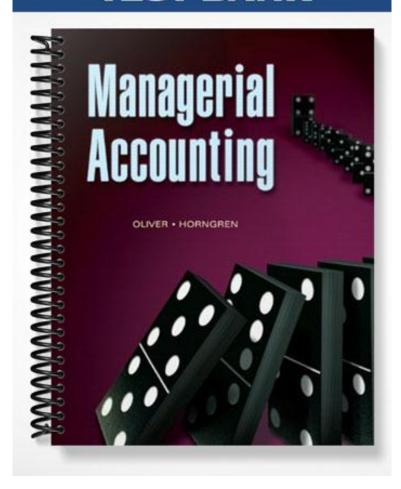
## TEST BANK



#### **Chapter 2: Job Order Costing**

2.1-1 Accounting firms, building contractors, and healthcare providers are companies that use job order costing.

Answer: True Difficulty: 1 LO: 2-1 EOC Ref: S2-1

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.1-2 Process costing is used by companies that produce large numbers of identical units in a continuous

fashion.

Answer: True Difficulty: 1 LO: 2-1 EOC Ref: S2-1

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.1-3 General Motors and Chevron are examples of companies that use process costing.

Answer: True Difficulty: 1 LO: 2-1 EOC Ref: S2-1

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.1-4 Which of the following companies would NOT use job order costing?

- A) A lawn maintenance company
- B) A legal firm
- C) An auto repair shop
- D) A beverage manufacturer

Answer: D Difficulty: 2 LO: 2-1

EOC Ref: E2-14

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

- 2.1-5 Which of the following is an example of an industry that would use a process costing system rather than a job order costing system?
  - A) Custom furniture manufacturer
  - B) Unique furniture accessories manufacturer
  - C) Paint manufacturer
  - D) Aircraft manufacturer

Answer: C Difficulty: 2 LO: 2-1

EOC Ref: E2-14

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.1-6 Job order costing is most likely used in which of the following industries?
  - A) Pharmaceutical manufacturing
  - B) Textbook publishing
  - C) Chemical manufacturing
  - D) Food and beverage manufacturing

Answer: B Difficulty: 2 LO: 2-1 EOC Ref: S2-1

EOC Ref: S2-1

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.1-7 Which of the following companies is most likely to use job order costing?
  - A) Swenson Mobil Oil Refinery
  - B) Hunter's Custom Furniture Company
  - C) Oliver Chemical Company
  - D) Somody Cereal Company

Answer: B Difficulty: 1 LO: 2-1 EOC Ref: S2-1

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

- 2.1-8 Which of the following statements is INCORRECT?
  - A) A job order costing system is used by manufacturers of heterogeneous products.
  - B) A process costing system is used by manufacturers of homogeneous products.
  - C) A service firm would likely use a job order costing system.
  - D) A custom home manufacturer would likely use a process costing system.

Answer: D Difficulty: 2 LO: 2-1

EOC Ref: E2-14

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

- 2.1-9 Which costing system would better account for a unique individual product?
  - A) Job order costing system
  - B) Product costing system
  - C) Process costing system
  - D) Variable costing system

Answer: A Difficulty: 2 LO: 2-1

EOC Ref: E2-14

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.1-10 State whether each company below would be more likely to use a job costing system or a process costing system:
  - a) \_\_\_\_\_ custom furniture manufacturer
    b) \_\_\_\_\_ paint manufacturer
    c) \_\_\_\_\_ carpet manufacturer
    d) \_\_\_\_\_ concrete manufacturer
  - e) \_\_\_\_\_ home builder

#### Answer:

- a) job costing
- b) process costing
- c) process costing
- d) process costing
- e) job costing

Difficulty: 1 LO: 2-1 EOC Ref: S2-1

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

2.1-11		State whether each company below would be more likely to use a job costing system or a process costing system:			
	A)		soft drink bottler		
	B)		custom jewelry manufacturer		
	C)		legal firm		
	D)		printer		
	E)		cardboard box maker		
	Ansv	wer:			
	A)	process costing			
	B)	job costing			
	C)	job costing			
	D)	job costing			
	E)	process costing			
	Diffi	culty: 1			
	LO:	2-1			
	EOC	Ref: S2-1			
	AAC	CSB: Reflective Thinking			
	AICE	PA Business Perspective Compet	encies: Critical Thinking		

			enter the letter corresponding to the term that best fits that han once, and some letters may not be used at all.
A)	cost allocation	F)	time record
B)	job cost record	G)	predetermined manufacturing overhead rate
Ć)	cost driver	H)	overallocated manufacturing overhead
D)	process costing	I)	allocation base
E)	materials requisition	J)	job costing
	estimated manufacturi overhead allocation ba Method of assigning n System for recording of A common denominat System for assigning of	ng overluse hanufact costs to a or for sy costs to 1	head rate computed at the beginning of the year, calculated as the nead costs divided by the estimated quantity of the manufacturing uring overhead and other indirect costs to cost objects a specific unit or to a small batch of products or services estematically linking indirect costs to products arge numbers of identical units that usually proceed in a continuous form production steps or processes
A_ B_	Estimated manufacturi estimated manufacturi overhead allocation ba Method of assigning n System for assigning c A common denominat System for assigning c	ng overluse hanufact osts to a or for sy costs to 1	head rate computed at the beginning of the Year, calculated as the head costs divided by the estimated quantity of the manufacturing uring overhead and other indirect costs to cost objects a specific unit or to a small batch of products or services estematically linking indirect costs to products arge numbers of identical units that usually proceed in a continuous form production steps or processes
LO: 2 EOC I AACS AICPA	ulty: 2 -1 Ref: S2-1 SB: Reflective Thinking A Business Perspective C A Functional Competence		

2.1-12

A.	cost allocation	F.	time record
B.	job cost record	G.	predetermined manufacturing overhead rate
C.	cost driver	H.	overallocated manufacturing overhead
D.	process costing	I.	allocation base
E.	materials requisition	J.	job costing
		l primai	rily by employees engaging in service activities, to trace direct
	to specific jobs		
	_ Any factor that affects	costs	
			· ·
	amount of manufactur	ing ove	turing overhead allocated to work in process inventory exceeds rhead costs that were actually incurred ry, prepared by manufacturing personnel
	_ Request for materials i	invento	ry, prepared by manuracturing personner
Answ			
F_		l primaı	rily by employees engaging in service activities to trace direct
	labor to specific jobs		
	Any factor that affects		
	Document used to acco		
H			turing overhead allocated to work in process inventory exceeds
			rhead costs that were actually incurred
E_	_ Request for materials i	invento	ry prepared by manufacturing personnel
Diffic	culty: 2		
LO: 2			
EOC	Ref: S2-2		
AAC	SB: Reflective Thinking		
AICF	PA Business Perspective (	Compet	encies: Critical Thinking
AICF	PA Functional Competence	eies: Me	easurement
Brief	ly explain the difference l	betweer	n job order and process costing and give examples of each.
Answ	/er:		
		ll accun	nulate costs for each batch or job. It is appropriate for companion
-			produce specialized services. Examples of companies that migh
			tractors, custom furniture makers, and law firms. Other compa
			ll units through a series of uniform production steps or processes
			costing. Examples would include banks, food and beverage
	facturers, and pharmaceu		
Diffi	culty: 1		
LO: 2			
	Ref: E2-14		

On the line in front of each statement, enter the letter corresponding to the term that best fits that

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AACSB: Reflective Thinking AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

2.1-13

2.1-14

2.2-1 When materials are requisitioned for a job, the materials inventory account is debited.

Answer: False Difficulty: 2 LO: 2-2 EOC Ref: S2-3

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.2-2 When indirect materials are requisitioned for a job, the work in process account is credited.

Answer: False Difficulty: 2 LO: 2-2 EOC Ref: S2-3

**AACSB: Reflective Thinking** 

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.2-3 Work in process inventory is debited for the incurrence of both direct and indirect labor in a job costing system.

Answer: False Difficulty: 2 LO: 2-2 EOC Ref: S2-5

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.2-4 The entry to record the purchase of materials on account using a job order costing system would include a:
  - A) debit to materials inventory.
  - B) debit to accounts payable.
  - C) debit to work in process inventory.
  - D) credit to materials inventory.

Answer: A Difficulty: 2 LO: 2-2 EOC Ref: S2-3

EOC Kei. 52-3

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

- 2.2-5 Which of the following would be debited to record the requisition of direct materials?
  - A) Cost of goods sold
  - B) Work in process inventory
  - C) Finished goods inventory
  - D) Materials inventory

Answer: B
Difficulty: 2
LO: 2-2
EOC Ref: \$2-3

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.2-6 Which of the following would be debited to record direct labor costs actually incurred?
  - A) Work in process
  - B) Manufacturing wages
  - C) Manufacturing overhead
  - D) Finished goods inventory

Answer: A Difficulty: 2 LO: 2-2 EOC Ref: S2-2

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

**AICPA Functional Competencies: Reporting** 

- 2.2-7 Which of the following would be debited to assign the costs of indirect labor?
  - A) Manufacturing overhead
  - B) Indirect labor wages expense
  - C) Finished goods inventory
  - D) Work in process inventory

Answer: A
Difficulty: 2
LO: 2-2
EOC Part: \$2

EOC Ref: S2-2

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.2-8 Which of the following would be debited to record the requisition of indirect materials?
  - A) Manufacturing overhead
  - B) Work in process inventory
  - C) Materials inventory
  - D) Indirect materials expense

Answer: A Difficulty: 2 LO: 2-2 EOC Ref: S2-2

**AACSB: Reflective Thinking** 

AICPA Business Perspective Competencies: Critical Thinking

- 2.2-9 Which of the following documents is prepared by manufacturing personnel to request indirect materials for the production process?
  - A) Manufacturing overhead requisition form
  - B) Manufacturing cost ticket
  - C) Job order cost card
  - D) Materials requisition form

Answer: D Difficulty: 2 LO: 2-2 EOC Ref: S2-4

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.2-10 The entry to transfer direct labor and indirect labor costs from manufacturing wages into production includes a debit to which of the following?
  - A) Manufacturing overhead and work in process inventory
  - B) Finished goods inventory and cost of goods sold.
  - C) Manufacturing overhead and cost of goods sold.
  - D) Finished goods inventory and work in process inventory.

