

Cost of Goods Manufactured

EX 1

The following information is available for Keystone Company.

	March 1	March 31
Raw materials inventory	\$12,000	\$10,000
Work in process inventory	2,500	4,000
Materials purchased in March	\$ 90,000	
Direct labor in March	75,000	
Manufacturing overhead in March	220,000	

Prepare the cost of goods manufactured schedule for the month of March.

Solution:

Keystone Company Cost of Goods Manufactured Schedule For the Month Ended March 31

Work in process, March 1		\$ 2,500
Direct materials		
Raw materials, March 1	\$ 12,000	
Raw material purchases	<u>90,000</u>	
Total raw materials available for use	102,000	
Less: Raw materials, March 31	<u>10,000</u>	
Direct materials used	\$ 92,000	
Direct labor	75,000	
Manufacturing overhead	<u>220,000</u>	
Total manufacturing costs		<u>387,000</u>
Total cost of work in process		389,500
Less: Work in process, March <u>31</u>		<u>4,000</u>
Cost of goods manufactured		<u>\$385,500</u>

Balance Sheet

The balance sheet for a merchandising company shows just one category of inventory. In contrast, the balance sheet for a manufacturer may have three inventory accounts, as shown in Illustration 1-8.

Raw Materials Inventory



Shows the cost of raw materials on hand.

Work in Process Inventory



Shows the cost applicable to units that have been started into production but are only partially completed.

Finished Goods Inventory



Shows the cost of completed goods on hand.

Finished Goods Inventory is to a manufacturer what Merchandise Inventory is to a merchandiser. Each of these classifications represents the goods that the company has available for sale.

The current assets sections presented in Illustration 1-9 contrast the presentations of inventories for merchandising and manufacturing companies. Manufacturing companies generally list their inventories in the order of their liquidity—the order in which they are expected to be realized in cash. Thus, finished goods inventory comes first. The remainder of the balance sheet is similar for the two types of companies.

Illustration 1-9

Current assets sections of merchandising and manufacturing balance sheets

Merchandising Company Balance Sheet December 31, 2014		Manufacturing Company Balance Sheet December 31, 2014	
Current assets		Current assets	
Cash	\$100,000	Cash	\$180,000
Receivables (net)	210,000	Receivables (net)	210,000
Merchandise inventory	400,000	Inventories	
Prepaid expenses	22,000	Finished goods	\$80,000
Total current assets	<u>\$732,000</u>	Work in process	25,200
		Raw materials	<u>22,800</u>
		Prepaid expenses	18,000
		Total current assets	<u>\$536,000</u>

Managerial accounting provides financial and nonfinancial information to an organization's managers. Managers include, for example, employees in charge of a company's divisions; the heads of marketing, information technology, and human resources; and top-level managers such as the chief executive officer (CEO) and chief financial officer (CFO). This section explains the purpose of managerial accounting (also called *management accounting*) and compares it with financial accounting.

Purpose of Managerial Accounting

The purpose of managerial accounting is to provide useful information to aid in three key managerial tasks:

1. Determining the costs of an organization's products and services.
2. Planning future activities.
3. Comparing actual results to planned results

Cost of goods manufactured Total cost of work in process less the cost of the ending work in process inventory

Direct labor The work of factory employees that can be physically and directly associated with converting raw materials into finished goods.

Direct materials Raw materials that can be physically and directly associated with manufacturing the finished product.

Indirect labor Work of factory employees that has no physical association with the finished product, or for which it is impractical to trace the costs to the goods produced.

Indirect materials Raw materials that do not physically become part of the finished product or for which it is impractical to trace to the finished product because their physical association with the finished product is too small.

Managerial accounting A field of accounting that provides economic and financial information for managers and other internal users.

Manufacturing overhead Manufacturing costs that are indirectly associated with the manufacture of the finished product.

Period costs : Costs that are matched with the revenue of a specific time period and charged to expense as incurred.

Product costs: Costs that are a necessary and integral part of producing the finished product.

Total cost of work in process: Cost of the beginning work in process plus total manufacturing costs for the current period.

Total manufacturing costs : The sum of direct materials, direct labor, and manufacturing overhead incurred in the current period.

EX 2

Super Company has the following cost and expense data for the year ending December 31, 2018.

