

Cost Allocation – Introduction

Two Basic Types:

1. Joint Costing
2. Departmental Costing

Cost Allocation – Example

Question from: Blocher et al. Cost Management: A Strategic Emphasis, 8th edition, © 2019, McGraw-Hill Education ISBN: 978-1-260-09172-4

7-45 Joint Products Johnston Adhesives Company makes three widely used industrial adhesives: A101, A204, and B216. Sales and production information for each of the three adhesives are shown in the following table. Most of Johnston's customers ask for a special blend of the three products, which improves heat-resistance. The additional separable processing requires additional time and materials, and the price is increased accordingly, as shown in the table. Assume that Johnston produces only for specific customer orders, so there is no beginning or ending inventory. Assume also that all of Johnston's customers requested the heat-resistant version of the products so that all production required additional separable processing. Total joint cost for the three products is \$3,500,000.

	A101	A204	B216
Gallons sold	175,000	135,000	115,000
Final sales price per gallon	\$ 14	\$ 10	\$ 12
Price at split-off	10	5	10
Separable processing cost	\$550,000	\$125,000	\$625,000

Required

1. Using four decimal points in your computations, calculate the unit product cost and total gross margin for each of the three product lines using the following methods: (a) physical measure method, (b) sales value at split-off method, (c) the net realizable value method, and (d) the constant gross margin percentage method.

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7-29 Departmental Cost Allocation Robinson Products Company has two service departments (S1 and S2) and two production departments (P1 and P2). The distribution of each service department's efforts (in percentages) to the other departments is:

From	To			
	S1	S2	P1	P2
S1	—	10%	20%	??%
S2	10%	—	?	30

The direct operating costs of the departments (including both variable and fixed costs) are:

S1	\$180,000
S2	60,000
P1	50,000
P2	120,000

Required

1. Determine the total cost of P1 and P2 using the direct method.
2. Determine the total cost of P1 and P2 using the step method.
3. Determine the total cost of P1 and P2 using the reciprocal method.

Cost Allocation – Example

Touchstone is a small manufacturer with two Production Departments (Fabricating and Assembly) and two Service Departments (Facilities and information systems). The assembly division assembles items manufactured by fabricating and packages them for shipment. Touchstone uses number of employees to allocate facilities costs & uses processing times to allocate Info. Systems. The following data are available for September:

	Service Depts		Production Depts	
	Facilities	Information Systems	Fabricating	Assembly
Department Costs	\$145,400	\$468,800	\$1,996,540	\$979,720
Facilities: (# of employees)		42	84	56
Information Systems: (mins processing time)	640		3,840	3,200

Required:

- A. Allocate the support divisions costs to the operating divisions using the direct method.
- B. Allocate the support divisions costs to the operating divisions using the step-down method allocating Facilities first.
- C. Using the reciprocal method, define the two relevant equations and solve the amount of funds to allocate. Note- there is no need to allocate costs.