Answer: A Difficulty: 2 LO: 2-2 EOC Ref: S2-6

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.2-11 In job order costing, indirect materials used in production are credited to which of the following?
  - A) Finished goods inventory
  - B) Materials inventory
  - C) Manufacturing overhead
  - D) Work in process inventory

Answer: B Difficulty: 2 LO: 2-2 EOC Ref: S2-6

**AACSB: Reflective Thinking** 

AICPA Business Perspective Competencies: Critical Thinking

- In job order costing, direct materials used in production are debited to which of the following? 2.2 - 12
  - A) Manufacturing overhead
  - B) Work in process inventory
  - C) Finished goods inventory
  - D) Either manufacturing overhead or work in process inventory

Answer: B Difficulty: 2 LO: 2-2 EOC Ref: S2-4

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

**AICPA Functional Competencies: Reporting** 

- 2.2-13 In job order costing, all indirect manufacturing labor incurred is initially debited to what account?
  - A) Manufacturing overhead
  - B) Work in process inventory
  - C) Manufacturing wages
  - D) Indirect labor expense

Answer: C Difficulty: 2 LO: 2-2 EOC Ref: S2-5

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.2-14 Allocation of direct and indirect materials requires a credit to what account?
  - A) Materials inventory
  - B) Manufacturing overhead
  - C) Work in process inventory
  - D) Finished goods inventory

Answer: A Difficulty: 2 LO: 2-2 EOC Ref: S2-3

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

- The journal entry to issue \$500 of direct materials and \$30 of indirect materials to production involves a 2.2-15 debit to what account(s)?
  - A) Work in process inventory for \$500 and manufacturing overhead for \$30
  - B) Work in process inventory for \$500 and indirect materials expense for \$30
  - C) Manufacturing overhead for \$530
  - D) Work in process inventory for \$530

Answer: A Difficulty: 2 LO: 2-2 EOC Ref: S2-3

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

**AICPA Functional Competencies: Reporting** 

- The journal entry to assign \$1,500 of direct labor and \$200 of indirect labor for the current period 2.2-16 involves a debit to what account(s)?
  - A) Manufacturing overhead for \$1,700
  - B) Work in process inventory for \$1,500 and indirect labor expense for \$200
  - C) Work in process inventory for \$1,500 and manufacturing overhead for \$200
  - D) Work in process inventory for \$1,700

Answer: C Difficulty: 2 LO: 2-2 EOC Ref: S2-3

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

## 2.2-17 Specialty Wood Products company had the following manufacturing labor related transactions last month:

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

What is the journal entry to record the incurrence of these wages?

٨	١
A	)

11)			
Work in process inventory		130,000	
	Wages payable (cash)		130,000

B)

Work in process inventory		130,000	
	Manufacturing wages		130,000

C)

/			
Manufacturing wages		130,000	
	Wages payable (cash)		130,000

D)

_D)			
Wages expense		130,000	
	Wages payable (cash)		130,000

Answer: C Difficulty: 2 LO: 2-2 EOC Ref: S2-5

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

## 2.2-18 Specialty Wood Products company had the following manufacturing labor related transactions last month:

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

What is the journal entry to record the assignment of these wages?

	\
А	)

Work in process inventory		120,000	
Wage expense		10,000	
	Manufacturing wages		130,000

B)

Work in process inventory		110,000	
Wage expense		20,000	
	Manufacturing wages		130,000

C)

Manufacturing wages		130,000	
	Wages payable (cash)		130,000

D)

Work in process inventory		100,000	
Manufacturing overhead		30,000	
	Manufacturing wages		130,000

Answer: D Difficulty: 2 LO: 2-2 EOC Ref: S2-5

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

# 2.2-19 Which of the following entries would be made to record the use of \$10,000 of direct materials and \$5,000 of indirect materials by Jake's Custom Furniture?

A)

Manufacturing overhead		15,000	
	Materials inventory		15,000

B)

Work in process inventory		10,000	
Manufacturing overhead		5,000	
	Materials inventory		15,000

C)

Materials inventory		15,000	
	Work in process inventory		15,000

D)

_ <b>D</b> )			
Work in process inventory		15,000	
	Materials inventory		15.000

Answer: B Difficulty: 2 LO: 2-2 EOC Ref: S2-4

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

## 2.2-20 Which of the following entries would be made to assign \$10,000 of manufacturing labor to jobs, 70% of which was direct labor and 30% of which was indirect labor?

A)

Manufacturing overhead		10,000	
	Manufacturing wages		10,000

B)

Work in process inventory		7,000	
Manufacturing overhead		3,000	
	Manufacturing wages		10,000

C)

Manufacturing wages		10,000	
	Work in process inventory		7,000
	Manufacturing overhead		3,000

D)

Work in process inventory		10,000	
	Manufacturing wages		10,000

Answer: B Difficulty: 2 LO: 2-2 EOC Ref: S2-4

**AACSB: Reflective Thinking** 

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.2-21 The journal entry to record \$200 of depreciation on factory equipment used in production for the current period involves which of the following?
  - A) A debit to accumulated depreciation-factory equipment for \$200
  - B) A credit to manufacturing overhead for \$200
  - C) A debit to depreciation expense-factory equipment for \$200
  - D) A debit to manufacturing overhead for \$200

Answer: D Difficulty: 2 LO: 2-2 EOC Ref: S2-2

**AACSB: Reflective Thinking** 

AICPA Business Perspective Competencies: Critical Thinking

- 2.2-22 Which of the following statements is INCORRECT?
  - A) Direct material costs are allocated to the manufacturing process as the materials are used.
  - B) Direct labor costs are allocated to the manufacturing process as they are incurred.
  - C) Actual indirect labor costs are allocated to the manufacturing process as they are incurred.
  - D) Estimated indirect material costs are allocated to the manufacturing process as production takes place.

Answer: C Difficulty: 2 LO: 2-2 EOC Ref: S2-6

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.2-23 The Hemingway Company uses a job order costing system. In April, material requisitions of \$44,000 were issued (direct materials, \$40,000) and materials purchases of both direct and indirect materials totaled \$56,600. The ending balance in materials inventory was \$18,400. What was the beginning raw materials balance?

A) \$5,800 B) \$31,000 C) \$25,600 D) \$22,400

Answer: A

Calculations:

Beg Materials + Purchases – Requisitions = End Materials BM+56,600-44,000=18,400 BM+12,600=18,400 BM=5,800

Difficulty: 2 LO: 2-2 EOC Ref: S2-3

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.2-24 Which of the following entries would be made to record the purchase of \$20,000 of raw materials on account for Jake's Custom Furniture?

A)

Accounts payable		20,000	
	Work in process inventory		20,000
B)			
Work in process inventory		20,000	
	Accounts payable		20,000
C)			

Raw materials inventory		20,000	
	Accounts payable		20,000

D)

Accounts payable		20,000	
	Materials inventory		20,000

Answer: C Difficulty: 2 LO: 2-2 EOC Ref: S2-2

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

**AICPA Functional Competencies: Reporting** 

2.2-25 For a manufacturer that used job order costing, show the order of the cost flow through the following accounts by numbering them from 1 to 4.

Finished goods inventory
Materials inventory
Cost of goods sold
Work in process inventory

#### Answer:

- \_\_3\_\_ Finished goods inventory
- \_\_1\_\_ Materials inventory
- \_\_4 \_\_ Cost of goods sold
- \_\_2\_\_ Work in process inventory

Difficulty: 1 LO: 2-2 EOC Ref: S2-2

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

2.2-26	On the line in front of each statement, enter either a dr for debit or a cr for credit to indicate the normal entry that would be needed for each account.
	Added purchases to materials inventory account  Added indirect materials to manufacturing overhead account  Requisitioned materials from inventory account  Added direct materials to work in process inventory account
	Answer: dr Added purchases to materials inventor accountdr Added indirect materials to manufacturing overhead accountcr Requisitioned materials from inventory accountdr Added direct materials to work in process inventory account
	Difficulty: 2 LO: 2-2 EOC Ref: E2-15 AACSB: Reflective Thinking AICPA Business Perspective Competencies: Critical Thinking AICPA Functional Competencies: Measurement
2.2-27	On the line in front of each statement, enter either a $dr$ for debit or a $cr$ for credit to indicate the normal entry that would be needed for each account.
	Added wages incurred to manufacturing wages account  Assigned wages from manufacturing wages account  Added indirect labor to manufacturing overhead account  Added direct labor to work in process inventory account
	Answer:dr Added wages incurred to manufacturing wages accountcr Assigned wages from manufacturing wages accountdr Added indirect labor to manufacturing overhead accountdr Added direct labor to work in process inventory account
	Difficulty: 2 LO: 2-2 EOC Ref: E2-15 AACSB: Reflective Thinking AICPA Business Perspective Competencies: Critical Thinking AICPA Functional Competencies: Measurement

2.2-28				than once, and some letters may not be used at all.
	A)	valuing inventory	D)	process costing
	B)	product emphasis	E)	pricing
	C)	cost control	F)	time record
		Focus on the most pr Compare the actual c	ofitable post with	the budgeted cost
		The manufacturing co	ost is use	d for this purpose
	Answer		mortzotine	a distribution and systemar agets, as well as profits
		Focus on the most pr		g, distribution, and customer costs, as well as profits products
		Compare the actual c		
	A	The manufacturing c	ost is use	d for this purpose
	Difficul LO: 2-2			
	EOC R			
		3: Reflective Thinking	•	
		Business Perspective Functional Competer		encies: Critical Thinking easurement
2.2-29	-	explain the cost flow entify the specific acc		ials through a job order costing system from the purchase to the t are used.
	are requested work in overhead the cost	naterials are purchased disitioned, they are most a process inventory, are ad rate is used to alloc as are moved from woo	oved out oud indirect out on the court of th	re recorded in the materials inventory account. As these materials of the materials inventory account. Direct materials are moved to et materials go to manufacturing overhead. A predetermined facturing overhead to work in process. When a job is completed, cess to finished goods inventory where they remain until the product asferred from finished goods inventory to cost of goods sold.
	Difficul	lty: 2		
	LO: 2-2			
		ef: E2-15	-	
	AICPA	_	Compete	encies: Critical Thinking
	AICPA	Functional Competer	icies: Me	asurement
2.3-1		nufacturing overhead of acturing overhead.	costs incu	urred are accumulated as debits to a general ledger account titled
	Answer			
	Difficul			
	LO: 2-3 EOC R			
		ei: 82-7 3: Reflective Thinking	r	
				encies: Critical Thinking
		Functional Competer		

2.3-2 Manufacturing overhead is credited for applied manufacturing overhead costs throughout the year.

