

Ch. 11: Service Dept. and Joint Cost Allocation

1. Harry Dorffman owns and operates Harry's Abstracting Service. Harry's two revenue generating operations (Abstracting Services and Closing Services) are supported by two service departments: Clerical and Custodial. Costs in the service departments are allocated in the following order using the designated allocation bases.

Clerical: number of transactions processed

Custodial: square footage of space occupied

Average and expected activity levels for next month are as follows:

	<u>Number of Transactions</u>	<u>Square Footage</u>	<u>Expected Costs</u>
Abstract services	50	1,800	
Closing services	25	2,200	
Clerical		1,600	\$40,000
Custodial	5		10,000

Required:

Use the direct method to allocate the service department costs to the revenue generating departments. Provide the total costs for the revenue departments.

2. Harry Dorffman owns and operates Harry's Abstracting Service. Harry's two revenue generating operations Abstracting Services and Closing Services are supported by two service departments: Clerical and Custodial. Costs in the service departments are allocated in the following order using the designated allocation bases.

Clerical: number of transactions processed

Custodial: square footage of space occupied

Average and expected activity levels for next month are as follows:

	<u>Number of Transactions</u>	<u>Square Footage</u>	<u>Expected Costs</u>
Abstract services	50	1,800	
Closing services	25	2,200	
Clerical		1,600	\$40,000
Custodial	5		10,000

Required:

- Use the step method to allocate the service department costs to the revenue generating departments. Assume Clerical costs are allocated before Custodial costs and round all calculations to the nearest whole dollar. Provide the total costs for the revenue departments.
- Use the step method to allocate the service department costs to the revenue generating departments but now assume Custodial costs are allocated before Clerical costs. Provide the total costs for the revenue departments.

3. Harry Dorffman owns and operates Harry's Abstracting Service. Harry's two revenue generating operations (Abstracting Services and Closing Services) are supported by two service departments: Clerical and Custodial. Costs in the service departments are allocated in the following order using the designated allocation bases.

Clerical: number of transactions processed

Custodial: square footage of space occupied

Average and expected activity levels for next month are as follows:

	<u>Number of Transactions</u>	<u>Square Footage</u>	<u>Expected Costs</u>
Abstract services	50	1,800	
Closing services	25	2,200	
Clerical		1,600	\$40,000
Custodial	5		10,000

Required:

Use the reciprocal method to allocate the service department costs to the revenue generating departments. Provide the total costs for the revenue departments.

4. Albertville Corp has three operating departments (Fabricating, Assembly, and Finishing) and two service departments (Custodial and Administrative). The following information has been provided:

	<u>Custodial</u>	<u>Admin</u>	<u>Fabricating</u>	<u>Assembly</u>	<u>Finishing</u>
Dept Costs	\$250,000	\$400,000	--	--	--
# employees	10	--	80	100	60
Sq ft	--	15,000	30,000	35,000	20,000

Allocations are based on the following:

Custodial: Square feet

Administrative: Number of employees

Required:

Albertville has been approached by ServiceMaster to outsource the custodial service. *Assuming all costs are variable*, what is the relevant cost of the custodial department to compare with the ServiceMaster bid?

5. Daz Manufacturing Company buys Liquid Charcoal for \$.80 a gallon. At the end of processing in department 1, the liquid charcoal splits off into Products U, V, and W. Product U is sold at the split-off point, with no further processing. Products V and W require further processing before they can be sold; Product V is processed in Department 2, and Product W is processed in Department 3. Following is a summary of costs and other related data for the most recent accounting period:

	Department		
	<u>1</u>	<u>2</u>	<u>3</u>
Cost of liquid charcoal	\$104,000		
Direct labor	16,000	45,000	65,000
Manufacturing overhead	10,000	27,000	49,000

	Products		
	<u>U</u>	<u>V</u>	<u>W</u>
Gallons sold	20,000	30,000	50,000
Gallons on hand end of period	15,000	0	15,000
Sales in dollars	\$30,000	\$96,000	\$142,000

There were no beginning inventories and there was no liquid charcoal on hand at the end of the period. All gallons on hand in ending inventory were complete as to processing. Daz uses the estimated net realizable value method of allocating joint costs.

Required:

- Determine the product cost for U, V and W, assuming the physical quantity method is used to allocate joint costs.
- Determine the product cost for U, V and W, assuming the net realizable value method is used to allocate joint costs.