary
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 $2(\$ 8,100+\$ 20,200+\$ 6,200)$
Underallocated overhead costs
Balance in Cost of Goods Sold
Diff: 2
LO: 19-5
AACSB: Application of knowledge
AICPA Functional: Measurement
PE Question Type: Application
H2 : Summary
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 | $\underline{39,000}$ | $\$ 83,000$ |
| 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 | $\underline{1,100}$ | $\underline{(56,300)}$ |
| Gross profit |  | $\underline{\$ 26,700}$ |

Diff: 3
LO: 19-5
AACSB: Analytical thinking
AICPA Functional: Measurement
PE Question Type: Critical thinking
H2 : Summary
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 | 500,000 |
| Less: Cost of Goods Sold | $(440,000)$ |
| Ending balance | \$68,000 (Dr.) |
| Manufacturing Overhead: |  |
| Manufacturing overhead incurred | 300,000 |
| Less: Manufacturing overhead allocated to production | $(295,000)$ |
| Unadjusted balance | 5,000 (Dr.) |
| Cost of Goods Sold | \$440,000 |
| Adjustment to manufacturing overhead account: |  |
| Manufacturing overhead incurred \$300,000 |  |
| Manufacturing overhead allocated to production $\underline{\text { 295,000 }}$ | 5,000 |
| Balance in Cost of Goods Sold (after adjustments) | $\underline{445,000 ~(D r .) ~}$ |
| Diff: 3 |  |
| LO: 19-5 |  |
| AACSB: Application of knowledge |  |
| AICPA Functional: Measurement |  |
| PE Question Type: Application |  |
| H2 : Summary |  |

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: |  |  |  |
| :---: | :---: | :---: | :---: |
| Item | Accounts and Explanation | Debit | Credit |
| a. | Advertising Expenses | 3,500 |  |
|  | Cash |  | 3,500 |
| 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 |  |
|  | Raw Materials Inventory |  | 17,500 |
| e. | Manufacturing Overhead | 14,000 |  |
|  | Accumulated Depreciation-Plant |  | 14,000 |
|  | Manufacturing Overhead | 1,800 |  |
|  | Prepaid Insurance |  | 1,800 |
|  | Manufacturing Overhead | 4,500 |  |
|  | Property Tax Payable |  | 4,500 |
| f. | Work-in-Process Inventory (\$18,000 $\times 150 \%$ ) | 27,000 |  |
|  | Manufacturing Overhead |  | 27,000 |
| g. | Finished Goods Inventory | 55,000 |  |
|  | Work-in-Process Inventory |  | 55,000 |
| h. | Accounts Receivable | 64,000 |  |
|  | Sales Revenue |  | 64,000 |
|  | Cost of Goods Sold | 35,000 |  |
|  | Finished Goods Inventory |  | 35,000 |
| i. | Cost of Goods Sold | 10,800 |  |
|  | 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)
Indirect labor ( $\$ 23 \times 10$ hours) (230)
Profit $\underline{\underline{\$ 800}}$
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)
Indirect labor ( $\$ 30 \times 8$ hours)
Profit $\underline{\underline{\$ 40}}$
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)
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:
Direct labor ( $\$ 45 \times 10$ hours $) \quad \$ 450$
Indirect labor ( $\$ 24 \times 10$ hours) $\underline{\underline{240}}$
Total costs $\underline{\underline{690}}$
Revenues - Total Costs $=$ Gross Profit
If Revenues $=X$ then,
$X-\$ 690=0.15 X$
Or, $0.85 \mathrm{X}=\$ 690$
Therefore, $\mathrm{X}=811.76$
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
H2 : How Do Service Companies Use a Job Order Costing System? (H1)
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 $(\$ 2,310 \times 50 \%) \quad \underline{1,155}$
Total job cost \$3,465
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)
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 cows <br> Divided by: Expected direct labor hours <br> Predetemrined overhead allocation rate per direct labor hour <br> $\$ 348000$ <br> [29,001\} bours

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 inctirect costs $\$ 220,0 \mathrm{MO}$
Dtvided by: Expectod dinct labor hours
28, noh hours
Predetermined overhead allocation rade per direct labor hour
$\$ 7.86$

## Costs:

| Direct labor ( 20 hours $m \$ 70$ ) | 51,401 |
| :--- | ---: |
| Indirect labor ( 20 hours $\times \$ 7.86$ ) | $\$ 157$ |
| Total job cost | $\$ 1.557$ |

Total job cost \$1.537
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)
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 $\quad \$ 155,0 / 4$
Expected directlabor houts
Predetermined overhead allocation rate per direct labor hour

### 32.000

$\$ 484$

Direct labor (49 hours $\times \$ 105 /$ hour) $\quad \$ 5,145$
[ndirect labor (49 hours $\times \$ 4.84 / \mathrm{hour}$ ) $\$ 237.16$
Total jobcost (A) $\quad \$ 5,392.16$
Times Mark up percenage
$\times 40 \%$
Mark upp on total job cost (B)
\$2,152.86
Total amount of client's bitl $(\mathrm{A}+\mathrm{B})$
\$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 $(\mathrm{A})$
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
H2 : How Do Service Companies Use a Job Order Costing System? (H1)
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)
Totat mumber of hours billed by professiortal staff (B)
Prodetermined ovednead allocation rate used for office and administrative costs ( $A / B$ )
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)
s, (0) hours 494.25
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)
Tonl mimber of hours billed by profestional staff (i3)
Drect iabor rate ( $A / B$ )