Answer: True Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.3-3 The entry to allocate manufacturing overhead costs to work in process requires a debit to manufacturing overhead.

Answer: False Difficulty: 2 LO: 2-3

EOC Ref: E2-19

**AACSB:** Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.3-4 The allocation base is a common denominator that links indirect manufacturing overhead costs to the cost objects.

Answer: True Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.3-5 The key to accurately assigning indirect manufacturing costs to jobs is to identify a manufacturing overhead allocation base.

Answer: True Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

- 2.3-6 Which of the following statements regarding overhead allocation is CORRECT?
  - A) Overhead should be allocated to the manufacturing process when the manufacturing process is complete.
  - B) Ending work-in process is reduced if overhead is underallocated.
  - C) Actual overhead is assigned to the manufacturing process as overhead is incurred.
  - D) Estimated overhead is assigned to the manufacturing process as production takes place.

Answer: D Difficulty: 2 LO: 2-3 EOC Ref: S2-8

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

#### 2.3-7 Wall Corporation's selected cost data for July is shown below:

Cost of goods manufactured	\$420,000
Work in process inventory, July 1	\$100,000
Work in process inventory, July 31	\$120,000
Direct materials used	\$50,000

Manufacturing overhead is allocated at 50% of direct labor cost.

What are the total manufacturing costs for July?

A) \$520,000

B) \$400,000

C) \$550,000

D) \$440,000

Answer: D

#### Calculations:

July TMC = WIP end + CGM - WIP beg = 120,000 + 420,000 - 100,000= 440,000

Difficulty: 3 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

## 2.3-8 Wall Corporation's selected cost data for July is shown below:

Cost of goods manufactured	\$420,000
Work in process inventory, July 1	\$100,000
Work in process inventory, July 31	\$120,000
Direct materials used	\$50,000

Manufacturing overhead is allocated at 50% of direct labor cost.

What was the amount of direct labor incurred in July?

A) \$330,126

B) \$260,000

C) \$243,750

D) \$224,500

Answer: B

## Calculations:

TMC = DM + DL + Allocated MOH \$440,000 = \$50,000 + DL + 0.5 DL 1.5 DL = \$390,000 DL = \$260,000

Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

## 2.3-9 Potts Company uses a job costing system and had the following data available for 2009.

Materials purchased on account	\$75,000
Materials requisitioned (includes \$2,000 of indirect materials)	\$43,000
Direct labor incurred	\$75,000
Manufacturing overhead incurred	\$95,000
Cost of goods completed	\$226,750
Cost of goods sold	\$138,000
Beginning materials inventory	\$15,000
Beginning work in process inventory	\$32,000
Beginning finished goods inventory	\$31,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor cost)	

The journal entry to record the total materials placed into production would include which of the following?

- A) Debit to work in process for \$41,000
- B) Debit to work in process for \$43,000
- C) Credit to manufacturing overhead for \$2,000
- D) Debit to manufacturing overhead for \$41,000

Answer: A

#### Calculations:

DM used = Total materials requisitioned – IDM = \$ 43,000 - \$2,000 = \$41,000

Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

## 2.3-10 Potts Company uses a job costing system and had the following data available for 2009.

Materials purchased on account	\$75,000
Materials requisitioned (includes \$2,000 of indirect materials)	\$43,000
Direct labor incurred	\$75,000
Manufacturing overhead incurred	\$95,000
Cost of goods completed	\$226,750
Cost of goods sold	\$138,000
Beginning materials inventory	\$15,000
Beginning work in process inventory	\$32,000
Beginning finished goods inventory	\$31,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor cost)	

The journal entry to record the actual manufacturing overhead costs incurred would include which of the following?

- A) Credit to work in process \$95,000
- B) Credit to manufacturing overhead \$93,750
- C) Debit to manufacturing overhead \$95,000
- D) Debit to work in process for \$93,750

Answer: C Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

## 2.3-11 Potts Company uses a job costing system and had the following data available for 2009.

Materials purchased on account	\$75,000
Materials requisitioned (includes \$2,000 of indirect materials)	\$43,000
Direct labor incurred	\$75,000
Manufacturing overhead incurred	\$95,000
Cost of goods completed	\$226,750
Cost of goods sold	\$138,000
Beginning materials inventory	\$15,000
Beginning work in process inventory	\$32,000
Beginning finished goods inventory	\$31,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor cost)	

The journal entry to record the allocation of manufacturing overhead costs incurred would include which of the following?

- A) Debit to work in process inventory for \$95,000
- B) Debit to work in process inventory for \$93,750
- C) Credit to manufacturing overhead for \$95,000
- D) Debit to manufacturing overhead for \$93,750

Answer: B

Calculations:

MOH allocated= DL\$ x POHR = \$75,000 x 1.25

Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

## 2.3-12 Potts Company uses a job costing system and had the following data available for 2009.

Materials purchased on account	\$75,000
Materials requisitioned (includes \$2,000 of indirect materials)	\$43,000
Direct labor incurred	\$75,000
Manufacturing overhead incurred	\$95,000
Cost of goods completed	\$226,750
Cost of goods sold	\$138,000
Beginning materials inventory	\$15,000
Beginning work in process inventory	\$32,000
Beginning finished goods inventory	\$31,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor cost)	

What is the balance in work in process inventory at December 31, 2009?

A) \$15,000

B) \$17,000

C) \$16,500

D) \$15,500

Answer: A

#### Calculations:

WIP end = WIP beg + TMC - CG completed = \$32,000 + (\$41,000 + \$75,000 +\$ 93,750) - \$226,750 = \$15,000

Difficulty: 3 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

## 2.3-13 Lakeside Company's schedule of cost of goods manufactured showed the following amounts for April:

Cost of goods manufactured	\$69,300
Direct materials used	\$27,000
Direct labor (\$15 per hour)	\$30,000
Work in process inventory, April 1	\$9,000

Manufacturing overhead is allocated at the rate of \$4.00 per direct labor hour. What is the work in process inventory on April 30th?

A) \$11,700

B) \$3,300

C) \$4,700

D) \$2,700

Answer: C

#### Calculations:

DLH = \$ 30,000 /15 = 2000 MOH allocated = 2000 DLH x \$4/DLH = \$ 8000 WIP end = WIP beg + ( DM + DL + MOH allocated) – CGM = \$9,000 + ( \$27,000 + \$30,000 + \$8,000) – \$69,300 = \$4,700

Difficulty: 3 LO: 2-3

EOC Ref: S2-8 AACSB: Analytic Skills

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AICPA Business Perspective Competencies: Critical Thinking

2.3-14 On January 1, 2009, Matthew Company's work in process inventory account had a balance of \$30,000. During 2009, \$58,000 of direct materials was placed into production. Manufacturing wages incurred amounted to \$84,000, of which \$66,000 were for direct labor. Manufacturing overhead is allocated on the basis of 120% of direct labor cost. Actual manufacturing overhead was \$90,000. Jobs costing \$220,400 were completed during 2009. What is the December 31, 2009, balance in work in process inventory?

A) \$16,800

B) \$34,800

C) \$6,000

D) \$12,800

Answer: D

#### Calculations:

```
MOH allocated = 66,000 \times 1.2 = 79,200
WIP end = WIP beg + (DM + DL + MOH) - Cost of jobs completed
= $30,000 + ($58,000 + $66,000 + $79,200) - $220,400
= $12,800
```

Difficulty: 3 LO: 2-3

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.3-15 Davie Company used estimated direct labor hours of 180,000 and estimated manufacturing overhead costs of \$990,000 in establishing its 2009 predetermined manufacturing overhead rate. Actual results showed:

Actual manufacturing overhead	\$950,000
Allocated manufacturing overhead	\$962,500

What was the number of direct labor hours worked during 2009?

- A) 180,000
- B) 186,000
- C) 192,000
- D) 175,000

Answer: D

Calculations:

POHR = Estm MOH/ estm DLH = \$ 990,000/ 180,000 DLH = \$ 5.5/ DLH

Allocated MOH = POHR x DLH 962,500 = \$5.5 x DLH DLH = 175,000

Difficulty: 3 LO: 2-3 EOC Ref: S2-8

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

2.3-16 Opague Corporation uses a job order costing system. The work in process inventory balance on December 31, 2009, consists of Job # 120, which has a balance of \$19,000. Job # 120 has been charged with manufacturing overhead of \$5,100. Opaque allocates manufacturing overhead at a predetermined rate of 85% of direct labor cost. What was the amount of direct materials charged to Job # 120?

A) \$7,900

B) \$7,000

C) \$7,565

D) \$5,900

Answer: A

Calculations:

```
Cost of Job # 120 = DM + DL + Allocated MOH

19,000 = DM + ($5100/0.85) + $5100

DM = $19,000 - $6,000 - $5,100

= $7,900
```

Difficulty: 3 LO: 2-3 EOC Ref: S2-8

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

## 2.3-17 Buncombe Company presents the following cost data for 2009:

Estimated manufacturing overhead costs	\$240,000
Estimated direct labor cost	\$300,000
Estimated direct labor hours	30,000
Actual direct labor cost	\$315,000
Actual direct labor hours	33,000
Allocation base: Direct labor cost	
Other expenses:	
Factory depreciation on equipment	\$65,300
Factory rent	\$51,000
Factory utilities	\$28,900
Factory property taxes	\$26,000
Indirect labor	\$23,800
Indirect materials	\$32,000
Sales commissions	\$52,500

What were the total actual manufacturing overhead costs for Buncombe Company in 2009?

A) \$227,000

B) \$275,500

C) \$223,000

D) \$197,000

Answer: A

#### Calculations:

Total actual MOH = \$65,300 + \$51,000 + \$28,900 + \$26,000 + \$23,800 + \$32,000= \$227,000

Difficulty: 2 LO: 2-3 EOC Ref: S2-9

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

## 2.3-18 Buncombe Company presents the following cost data for 2009:

Estimated manufacturing overhead costs	\$240,000
Estimated direct labor cost	\$300,000
Estimated direct labor hours	30,000
Actual direct labor cost	\$315,000
Actual direct labor hours	33,000
Allocation base: Direct labor cost	
Other expenses:	
Factory depreciation on equipment	\$65,300
Factory rent	\$51,000
Factory utilities	\$28,900
Factory property taxes	\$26,000
Indirect labor	\$23,800
Indirect materials	\$32,000
Sales commissions	\$52,500

What is the predetermined manufacturing overhead rate for 2009?