Raw materials, 1/1/18	\$ 30,000	Insurance, factory	\$ 14,000
Raw materials, 12/31/18	20,000	Property taxes, factory building	6,000
Raw materials purchase	205,000	Sales revenue	1,500,000
Indirect materials	15,000	Delivery expenses	100,000
Work in process, 1/1/18	80,000	Sales commissions	150,000
Work in process, 12/31/18	50,000	Indirect labor	90,000
Finished goods, 1/1/18	110,000	Factory machinery rent	40,000
Finished goods, 12/31/18	120,000	Factory utilities	65,000
Direct labor	350,000	Depreciation, factory building	24,000
Factory manager's salary	35,000	Administrative expenses	300,000

Instructions

- Prepare a cost of goods manufactured schedule for Superior Company for 2018.
- Prepare an income statement for Superior Company for 2018.
- Assume that Superior Company's accounting records show the balances of the following current asset accounts: Cash \$17,000, Accounts Receivable (net) \$120,000, Prepaid Expenses \$13,000, and Short-Term Investments \$26,000. Prepare the current assets section of the balance sheet for Superior Company as of December 31, 2018

Solution:

a- Super Company Cost of Goods Manufactured Schedule
For the Year Ended December 31, 2018

Work in process, 1/1		\$ 80,000
Direct materials		
Raw materials inventory, 1/1	\$ 30,000	
Raw materials purchases	205,000	
Total raw materials available for use	235,000	
Less: Raw materials inventory, 12/31	20,000	
Direct materials used		\$215,000
Direct labor		350,000
Manufacturing overhead		
Indirect labor	90,000	
Factory utilities	65,000	
Factory machinery rent	40,000	
Factory manager's salary	35,000	
Depreciation, factory building	24,000	
Indirect materials	15,000	
Insurance, factory	14,000	
Property taxes, factory building	6,000	
Total manufacturing overhead		289,000
Total manufacturing costs		854,000
Total cost of work in process		934,000
Less: Work in process, 12/31		50,000
Cost of goods manufactured		<u>\$ 884,000</u>

**Super Company Cost of Goods Manufactured Schedule
For the Year Ended December 31, 2018**

b-

Sales revenue		\$1,500,000
Cost of goods sold		
Finished goods inventory, January 1	\$110,000	
Cost of goods manufactured	884,000	
Cost of goods available for sale	994,000	
Less: Finished goods inventory, December 31	<u>120,000</u>	
Cost of goods sold		<u>874,000</u>
Gross profit		626,000
Operating expenses		
Administrative expenses	300,000	
Sales commissions	150,000	
Delivery expenses	<u>100,000</u>	
Total operating expenses		<u>550,000</u>
Net income		<u>\$ 76,000</u>

c-

**Super Company Cost of Goods Manufactured Schedule
For the Year Ended December 31, 2018**

Current assets		
Cash		\$ 17,000
Short-term investments		26,000
Accounts receivable (net)		120,000
Inventories		
Finished goods	\$120,000	
Work in process	50,000	
Raw materials	<u>20,000</u>	190,000
Prepaid expenses		<u>13,000</u>
Total current assets		<u>\$ 366,000</u>

Q1

The following information is available for Fishel Company.

	April 1	April 30
Raw materials inventory	\$10,000	\$14,000
Work in process inventory	5,000	3,500
Materials purchased in April	\$ 98,000	
Direct labor in April	80,000	
Manufacturing overhead in April	180,000	

Prepare the cost of goods manufactured schedule for the month of April.

Q2

Company reports the following costs and expenses in May.

Factory utilities	\$ 15,500	Direct labor	\$69,100
Depreciation on factory equipment	12,650	Sales salaries	46,400
delivery trucks	3,800	Property taxes on factory building	2,500
Indirect factory labor	48,900	Depreciation on office equipment	1,300
Indirect materials	80,800	Repairs to office equipment	1,300
Direct materials used	137,600	Factory repairs	2,000
Factory manager's salary	8,000	Advertising	15,000
		Office supplies used	2,640

Instructions

From the information, determine the total amount of:

- (a) Manufacturing overhead.
- (b) Product costs.
- (c) Period costs.

Q3

In below are current asset items for Ru Company's balance sheet at December 31, 2018. Prepare the current assets section

Accounts receivable	\$200,000
Cash	62,000
Finished goods	91,000
Prepaid expenses	38,000
Raw materials	73,000
Work in process	87,000