

MANAGEMENT ACCOUNTING – ASSIGNMENT HELP

Problem 1) Job Costing

Description

In this part of the project, there are two independent problems that study job costing systems.

Learning objectives

- 1) Outline the seven step approach to job costing.
- 2) Track the flow of costs in a job costing system.

Problem One Directions

Jordan Manufacturing Company has the following departments with the following data:

	<u>Department X</u> direct labor cost	<u>Department Y</u> machine hours
<u>Budget departmental annual data</u>		
Direct labor costs	\$180,000	\$165,000
Indirect manufacturing costs	\$225,000	\$180,000
Machine hours	51,000	40,000
<u>Actual data for Job 101</u>		
Direct material costs	\$10,000	\$16,000
Direct labor costs	\$11,000	\$14,000
Machine hours	5,000	3,000

Required:

- A. Determine the predetermined allocation rate for department X.
- B. Determine the predetermined allocation rate for department Y.
- C. Determine the amount of indirect manufacturing costs allocated to Job 101.
- D. Assume that Job 101 is comprised of 50 finished units. Determine the total manufacturing cost per unit of Job 101.

Answers:

- A. The predetermined allocation rate for Department X will be $225000/180000=1.25$
- B. The predetermined allocation rate for Department Y will be $180000/40000=4.5$
- C. The amount of indirect manufacturing cost allocated to Job 101 will be:

For Department X: $11000*1.25= \$13750$

For Department Y: $3000*4.5= \$13500$

Total indirect manufacturing cost allocated to Job 101 is \$27,250

- D.

	Department X	Department Y	Total
Material Cost	10,000	16,000	26,000
Labor Cost	11,000	14,000	25,000
Indirect Manufacturing Cost	13,750	13,500	27,250
Total Cost			78,250
No of Units			50
Cost per Unit			1,565

Problem Two Directions

Leblanc Manufacturing Company has the following financial data for the year:

Direct materials ending inventory balance	\$15,000
Work in process ending inventory balance	\$34,500
Finished goods ending inventory balance	\$49,500
Under applied factory overhead	\$4,000
Cost of goods sold	\$74,500
Direct materials purchased	\$41,000
Direct materials consumed	\$47,000
Cost of finished goods completed	\$102,000
Factory overhead applied to jobs	\$48,000
Factory overhead application rate	120% of direct labor dollars

Assume the under applied overhead has NOT yet been charged off.

Required:

- Determine beginning direct materials inventory.
- Determine direct labor costs incurred during the year.
- Determine beginning work in process inventory.
- Determine beginning finished goods inventory.
- Determine actual factory overhead (indirect manufacturing costs) incurred during the year.

Answers:

- We know that Opening Inventory + Purchases - Closing Inventory = D. Materials Consumed.
Therefore, Opening Direct Material Inventory = $47,000 + 15,000 - 41,000 = \$21,000$
- Factory Overhead applied to jobs = \$48,000 & Factory Overhead application rate is 120% of direct labour dollars. Therefore, Direct labor cost = $48,000 / 1.2 = \$40,000$
-

	Amount	Amount
Opening Inventory	\$21,000	
Add: Purchases	\$41,000	
Less: Closing Inventory	\$15,000	
Direct Materials Consumed		\$47,000

Direct Labor		\$40,000
Prime Cost		\$87,000
Factory Overhead		\$48,000
Factory Cost (Gross)		\$135,000
Add: Opening WIP Inventory		\$1,500
Less: Closing WIP Inventory		\$34,500
Works Cost		\$102,000
Add: Office & Administration Overhead		\$0
Costs of finished goods completed		\$102,000

In the above table, Opening WIP inventory has been calculated which is \$1500.

- D. We know, Total Cost of Production + Opening Finished Goods Inventory - Closing Finished Goods Inventory = Cost of Goods Sold
Therefore, Opening Finished Goods Inventory = $\$74,500 + \$49,500 - \$1,02,000 = \$22,000$
- E. Actual Factory Overhead incurred = $\$48,000 + \$4,000 = \$52,000$

Part Two: Inventory Costing

Description

In this part of the project, there is one problem that studies variable costing and absorption costing.

Learning objectives

- 1) Understand what distinguishes variable costing from absorption costing.
- 2) Determine differences in income between variable costing and absorption costing.

Directions

Jarvis Manufacturing Company has the following financial data for the year:

Sell price per unit	\$20
Direct labor time required per unit	15 minutes
Fixed selling and administrative costs	\$40,000
Fixed indirect manufacturing costs	\$132,000
Direct materials cost per unit	\$2
Direct labor cost per hour	\$24
Variable indirect manufacturing cost per unit	\$4
Variable selling expenses per unit	\$2
Units produced	30,000
Units sold	28,000
Beginning inventory units	0

Assume actual costs and production units equal budget costs and production units.

Required:

- A. Determine the inventoriable cost per unit under absorption costing.
- B. Determine the inventoriable cost per unit under variable costing.
- C. Determine the cost of goods sold under absorption costing.

- D. Determine the cost of goods sold under variable costing.
- E. Without preparing financial statements and focusing only on ending inventory, determine the difference in operating income between absorption costing and variable costing.

Answers:

- A. Inventoriable Cost per unit under absorption costing = $\$2 + (\$24/4) + \$4 + (\$132,000/30,000) = \$16.4$
- B. Inventoriable Cost per unit under variable costing = $\$2 + (\$24/4) + \$4 = \12
- C. Cost of Goods Sold under Absorption Costing:

	Amount
Direct Materials Cost	\$60,000
Direct Labor Cost	\$180,000
Prime Cost	\$240,000
Add: Fixed Indirect Manufacturing Cost	\$132,000
Add: Variable Indirect Manufacturing Cost	\$120,000
Total Cost of Production	\$492,000
Less: Closing Stock of finished goods	\$32,800
Cost of goods sold	\$459,200

- D. Cost of Goods Sold under Variable Costing:

	Amount
Direct Materials Cost	\$60,000
Direct Labor Cost	\$180,000
Prime Cost	\$240,000
Add: Variable Indirect Manufacturing Cost	\$120,000
Total Cost of Production	\$360,000
Less: Closing Stock of finished goods	\$24,000
Cost of goods sold	\$336,000

- E. Difference in the net income obtained under absorption costing and variable costing = Ending Inventory*Fixed Indirect Manufacturing Cost per unit = $2000 * (\$132,000/30,000) = \$8,800$