- A) 84% of direct labor cost
- B) \$1.25 per direct labor hour
- C) 70% of direct labor cost
- D) 80% of direct labor cost

Answer: D

#### Calculations:

POHR = Estm MOH / Estm DL\$ = \$ 240,000/ \$300,000 = 0.80

Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

## 2.3-19 Buncombe Company presents the following cost data for 2009:

Estimated manufacturing overhead costs	\$240,000
Estimated direct labor cost	\$300,000
Estimated direct labor hours	30,000
Actual direct labor cost	\$315,000
Actual direct labor hours	33,000
Allocation base: Direct labor cost	
Other expenses:	
Factory depreciation on equipment	\$65,300
Factory rent	\$51,000
Factory utilities	\$28,900
Factory property taxes	\$26,000
Indirect labor	\$23,800
Indirect materials	\$32,000
Sales commissions	\$52,500

Manufacturing overhead allocated for 2009 is:

A) \$450,450.

B) \$210,000.

C) \$220,500.

D) \$252,000.

Answer: D

Calculations:

MOH allocated = POHR x Actual DL\$ = 0.80 x \$ 315,000 = \$ 252,000

Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.3-20 Charleston Corporation's schedule of cost of goods manufactured showed the following amounts for August, 2009.

Cost of goods manufactured	\$98,000
Direct materials used	\$36,000
Direct labor (\$20 per hour)	\$70,000
Work in process, August 1, 2009	\$10,000

Manufacturing overhead is allocated at the rate of \$8 per direct labor hour. What is the amount of allocated manufacturing overhead for August 2009?

A) \$35,000

B) \$28,000

C) \$34,000

D) \$3,500

Answer: B

Calculations:

Allocated  $MOH = POHR \times Actual DLH$ 

= \$ 8/DLH x (70,000/20)

= \$ 28,000

Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.3-21 Charleston Corporation's schedule of cost of goods manufactured showed the following amounts for August, 2009.

Cost of goods manufactured	\$98,000
Direct materials used	\$36,000
Direct labor (\$20 per hour)	\$70,000
Work in process, August 1, 2009	\$10,000

Manufacturing overhead is allocated at the rate of \$8 per direct labor hour.

Actual manufacturing overhead for August, 2009 amounts to \$30,000. What is the amount of work in process inventory on August 31, 2009?

- A) \$46,000
- B) \$6,000
- C) \$16,000
- D) \$48,000

Answer: A

#### Calculations:

```
WIP end = WIP beg + (DM + DL + MOH) – CGM
= $ 10,000 + ($36,000 + $70,000 + $28,000) –$ 98,000
= $ 46,000
```

Difficulty: 3 LO: 2-3

EOC Ref: E2-18

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

On January 1, 2009, Jackson Company's work in process inventory account had a balance of \$65,000. During 2009, materials requisitioned for use in production amounted to \$70,000, of which \$66,000 represented direct materials. Factory wages for the period were \$209,000, of which \$186,400 were for direct labor. Manufacturing overhead is allocated on the basis of 60% of direct labor cost. Actual overhead was \$116,440. Jobs costing \$353,240 were completed during 2009. The December 31, 2009, balance in work in process inventory is:

A) \$ 80,000.B) \$ 72,800.C) \$107,200.D) \$ 76,000.

Answer: D

#### Calculations:

```
WIP end = WIP beg + (DM + DL + MOH) - Cost of jobs completed
= $65,000 + ($66,000 + $186,400 + $111,840) - $353,240
= $76,000
```

Difficulty: 3 LO: 2-3

EOC Ref: E2-18

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

2.3-23 Forsyth Company uses estimated direct labor hours of 150,000 and estimated manufacturing overhead costs of \$337,500 in establishing its 2010 predetermined manufacturing overhead rate. Actual results showed:

Actual manufacturing overhead	\$346,500
Allocated manufacturing overhead	\$343,800

The number of direct labor hours worked during the period was:

A) 154,000.

B) 152,800.

C) 150,000.

D) 146,000.

Answer: B

## Calculations:

Allocated  $MOH = POHR \times Actual DLH$ 

343,800 = 337,500/150,000 x Actual DLH

Actual DLH = 152,800

Difficulty: 2 LO: 2-3 EOC Ref: S2-7

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

- 2.3-24 How is the predetermined manufacturing overhead rate used to allocate manufacturing overhead calculated?
  - A) By dividing the total estimated manufacturing overhead costs by the total estimated quantity of allocation base
  - B) By dividing the total estimated quantity of allocation base by the total estimated manufacturing overhead costs
  - C) By multiplying the total estimated manufacturing overhead costs by the total estimated quantity of allocation base
  - D) By dividing the total estimated manufacturing overhead costs by the total actual quantity of the allocation base

Answer: A Difficulty: 2 LO: 2-3

EOC Ref: S2-10

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

# 2.3-25 Clyde Company gathered the following information for the year ended December 31, 2009:

Direct labor cost incurred	\$165,000
Estimated manufacturing overhead costs	\$231,000
Estimated direct labor cost	\$3,080,000
Work in process inventory, Dec, 31, 2009	\$50,000
Finished goods inventory, Dec. 31, 2009	\$65,000
Cost of goods sold	\$135,000
Estimated direct labor hours	308,000

Clyde Company uses a job costing system.

What would the predetermined manufacturing overhead rate be using direct labor cost as the allocation base?

A) 71.4%

B) 140%

C) 5.2%

D) 7.5%

Answer: D

Calculations:

POHR = Estm MOH / Estm DL\$

= \$231,000/3,080,000

= 7.5%

Difficulty: 2 LO: 2-3

EOC Ref: S2-10

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.3-26 Clyde Company gathered the following information for the year ended December 31, 2009:

Direct labor cost incurred	\$165,000
Estimated manufacturing overhead costs	\$231,000
Estimated direct labor cost	\$3,080,000
Work in process inventory, Dec, 31, 2009	\$50,000
Finished goods inventory, Dec. 31, 2009	\$65,000
Cost of goods sold	\$135,000
Estimated direct labor hours	308,000

Clyde Company uses a job costing system.

What would the predetermined manufacturing overhead rate be using direct labor hours as the allocation base?

- A) \$.75 per hour
- B) \$1.87 per hour
- C) \$1.40 per hour
- D) \$.54 per hour

Answer: A

Calculations:

POHR = Estm MOH / Estm DLH

= \$ 231,000 / 308,000 DLH

= \$ 0.75/ DLH

Difficulty: 2 LO: 2-3

EOC Ref: S2-10

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

- 2.3-27 The records at Smith and Jones Company show Job. No. 110 charged with \$11,000 of direct materials and \$12,500 of direct labor. Smith and Jones Company allocates manufacturing overhead at 85% of direct labor cost. What is the total cost of Job No. 110?
  - A) \$20.625
  - B) \$34,125
  - C) \$22,500
  - D) \$21,625

Answer: B

Calculations:

 $$11,000 + $12,500 + (.85 \times $12,500)$ 

Difficulty: 2 LO: 2-3 EOC Ref: S2-8

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.3-28	Marion Company uses a job order costing system. The work in process inventory on December 31, 2009, consisted of Job No. 175 with a balance of \$53,400. Job No. 175 has been charged with manufacturing overhead of \$16,000. Marion allocates manufacturing overhead at a rate of 80% of direct labor cost. What was the amount of direct materials charged to Job No. 175?  A) \$20,000  B) \$24,600  C) \$17,400  D) \$7,400
	Answer: C DM +DL+MOH=Job cost DM+(16000/.80)+16,000=53400 DM=17,400 Difficulty: 3 LO: 2-3 EOC Ref: E2-18 AACSB: Analytic Skills AICPA Business Perspective Competencies: Critical Thinking AICPA Functional Competencies: Measurement
2.3-29	For each of the following items, determine whether it would be more appropriate to debit MOH) manufacturing overhead or WIP) work in process inventory. Enter either MOH or WIP on the line in front of each statement.  Indirect materials used Direct materials used Indirect labor used Direct labor used Plant utilities
	Answer: MOH Indirect materials used WIP Direct materials used MOH Indirect labor used WIP Direct labor used MOH Plant utilities
	Difficulty: 2 LO: 2-3 EOC Ref: S2-6 AACSB: Reflective Thinking AICPA Business Perspective Competencies: Critical Thinking AICPA Functional Competencies: Measurement

2.3-30 Gadgets Company has two departments, X and Y. Manufacturing overhead is allocated based on direct labor cost in Department X and direct labor hours in Department Y. The following additional information is available:

Estimated Amounts	Department X	Department Y
Direct labor cost	\$249,600	\$427,500
Direct labor hours	24,960	45,000
Manufacturing overhead costs	\$312,000	\$256,500

Actual data for completed Job No. 140 is as follows:

	Department X	Department Y
Direct materials requisitioned	\$23,700	\$48,580
Direct labor cost	\$34,400	\$38,800
Direct labor hours	4,300	3,800

## Requirements:

- a) Compute the predetermined manufacturing overhead rate for Department X.
- b) Compute the predetermined manufacturing overhead rate for Department Y.
- c) What is the total manufacturing overhead cost for Job No.140?
- d) If Job No. 140 consists of 350 units of product, what is the average unit cost of this job?

#### Answer:

- a) \$312,000/\$249,600 = 125% of direct labor cost
- b) \$256,500/45,000 hours = \$5.70 per direct labor hour

c) Dept. 
$$X = (\$34,400 \times 125\%) = \$43,000$$
  
Dept.  $Y = (\$5.70 \times 3,800) = \frac{21,660}{\$64,660}$ 

d) 
$$$23,700 + $34,400 + $43,000 + $48,580 + $38,800 + $21,660 = $210,140$$
  
 $$210,140/350 \text{ units} = $600.40$ 

Difficulty: 3 LO: 2-3

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.3-31 Boone Company has the following balances as of December 31, 2009.