Offoe and administrative costs per year (A)
Total number of hours bilied by professional staff (B)
Predetermined overhead alloction rate usad for indirect costs (A/B)
$\$ 561,000$ 8500 houts
\$73I,0N6
8.504 \$86
sfif)

Costs:

Toial jobcost \$6,536
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)
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)
Tiotal corrqensation to professional staff (A)
Total ramber of hours billed by professional staff ( $B$ )
Cost allocation rate used for diret labor (A /B)

Office and administrative cocts per year (A)
Total number of hours billed by professional staff (B)
Cost allocation rate usex for uffice and administrative costs ( $A / B$ )
$\$ 575,000$
8300 bours
$\$ 49.2 \mathrm{~K}$

## Costs:

| Direct habor (590.72/howe $* 38$ hours) | \$3,447.36 |
| :---: | :---: |
| Indirect labor ( $\$ 69.28 /$ hour $\times 38$ hours) | 2,632,64 |
| Total job cost (A) | \$6,080,60 |
| Mark up percentage | + $25 \%$ |
| Mark up on total jobe cost (B) | \$1520.00 |
| Total amount of client's bill ( $\mathrm{A}+\mathrm{B}$ ) | \$7,600 |

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)
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 prolessional staff (A)
Tobal number of hours billed by profestional staff (B)
Cost allocation rate used for direct labor (A/B)

Offios and administrative costs per year (A)
Toral number of hours billed by professional staff (B)
Crist allocation rate used for office and administrative costs ( $A / B$ )

Sal Wion
3,400 hours
$\$ 235.29$

3,400 houts
$\$ 88,29$

Costs:
Direct labor ( $\$ 235.29 /$ hour $\times 43$ hours $) \quad \$ 10,117.47$
Indirect labor (\$85.29/hour $\times 43$ hours) $\$ 3,667.47$
Total job cost
$\$ 13,7 \times 4.94$
Mark up percentage
$\mathrm{K} 30 \%$
Mark up on total joh cost
\$4,135
Diff: 3
LO: 19-6
AACSB: Analytical thinking
AICPA Functional: Measurement
PE Question Type: Critical thinking
H2 : How Do Service Companies Use a Job Order Costing System? (H1)
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 $\quad \angle 7,100$ hours
Predetermined overhead allocation rate used for indirect costs $\quad \underline{\$ 95.07}$
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)
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 ter spectalists (A) $\quad \$ 6580001$
Toal mamber of hours brilled by spedialists (B) $\quad 7,000$ hours
Dtrect labor rate (A/B)
$\$ 94$

Offor and admenistrativecosts per yoar (A)
Total number of hours billed ty speciadists (B)
Predetermined owernead allocation rate used for indirect costs (A/B)
7,000 houts
\$56

Cosis:
Direct labor ( $\$ 94 /$ hour $\times 34$ hours ) $\$ 3,196$
Indirect labor (\$56/hour $\times 34$ hours) $\quad 1,904$
Total job cost \$5,100
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)
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 spectalists
Tobl mumber of hours billed by specialists
Direct labor rate ( $\$ 663,01007,804$ )
$\$ 663,0 \mathrm{MH}$
7,800 hours
整
$\$ 390,0000$
7.800 hours
$\$ 50$

Offio and administrative costs per year
Total number of hours billed by specialists
Predetermined overhead allocation rate used for indirect costs
( $\$ 3901,000 / 7,8(x)$

Cosib:
Direct labor ( $\$ 85 /$ hour $\times 37,0$ hours ) $\$ 3,145$
Indirect labor ( $\$ 50 /$ hout $\times 37.0 \mathrm{hom} \mathrm{s}$ ) $\quad 1,850$
Total job cost
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)
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 tu spedalists
Tobl mumber of hours billed by specialists
$\$ 656.1010$

Direct iabor rate per hour ( Wh $^{656}$ (0008,000)
8,000 hours

Offio: and administrative costry per yoar
\$392,000
Toral ntumber of hours billed by specialists
8,000 hotirs
Prentekermined owe rhead allocation rate usad for indirect coss $\$ 49$
$4392,000 / 8,0(0)$

| Revenue | \$6,700 |
| :---: | :---: |
| Les costs: |  |
| Direct lathor (\$32/hour $\times 37.5$ hours) | (\$3,175) |
| Indirect labor (\$49/hour $\times 37.5$ heurs) | (1.838) |
| Gross profit | \$1.787 |
| Diff: 3 |  |
| LO: 19-6 |  |
| AACSB: Analytical thinking |  |
| AICPA Functional: Measurement |  |
| PE Question Type: Critical thinking |  |
| H2 : How Do Service Companies Use a J | der Costin |

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 $(\$ 660,000 / 7,500) \quad \underline{\underline{\$ 8}}$

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 $\underline{\underline{\$ 52}}$
(\$390,000/7,500)

Costs:
Direct labor (\$88/hour $\times 40$ hours) \$3,520
Indirect labor (\$52/hour $\times 40$ hours) $\underline{\underline{2,080}}$
Total job cost (A) \$5,600
Mark up percentage $\times 25 \%$
Mark up on total job cost (B) \$1,400
Amount of clients' bill (A + B) $\underline{\underline{\$ 7,000}}$
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
H2 : How Do Service Companies Use a Job Order Costing System? (H1)