Materials inventory	\$15,000
Work in process inventory	\$36,200
Finished goods inventory	\$50,100
Manufacturing overhead debit balance (after allocation)	\$3,500
Cost of goods sold	\$74,500

## Additional information is as follows:

Cost of materials purchased during 2009	\$41,000
Cost of direct materials requisitioned during 2009	\$ 47,000
Cost of indirect materials requisitioned during 2009	\$ 8,000
Cost of goods manufactured during 2009	\$105,000
Manufacturing overhead allocated (120% of direct labor)	\$51,000

# Determine each of the following:

- a) January 1, 2009, materials inventory
- b) January 1, 2009, work in process inventory
- c) January 1, 2009, finished goods inventory
- d) Actual manufacturing overhead incurred

#### Answer:

a) 
$$$15,000 + $47,000 + $8,000 - $41,000 = $29,000$$

b) 
$$$51,000/1.2 = $42,500$$
 direct labor  $$36,200 + $105,000-$47,000-$51,000-$42,500 =  $$700$$ 

c) 
$$$50,100 + $74,500 - $105,000 = $19,600$$

d) 
$$\$51,000 + \$3,500 = \$54,500$$

Difficulty: 3 LO: 2-3

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.3-32 Gilbert Company's work in process inventory has a June 1, 2009, balance of \$19,500 representing Job No. 95. During June, \$48,000 of direct materials was requisitioned for Job No. 95 and \$26,000 of direct labor cost was incurred on Job No. 95. Manufacturing overhead is allocated at 150% of direct labor cost. Actual manufacturing overhead costs incurred in June amounted to \$40,000. No new jobs were started during June. Job No. 95 is completed on June 28.

## Requirements:

- a) Determine the total cost of Job No. 95.
- b) What is the balance in manufacturing overhead on June 30, 2009? Assume the June 1, 2009, balance was overallocated \$300.

#### Answer:

- a)  $$19,500 + $48,000 + $26,000 + (1.50 \times $26,000) = $132,500$
- b) \$40,000 actual \$39000 allocated \$300 overallocated = \$700 underallocated

Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

2.3-33 The following information was gathered for the Kidman Company for the year ended December 31, 2009.

Estimated direct labor hours	32,500
Actual direct labor hours	35,000
Estimated manufacturing overhead	\$650,000
Actual manufacturing overhead	\$670,000

Kidman uses direct labor hours to calculate the predetermined overhead rate.

Calculate the following:

- a) Predetermined manufacturing overhead rate
- b) Manufacturing overhead allocated
- c) Amount of over/underallocated overhead

## Answer:

- a) \$650,000/32,500 = \$20 per direct labor hour
- b)  $35,000 \times \$20 = \$700,000$
- c) \$700,000-\$670,000 = \$30,000 overallocated

Difficulty: 2 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.3-34 Wright Brothers is debating the use of direct labor cost or direct labor hours as the cost allocation base for allocating manufacturing overhead. The following information is available for the year ended December 31, 2009:

Estimated direct labor cost	\$437,500
Actual direct labor cost	\$447,000
Estimated manufacturing overhead costs	\$350,000
Actual manufacturing overhead costs	\$338,000
Estimated direct labor hours	25,000
Actual direct labor hours	24,200

# Determine the following:

- a) Predetermined manufacturing overhead rate using direct labor cost as the allocation base
- b) Predetermined manufacturing overhead rate using direct labor hours as the allocation base
- c) Allocated manufacturing overhead based on direct labor cost
- d) Allocated manufacturing overhead based on direct labor hours
- e) Was manufacturing overhead under or overapplied
- f) Using direct labor hours as the allocation base, prepare the journal entry to close out manufacturing overhead.

#### Answer:

- a) \$350,000/\$437,500 = 80% of direct labor cost
- b) \$350,000/25,000 hours = \$14.00 per direct labor hour
- c)  $$447,000 \times .80 = $357,600$
- d)  $$14.00 \times 24,200 = $338,800$
- e) overapplied (\$338,800 applied but only \$338,000 actually incurred)

f) General Journal

Date	Accounts	Debit	Credit
Dec. 31	Manufacturing Overhead	800	
	Cost of Goods Sold		800

Difficulty: 3 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.3-35 Given for Converse Corporation:

Actual manufacturing overhead costs \$25,855 Overallocated manufacturing overhead \$920

Manufacturing overhead is allocated at a rate of \$1.75 per direct labor hour. Direct labor cost is \$17.00 per hour.

# Calculate the following:

- a) Allocated manufacturing overhead
- b) Actual number of direct labor hours worked

## Answer:

a) \$25,855 + \$920 = \$26,775
 b) \$26,775/\$1.75 = \$15,300 hours

Difficulty: 2 LO: 2-3

EOC Ref: E2-20

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.3-36 Calculate the unknowns for the following independent situations:

1) Given for Sabo Corporation: Actual manufacturing overhead costs

Actual manufacturing overhead costs \$30,600 Underallocated manufacturing overhead \$1,550

Allocated manufacturing overhead is based on 50% of direct labor cost.

- a) Calculate the allocated manufacturing overhead cost.
- b) Calculate the direct labor cost.
- 2) Given for Chernoff Corporation:

Actual manufacturing overhead costs \$25,600 Overallocated manufacturing overhead \$1,400

Manufacturing overhead is allocated at \$15 per machine hour.

- a) Calculate the allocated manufacturing overhead cost.
- b) Calculate the number of machine hours incurred.

## Answer:

- 1) a) \$30,600 \$1,550 = \$29,050
  - b) \$29,050/.50 = \$58,100
- 2) a) \$25,600 + \$1,400 = \$27,000
  - b) \$27,000/\$15 = 1,800 machine hours

Difficulty: 3 LO: 2-3

EOC Ref: E2-20

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.3-37 Cambridge Corporation has two departments that produce small appliances. Department A allocates manufacturing overhead using machine hours as the allocation base, while Department B allocates manufacturing overhead using direct labor cost as the allocation base. Data for April, 2009, are shown below:

	Dept. A	Dept. B
Estimated manufacturing overhead costs for 2009	\$90,000	\$300,000
Estimated direct labor cost for 2009	\$50,000	\$625,000
Estimated machine hours for 2009	30,000	5,000
Actual manufacturing overhead costs for April	\$7,000	\$14,900
Actual direct labor cost for April	\$3,000	\$32,000
Actual machine hours for April	2,200	490

- a) Determine the predetermined manufacturing overhead rate for Department A.
- b) Determine the predetermined manufacturing overhead rate for Department B.
- c) Journalize the entries to allocate manufacturing overhead to each department for April, 2009.
- d) Determine the balances of the manufacturing overhead accounts for each department as of April 30, 2009.

Indicate whether the amounts represent overallocated or underallocated manufacturing overhead.

#### Answer

- a) \$90,000/30,000 = \$3.00 per machine hour
- b) \$300,000/\$625,000 = 48% of direct labor cost
- c) General Journal

Date	Accounts	Debit	Credit
Dec. 31	Work in Process Inventory-Dept. A	6,600	
	Manufacturing Overhead-Dept. A		6,600

(2,200 machine hours x \$3.00 predetermined manufacturing overhead allocation rate)

Dec. 31 Work in Process Inventory-Dept. B 15,360

Manufacturing Overhead-Dept. B 15,360

(\$32,000 direct labor cost x 48% predetermined manufacturing overhead allocation rate)

# d) Department A

actual manufacturing overhead = \$7,000 allocated manufacturing overhead = \$6,600 \$6,600 - \$7,000 = \$400 underallocated

## Department B

actual manufacturing overhead = \$14,900 allocated manufacturing overhead = \$15,360 \$15,360 - \$14,900 = \$460 overallocated

Difficulty: 3 LO: 2-3

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

Overallocated overhead occurs when the manufacturing overhead allocated to work in process inventory 2.4 - 1is less than the amount actually incurred.

> Answer: False Difficulty: 2 LO: 2-4 EOC Ref: S2-9

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.4-2Cost of goods sold needs to be increased at year-end when the manufacturing overhead is overapplied.

> Answer: False Difficulty: 2 LO: 2-4 EOC Ref: S2-9

**AACSB: Reflective Thinking** 

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.4 - 3The work in process inventory account summarizes the schedule of cost of goods manufactured.

> Answer: True Difficulty: 2 LO: 2-4

EOC Ref: S2-10

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.4 - 4Each time jobs are completed, the entire balance in manufacturing overhead is transferred to finished goods inventory.

> Answer: False Difficulty: 2 LO: 2-4

EOC Ref: S2-11

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.4-5The work in process account balance increases when cost of goods manufactured is greater than the manufacturing costs incurred during the period.

> Answer: False Difficulty: 2 LO: 2-4 EOC Ref: S2-10

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

- 2.4-6 Overallocation of overhead results in which of the following year-end adjustments?
  - A) A decrease in ending finished goods inventory
  - B) An increase in ending finished goods inventory
  - C) A decrease in ending work-in process inventory
  - D) A decrease in cost of goods sold

Answer: D Difficulty: 2 LO: 2-4 EOC Ref: S2-9

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

# 2.4-7 Underapplied overhead results when:

- A) actual overhead costs are greater than applied overhead costs.
- B) actual overhead costs are less than estimated overhead costs.
- C) actual overhead costs are greater than estimated overhead costs.
- D) too much overhead is assigned to cost of goods manufactured.

Answer: A Difficulty: 2 LO: 2-4 EOC Ref: S2-9

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

## 2.4-8 Which of the following statements is INCORRECT?

- A) Finished goods inventory increases when cost of goods manufactured exceeds cost of goods sold.
- B) Work in process inventory increases when the manufacturing costs allocated to work in process exceeds cost of goods manufactured.
- C) Overapplied overhead results in an adjustment that decreases cost of goods sold.
- D) Underapplied overhead results when applied manufacturing overhead is less than estimated manufacturing overhead.

Answer: D Difficulty: 2 LO: 2-4

EOC Ref: E2-19

**AACSB:** Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

# 2.4-9 McDuffy Furniture Company constructs custom furniture. Job cost records during the second and third quarters of 2009 are shown below.

Job No.	Date Started	Date Finished	Total Cost of Job on	Manufacturing Costs
			July 1	Added in July
110	June 1	July 15	\$32,840	\$43,600
111	June 3	August 25	\$18,100	\$177,200
112	July 2	July 30	-	\$145,000
113	July 6	July 31	-	\$82,800
114	July 15	August 19	-	\$126,400

What would the entry be to record the sale of Job 111 on August 25, at a sales price of \$305,420?

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Accounts Receivable		305,420	
	Sales Revenue		305,420
Cost of Goods Sold		195,300	
	Work in Process Inventory		195,300

B)

Accounts Receivable		305,420	
	Sales Revenue		305,420
Cost of Goods Sold		177,200	
	Finished Goods Inventory		177,200

C)

Accounts Receivable		305,420	
	Sales Revenue		305,420
Cost of Goods Sold		195,300	
	Finished Goods Inventory		195,300

D)

Accounts Receivable		305,420	
	Sales Revenue		305,420
Finished Goods Inventory		195,300	
	Cost of Goods Sold		195,300

Answer: C Difficulty: 2 LO: 2-4

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.4-10 McDuffy Furniture Company constructs custom furniture. Job cost records during the second and third quarters of 2009 are shown below.

Job No.	Date Started	Date Finished	Total Cost of Job on	Manufacturing Costs
			July 1	Added in July
110	June 1	July 15	\$32,840	\$43,600
111	June 3	August 25	\$18,100	\$177,200
112	July 2	July 30	-	\$145,000
113	July 6	July 31	-	\$82,800
114	July 15	August 19	-	\$126,400

What is the work in process on June 30<sup>th</sup>?

- A) \$50,940
- B) \$492,540
- C) \$625,940
- D) \$0

Answer: A

# Calculations:

WIP at June 30<sup>th</sup> = Job # 110 + Job #111 = \$ 32,840 + \$18,100 = \$ 50,940

Difficulty: 2 LO: 2-4

EOC Ref: P2-25A

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-11 Buncombe Company presents the following cost data for 2009:

Estimated manufacturing overhead costs	\$240,000
Estimated direct labor cost	\$300,000
Estimated direct labor hours	30,000
Actual direct labor cost	\$315,000
Actual direct labor hours	33,000
Allocation base: Direct labor cost	
Other expenses:	
Factory depreciation on equipment	\$65,300
Factory rent	\$51,000
Factory utilities	\$28,900
Factory property taxes	\$26,000
Indirect labor	\$23,800
Indirect materials	\$32,000
Sales commissions	\$52,500

What is required to close the manufacturing overhead account on December 31, 2009?

- A) A credit to manufacturing overhead for \$25,000
- B) A debit to manufacturing overhead for \$25,000
- C) A debit to cost of goods sold for \$25,000
- D) A credit to work in process inventory for \$25,000

Answer: B

## Calculations:

POHR = Estm MOH / Estm DL\$ = \$240,000/300,000 = 0.8Allocated MOH = POHR x Actual DL\$ =  $0.8 \times $315,000 = $252,000$ Actual MOH = \$65,300 + 51,000 + 28,900 + 26,000 + 23,800 + 32,000 = 227,000MOH was overallocated by \$252,000 - 227,000 = \$25,000The credit balance in MOH needs to be debited to close out MOH.

Difficulty: 2 LO: 2-4

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-12 Buncombe Company presents the following cost data for 2009:

Estimated manufacturing overhead costs	\$240,000
Estimated direct labor cost	\$300,000
Estimated direct labor hours	30,000
Actual direct labor cost	\$315,000
Actual direct labor hours	33,000
Allocation base: Direct labor cost	
Other expenses:	
Factory depreciation on equipment	\$65,300
Factory rent	\$51,000
Factory utilities	\$28,900
Factory property taxes	\$26,000
Indirect labor	\$23,800
Indirect materials	\$32,000
Sales commissions	\$52,500

What is the manufacturing overhead rate?

- A) 76% of direct labor cost
- B) 125% of direct labor cost
- C) 80% of direct labor cost
- D) 105% of direct labor cost

Answer: C

## Calculations:

POHR = Estm MOH / Estm DL\$ = \$240,000/300,000 = 0.8

Difficulty: 2 LO: 2-4

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.4-13 Daniel Company's manufacturing overhead account showed a \$4,500 overallocated balance at the end of 2005. Actual overhead incurred was \$95,000. Other accounts showed the following balances:

Materials inventory	\$10,000
Work in process inventory	\$30,000
Finished goods inventory	\$45,000
Cost of goods sold	\$275,000

The entry to close the manufacturing overhead account would include which of the following?

- A) Credit to work in process for \$4,500
- B) Debit to work in process for \$4,500
- C) Debit to cost of goods sold for \$4,500
- D) Debit to manufacturing overhead for \$4,500

Answer: D Difficulty: 2 LO: 2-4

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

2.4-14 Daniel Company's manufacturing overhead account showed a \$4,500 overallocated balance at the end of 2005. Actual overhead incurred was \$95,000. Other accounts showed the following balances:

Materials inventory	\$10,000
Work in process inventory	\$30,000
Finished goods inventory	\$45,000
Cost of goods sold	\$275,000

What will be the ending balance in cost of goods sold after allocating the proper amount of the manufacturing overhead?

A) \$270,500

B) \$279,500

C) \$266,000

D) \$284,000

Answer: A

## Calculations:

After the closing entry, COGS = \$275,000 - 4,500 = \$270,500

Difficulty: 2 LO: 2-4

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.4-15 Delaware Furniture Company constructs custom furniture. Job cost records during the second and third quarters of 2009 are shown below.

Job No.	Date Started	Date Finished	Total Cost of Job on	Manufacturing Costs
			July 1	Added in July
110	June 1	July 15	\$32,840	\$ 43,600
111	June 3	August 25	\$18,100	\$177,200
112	July 2	July 30		\$145,000
113	July 6	July 31		\$82,800
114	July 15	August 19		\$126,400

What is the total cost of the July 31st work in process inventory?

- A) \$466,700
- B) \$448,600
- C) \$321,700
- D) \$303,600

Answer: C

# Calculations:

July  $31^t$  WIP = Job 111 + Job 114 = (18,100 + 177,200) + 126,400 = \$321,700

Difficulty: 3 LO: 2-4

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.4-16 Delaware Furniture Company constructs custom furniture. Job cost records during the second and third quarters of 2009 are shown below.

Job No.	Date Started	Date Finished	Total Cost of Job on	Manufacturing Costs
			July 1	Added in July
110	June 1	July 15	\$32,840	\$ 43,600
111	June 3	August 25	\$18,100	\$177,200
112	July 2	July 30		\$145,000
113	July 6	July 31		\$82,800
114	July 15	August 19		\$126,400

What is the total cost of the July 31st finished goods inventory?

- A) \$82,800
- B) \$304,240
- C) \$209,200
- D) \$227,800

Answer: B

# Calculations:

July 31 FG = Job 110 + Job 112 + Job 113 = (32,840 + 43,600) + 145,000 + 82,800 = \$304,240

Difficulty: 3 LO: 2-4

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

2.4-17 Delaware Furniture Company constructs custom furniture. Job cost records during the second and third quarters of 2009 are shown below.

Job No.	Date Started	Date Finished	Total Cost of Job on	Manufacturing Costs
			July 1	Added in July
110	June 1	July 15	\$32,840	\$ 43,600
111	June 3	August 25	\$18,100	\$177,200
112	July 2	July 30		\$145,000
113	July 6	July 31		\$82,800
114	July 15	August 19		\$126,400

Assuming Jobs No. 110 and 112 are sold to customers in July, what is the total cost of goods sold for July?

A) \$188,600

B) \$304,240

C) \$271,400

D) \$221,440

Answer: D

Calculations:

CGS for July = Job 110 + Job 112 = (\$32,840 +\$43,600) + \$145,000

= \$ 221,440

Difficulty: 3 LO: 2-4

EOC Ref: E2-19

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-18 Cruise Company uses a job order costing system and had the following data available for 2009.

Beginning materials inventory	\$36,000
Beginning work in process inventory	\$64,000
Beginning finished goods inventory	\$54,000
Materials purchased on account	\$148,000
Direct materials requisitioned	\$85,000
Direct labor cost incurred	\$135,000
Actual manufacturing overhead incurred	\$162,000
Cost of goods completed	\$295,000
Cost of goods sold	\$260,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor)	

The journal entry to record the cost of goods completed would include which of the following?

- A) Debit to finished goods for \$295,000
- B) Debit to work in process inventory for \$260,000
- C) Credit to work in process for \$260,000
- D) Credit to finished goods for \$295,000

Answer: A Difficulty: 2 LO: 2-4

EOC Ref: E2-20

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-19 Cruise Company uses a job order costing system and had the following data available for 2009.

Beginning materials inventory	\$36,000
Beginning work in process inventory	\$64,000
Beginning finished goods inventory	\$54,000
Materials purchased on account	\$148,000
Direct materials requisitioned	\$85,000
Direct labor cost incurred	\$135,000
Actual manufacturing overhead incurred	\$162,000
Cost of goods completed	\$295,000
Cost of goods sold	\$260,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor)	

What is the ending work in process inventory balance?

- A) \$151,000
- B) \$87,000
- C) \$157,750
- D) \$93,750

Answer: C

WIP end = WIP beg + (DM + DL + MOH) – CGM =\$ 64,000 + (\$85,000 + \$135,000 + \$135,000 x 1.25) – \$295,000 = \$ 157,750

Difficulty: 3 LO: 2-4

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-20 Cruise Company uses a job order costing system and had the following data available for 2009.

Beginning materials inventory	\$36,000
Beginning work in process inventory	\$64,000
Beginning finished goods inventory	\$54,000
Materials purchased on account	\$148,000
Direct materials requisitioned	\$85,000
Direct labor cost incurred	\$135,000
Actual manufacturing overhead incurred	\$162,000
Cost of goods completed	\$295,000
Cost of goods sold	\$260,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor)	

What is the ending finished goods inventory balance?

- A) \$35,000
- B) \$54,400
- C) \$19,000
- D) \$89,000

Answer: D

# Calculations:

FG end = FG beg + CGM - CGS = \$54,000 + \$295,000 - \$260,000 = \$89,000

Difficulty: 2 LO: 2-4

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-21 Cruise Company uses a job order costing system and had the following data available for 2009.

Beginning materials inventory	\$36,000
Beginning work in process inventory	\$64,000
Beginning finished goods inventory	\$54,000
Materials purchased on account	\$148,000
Direct materials requisitioned	\$85,000
Direct labor cost incurred	\$135,000
Actual manufacturing overhead incurred	\$162,000
Cost of goods completed	\$295,000
Cost of goods sold	\$260,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor)	

The journal entry to record the sale of all jobs for the entire year would include which of the following?

- A) Debit to cost of goods sold for \$295,000
- B) Credit to finished goods inventory for \$295,000
- C) Credit to finished goods inventory for \$260,000
- D) Debit to finished goods inventory for \$295,000

Answer: C Difficulty: 2 LO: 2-4

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-22 Allison Corporation reports end-of-year data as follows for 2009:

Sales revenue	\$570,000
Actual manufacturing overhead	\$103,600
Allocated manufactured overhead	\$96,000
Cost of goods sold	\$368,000

Allison Corporation adjusts cost of goods sold for any balance in the manufacturing overhead account at the end of the year. What is the 2009 gross profit of Allison Corporation?

- A) \$184,400
- B) \$194,400
- C) \$192,000
- D) \$199,600

Answer: B

# Calculations:

Underallocated MOH = \$103,600 - \$96,000 = \$7,600 COGS after closing = \$368,000 + \$7,600 = \$375,600 Gross profit = Sales - COGS = \$570,000 - \$375,600 = \$194,400

Difficulty: 3 LO: 2-4

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

Davidson Company's manufacturing overhead account showed a \$6,200 underallocated balance on December 31, 2009. Other accounts showed the following balances on December 31, 2009:

Materials inventory	\$50,000
Work in process inventory	\$30,000
Finished goods inventory	\$20,000
Cost of goods sold	\$100,000

Davidson adjusts costs of goods sold for the balance in manufacturing overhead. What is the balance in Cost of goods sold after closing out the balance in manufacturing overhead?

A) \$93,800

B) \$103,100

C) \$106,200

D) \$100,000

Answer: C

Calculations:

COGS after closing = COGS + underallocated MOH = \$100,000 + \$6,200 = \$106,200

Difficulty: 2 LO: 2-4

EOC Ref: S2-10

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

2.4-24 Wake Corporation reports the following balances at December 31, 2009:

Sales revenue	\$360,000
Cost of goods sold	\$206,000
Allocated manufacturing overhead	\$78,800
Actual manufacturing overhead	\$72,800

Wake adjusts cost of goods sold for any balance in the manufacturing overhead account at the end of the year. What is the gross profit of Wake Corporation for the year ended December 31, 2009?

A) \$160,000

B) \$172,000

C) \$154,000

D) \$148,000

Answer: A

Calculations:

COGS after closing = = \$206,000 - \$6,000 = \$200,000

Gross Profit = Sales Revenue - COGS = \$360,000 - 200,000 = \$160,000

Difficulty: 3 LO: 2-4

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-25 Clyde Company gathered the following information for the year ended December 31, 2009:

Direct labor cost incurred	\$165,000
Estimated manufacturing overhead costs	\$231,000
Estimated direct labor cost	\$3,080,000
Work in process inventory, Dec, 31, 2009	\$50,000
Finished goods inventory, Dec. 31, 2009	\$65,000
Cost of goods sold	\$135,000
Estimated direct labor hours	308,000

Clyde Company uses a job order costing system.

Assume that manufacturing overhead is underallocated on December 31, 2009, by \$17,000. After closing out manufacturing overhead, what would the balance be in cost of goods sold?

A) \$152,000

B) \$143,500

C) \$160,500

D) \$118,000

Answer: A

#### Calculations:

COGS after closing = COGS + Underallocated MOH = \$135,000 + \$17,000 = \$152,000

Difficulty: 2 LO: 2-4

EOC Ref: P2-25A AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

- 2.4-26 Actual manufacturing overhead for the current period is \$19,600 while allocated manufacturing overhead for the current period is \$18,700. What is the proper entry to dispose of the manufacturing overhead balance?
  - A) Debit cost of goods sold and credit manufacturing overhead for \$900
  - B) Debit cost of goods sold and credit finished goods inventory for \$900
  - C) Debit manufacturing overhead and credit cost of goods sold for \$900
  - D) Debit manufacturing overhead and credit work in process inventory for \$900

Answer: A Difficulty: 2 LO: 2-4 EOC Ref: S2-9

**AACSB:** Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

2.4-27 When a job is completed in a job order costing system, the journal entry involves which accounts?

- A) A debit to finished goods inventory and a credit to work in process inventory for the cost of the job
- B) A debit to finished goods inventory and a credit to work in process inventory for the sales price of the
- C) A debit to cost of goods sold and a credit to finished goods inventory for the cost of the job
- D) A debit to work in process inventory and a credit to finished goods inventory for the cost of the job

Answer: A Difficulty: 2 LO: 2-4 EOC Ref: S2-9

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

- 2.4-28 Actual manufacturing overhead for 2009 amounts to \$102,500, allocated manufacturing overhead for 2009 amounts to \$98,700. By how much is manufacturing overhead over/underallocated?
  - A) \$3,800 underallocated
  - B) \$1,900 underallocated
  - C) \$1.900 overallocated
  - D) \$3,800 overallocated

Answer: A Calculations:

102,500 - 98,700 = 3,800 underallocated

Difficulty: 2 LO: 2-4 EOC Ref: S2-9

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-29 Potts Company uses a job order costing system and had the following data available for 2009.

Materials purchased on account	\$75,000
Materials requisitioned (includes \$2,000 of indirect	\$43,000
materials)	
Direct labor incurred	\$75,000
Manufacturing overhead incurred	\$95,000
Cost of goods completed	\$226,750
Cost of goods sold	\$138,000
Beginning materials inventory	\$15,000
Beginning work in process inventory	\$32,000
Beginning finished goods inventory	\$31,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor cost)	

The journal entry to transfer completed goods to the finished goods inventory account would include which of the following?

- A) Debit to work in process inventory for \$226,750
- B) Debit to finished goods inventory for \$227,875
- C) Debit to finished goods inventory for \$226,750
- D) Credit to work in process inventory for \$227,875

Answer: C Difficulty: 2 LO: 2-4

EOC Ref: P2-25A

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-30 Potts Company uses a job order costing system and had the following data available for 2009.

Materials purchased on account	\$75,000
Materials requisitioned (includes \$2,000 of indirect	\$43,000
materials)	
Direct labor incurred	\$75,000
Manufacturing overhead incurred	\$95,000
Cost of goods completed	\$226,750
Cost of goods sold	\$138,000
Beginning materials inventory	\$15,000
Beginning work in process inventory	\$32,000
Beginning finished goods inventory	\$31,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor cost)	

The journal entry to close manufacturing overhead would include a:

- A) debit to manufacturing overhead for \$1,250.
- B) credit to manufacturing overhead for \$1,250.
- C) debit to work in process inventory for \$1,250.
- D) credit to cost of goods sold for \$1,250.

Answer: B

## Calculations:

Amt of Underallocated MOH = Actual MOH - Allocated MOH =\$95,000 - (\$75,000 x 1.25) = \$95,000 - \$93,750 = \$1,250 underallocated

Difficulty: 2 LO: 2-4

EOC Ref: P2-25A

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-31 Potts Company uses a job order costing system and had the following data available for 2009.

Materials purchased on account	\$75,000
Materials requisitioned (includes \$2,000 of indirect	\$43,000
materials)	
Direct labor incurred	\$75,000
Manufacturing overhead incurred	\$95,000
Cost of goods completed	\$226,750
Cost of goods sold	\$138,000
Beginning materials inventory	\$15,000
Beginning work in process inventory	\$32,000
Beginning finished goods inventory	\$31,000
Predetermined manufacturing overhead rate	125%
(as a percent of direct labor cost)	

The journal entry to close manufacturing overhead would include which of the following?

- A) Debit to cost of goods sold for \$1,250
- B) Debit to work in process inventory for \$1,250
- C) Debit to manufacturing overhead for \$1,250
- D) Credit to work in process inventory for \$1,250

Answer: A Difficulty: 2 LO: 2-4

EOC Ref: P2-25A

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

- 2.4-32 Door Company estimated manufacturing overhead costs for 2009 at \$378,000. The predetermined manufacturing overhead rate was based on 105,000 estimated direct labor hours. Actual direct labor hours for 2009 totaled 110,000. The manufacturing overhead account showed debit entries totaling \$394,000. For the year, was overhead overallocated or underallocated and by how much?
  - A) \$16,000 underallocated
  - B) \$2.000 overallocated
  - C) \$2,000 underallocated
  - D) \$16,000 overallocated

Answer: B

#### Calculations:

\$378,000/105,000 = \$3.60 allocated overhead per direct labor hour

 $3.60 \times 110,000 = 396,000$  allocated overhead

\$396,000 allocated - \$394,000 actual = \$2,000 overallocated overhead

Difficulty: 3 LO: 2-4

EOC Ref: S2-10 AACSB: Analytic Skills

A LCDA D

AICPA Business Perspective Competencies: Critical Thinking

- 2.4-33 Manufacturing overhead is overallocated \$1,000 at the end of the current period. The journal entry to dispose of the overallocated overhead balance involves a debit to:
  - A) manufacturing overhead and a credit to cost of goods sold for \$1,000.
  - B) cost of goods sold and a credit to manufacturing overhead for \$1,000.
  - C) manufacturing overhead and a credit to work in process inventory for \$1,000.
  - D) cost of goods sold and a credit to finished goods inventory for \$1,000.

Answer: A Difficulty: 2 LO: 2-4 EOC Ref: S2-9

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

- 2.4-34 Lakeside Company estimated manufacturing overhead costs for 2009 at \$378,000, based on 180,000 estimated direct labor hours. Actual direct labor hours for 2009 totaled 195,000. The manufacturing overhead account contains debit entries totaling \$391,500. The manufacturing overhead for 2009 was:
  - A) \$31,500 underallocated.
  - B) \$31,500 overallocated.
  - C) \$18,000 underallocated.
  - D) \$18,000 overallocated.

Answer: D

#### Calculations:

\$378,000/180,000 = \$2.10 overhead allocated per direct labor hour \$2.10 x 195,000 = \$409,500 overhead allocated \$409,500 allocated- \$391,500 actual = \$18,000 overallocated overhead

Difficulty: 3 LO: 2-4

EOC Ref: S2-10

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

33	For each of the following statements, determine if manufacturing overhead was:
	U) underallocated
	O) overallocated
	Put the correct letter on the line in front of each statement.
	Cost of Goods Sold is increased
	Manufacturing Overhead has a debit balance
	Cost of Goods Sold is decreased
	Manufacturing Overhead is credited and Cost of Goods Sold is debited
	Answer:
	U Cost of Goods Sold is increased
	U Manufacturing Overhead has a debit balance
	O Cost of Goods Sold is decreased
	U Manufacturing Overhead is credited and Cost of Goods Sold is debited
	Difficulty: 2
	LO: 2-4
	EOC Ref: S2-10
	AACSB: Reflective Thinking
	AICPA Business Perspective Competencies: Critical Thinking
	AICPA Functional Competencies: Measurement

- 15.4-36 Peterson Corporation uses a job order costing system. Record the following transactions in Peterson's general journal for the current month:
  - a) Purchased materials on account, \$70,000.
  - b) Requisitioned \$48,000 of direct materials and \$6,500 of indirect materials for use in production.
  - c) Factory payroll incurred, \$75,000.
  - d) Allocated factory payroll, 85% direct labor, 15% indirect labor.
  - e) Recorded depreciation on factory equipment \$13,500, and other manufacturing overhead of \$45,900 (credit accounts payable).
  - f) Allocated manufacturing overhead based on 130% of direct labor cost.
  - g) Cost of completed production for the current month, \$165,000.
  - h) Cost of finished goods sold, \$130,000; selling price, \$188,500 (all sales on account).

#### Answer:

#### General Journal

Date	Accounts	Debit	Credit
a)	Materials Inventory Accounts Payable	70,000	70,000
b)	Work in Process Inventory Manufacturing Overhead Materials Inventory	48,000 6,500	54,500
c)	Manufacturing Wages Wages Payable	75,000	75,000
d)	Work in Process Inventory Manufacturing Overhead Manufacturing Wages	63,750 11,250	75,000
e)	Manufacturing Overhead Accum. DeprFactory Equip. Accounts Payable	59,400	13,500 45,900
f)	Work in Process Inventory Manufacturing Overhead	82,875	82,875
g)	Finished Goods Inventory Work in Process Inventory	165,000	165,000
h)	Accounts Receivable Sales Revenue Cost of Goods Sold Finished Goods Inventory	188,500 130,000	188,500 130,000
	i mished Goods mitchiory		150,000

## Calculations:

d)  $\$75,000 \times .85 = \$63,750; \$75,000 \times .15 = \$11,250$ 

f)  $$63,750 \times 1.30 = $82,875$ 

Difficulty: 2 LO: 2-4

EOC Ref: P2-25A

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-37 Records for Claire's Manufacturing contained the following data.

Job No.	Date Started	Date Finished	Date Sold	Total Cost of Job on
100				June 30
100	May 12	June 12	June 21	\$16,800
101	May 15	June 20	June 25	\$6,900
102	June 8	July 8	July 15	\$19,500
103	June 12	June 28	July 2	\$3,500
104	June 20	July 19	July 26	\$9,200

Determine each of the following:

- a) Work in process inventory on June 30
- b) Finished goods inventory on June 30
- c) Cost of goods sold for June

## Answer:

- a) Job 104 and Job 102 \$19,500 + \$9,200 = \$28,700
- b) Job 103 \$3,500
- c) Job 100 and Job 101 16,800 + 6,900 = 23,700

Difficulty: 2 LO: 2-4

EOC Ref: E2-15

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-38 The following activities took place in the work in process inventory account during April:

Beginning balance \$15,000 Direct materials used \$120,000

Total manufacturing labor incurred in April was \$162,500, 75% of this amount represented direct labor. The predetermined manufacturing overhead rate is 120% of direct labor cost. Actual manufacturing overhead costs for April amounted to \$150,000.

Two jobs were completed with total costs of \$120,000 and \$85,000, respectively. They were sold on account for \$260,000 and \$150,000, respectively.

# Requirements:

- a) Compute the balance in work in process inventory on April 30th.
- b) Record the journal entry for direct materials used in April.
- c) Record the journal entry for total manufacturing labor incurred in April.
- d) Record the journal entry to assign manufacturing labor to the appropriate accounts.
- e) Record the journal entry for allocated manufacturing overhead for April.
- f) Record the journal entry to move the completed jobs into finished goods inventory.
- g) Record the journal entry to sell the two completed jobs on account.

## Answer:

a)  $$15,000 + $120,000 + (75\% \times $162,500) + [120\% \times (75\% \times $162,500)] - $120,000 - $85,000 = $198,125$ 

ъ.	General Journal	D 11:	Q 11:
<u>Date</u>	Accounts	Debit	Credit
b)	Work in Process Inventory Materials Inventory	120,000	120,000
c)	Manufacturing Wages Wages Payable	162,500	162,500
d)	Work in Process Inventory Manufacturing Overhead Manufacturing Wages	121,875 40,625	162,500
e)	Work in Process Inventory Manufacturing Overhead	146,250	146,250
f)	Finished Goods Inventory Work in Process Inventory	205,000	205,000
g)	Accounts Receivable Sales Revenue Cost of Goods Sold	410,000 205,000	410,000
	Finished Goods Inventory	,	205,000

Difficulty: 2 LO: 2-4 EOC Ref: E2-16

AACSB: Analytic Skills, Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-39 The following account balances as of January 1, 2009, were selected from the general ledger of Browning Manufacturing Company:

Work in process inventory \$0
Materials inventory \$24,000
Finished goods inventory \$44,000

## Additional data:

- 1) Actual manufacturing overhead for January amounted to \$59,000.
- 2) Total direct labor cost for January was \$56,000.
- 3) The predetermined manufacturing overhead rate is based on direct labor cost. The budget for 2009 called for \$300,000 of direct labor cost and \$360,000 of manufacturing overhead costs.
- 4) The only job unfinished on January 31, 2009, was Job No. 410, for which total labor charges were \$5,600 (700 direct labor hours) and total direct material charges were \$10,000.
- 5) Cost of direct materials placed in production during January totaled \$100,000. There were no indirect material requisitions during January, 2009.
- 6) January 31 balance in materials inventory was \$29,000.
- 7) Finished goods inventory balance on January 31 was \$30,000.

## Requirements:

- a) Determine the predetermined manufacturing overhead rate.
- b) Determine the amount of materials purchased during January.
- c) Determine cost of goods manufactured for January.
- d) Determine the work in process inventory balance on January 31st.
- e) Determine cost of goods sold for January.
- f) Determine whether manufacturing overhead is overallocated or underallocated and by what amount.

## Answer:

- a) \$360,000/\$300,000 = 120% of direct labor cost
- b) Beg Inv \$24,000+Purchases-Materials Requisitioned 100,000=End Inv \$29,000. Purchases = \$105,000
- c)  $\$100,000 + 56,000 + (1.20 \times \$56,000) 10,000 5,600 (1.20 \times \$5,600) = \$200,880$
- d)  $$10,000 + 5,600 + (1.20 \times $5,600) = $22,320$
- e) \$44,000 + \$200,880 \$30,000 = \$214,880
- f) Actual manufacturing overhead = \$59,000; Allocated manufacturing overhead = \$67,200 - \$59,000 = \$8,200 overallocated

Difficulty: 3 LO: 2-4

EOC Ref: E2-18

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

# 2.4-40 Prepare journal entries for the following transactions for Long Company:

- a) Materials purchased on account, \$62,500.
- b) Materials requisitioned for use in production: direct materials, \$33,600; indirect materials, \$5,400.
- c) Manufacturing labor incurred, \$35,000.
- d) Manufacturing labor allocation: 90% direct labor, 10% indirect labor.
- e) Depreciation on factory equipment, \$5,000.
- f) Prepaid expenses expired relating to the manufacturing operations, \$6,100.
- g) Other miscellaneous factory costs incurred, \$12,000 (credit accounts payable).
- h) Manufacturing overhead is allocated at 120% of direct labor cost.
- i) Cost of goods manufactured, \$88,000.
- j) Jobs sold to customers on account: cost of jobs, \$75,000; sales price, \$132,000.

### Answer:

## General Journal

<u>Date</u>	Accounts	Debit	Credit
a)	Materials Inventory Accounts Payable	62,500	62,500
b)	Work in Process Inventory Manufacturing Overhead Materials Inventory	33,600 5,400	39,000
c)	Manufacturing Wages Wages Payable	35,000	35,000
d)	Work in Process Inventory Manufacturing Overhead Manufacturing Wages	31,500 3,500	35,000
e)	Manufacturing Overhead Accum. DeprFactory Equip.	5,000	5,000
f)	Manufacturing Overhead Prepaid Expenses	6,100	6,100
g)	Manufacturing Overhead Accounts Payable	12,000	12,000
h)	Work in Process Inventory Manufacturing Overhead	37,800	37,800
i)	Finished Goods Inventory Work in Process Inventory	88,000	88,000
j)	Accounts Receivable Sales Revenue Cost of Goods Sold	132,000 75,000	132,000
	Finished Goods Inventory	73,000	75,000

## Calculations:

Difficulty: 2 LO: 2-4

d) \$35,000 x .9 = \$31,500; \$35,000 x .1 = \$3,500

h)  $\$31,500 \times 1.20 = \$37,800$ 

EOC Ref: E2-16

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

2.5-1 A service firm would most likely use a process costing system.

Answer: False Difficulty: 2 LO: 2-5

EOC Ref: S2-12

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.5-2 Both service firms and manufacturing companies allocate indirect costs.

Answer: True Difficulty: 2 LO: 2-5

EOC Ref: S2-12

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.5-3 Service firms follow the same approach as manufacturing companies to develop a predetermined indirect cost allocation rate.

cost anocation rate

Answer: True Difficulty: 2 LO: 2-5

EOC Ref: S2-12

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting

2.5-4 The main cost driver for service firms is usually machine hours.

Answer: False Difficulty: 2 LO: 2-5

EOC Ref: S2-13

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Reporting AICPA Functional Competencies: Reporting

2.5-5 Which of the following is the most significant cost for a service company which used job order costing?

- A) Labor costs
- B) Indirect costs
- C) Supplies costs
- D) Overhead costs

Answer: A Difficulty: 1 LO: 2-5 EOC Ref: S2-12

AACSB: Reflective Thinking

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

AICPA Functional Competencies: Measurement

2.5-6 The engineering firm of Dobbs and Smith uses a job order costing system to accumulate client-related costs. The overhead rate is 60% of direct labor cost. Staff engineer time is charged at a rate of \$80 per hour. A recent job for a client involved 30 staff labor hours.

Compute the cost of the job.

## Answer:

 $(30 \times \$80) + [(30 \times \$80) \times .60] = \underline{\$3,840}$ 

Difficulty: 2 LO: 2-5

EOC Ref: E2-23

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking

AICPA Functional Competencies: Measurement

- 2.5-7 Abba Accounting expects its accountants to work a total of 24,000 direct labor hours per year. Abba's estimated total indirect costs are \$240,000.
  - A) What is the indirect cost allocation rate?
  - B) What indirect costs will be allocated to client 405, if one accountant works 28 hours to prepare the annual report?

#### Answer:

- A) \$240,000/24,000 hours = \$10 per hour
- B)  $$10 \text{ per hour} \times 28 \text{ hours} = $\frac{$280}{}$

Difficulty: 2 LO: 2-5

EOC Ref: S2-13

AACSB: Analytic Skills

AICPA Business Perspective Competencies: Critical Thinking