

Equations for Income Statements and Cost Concepts

$$MC = DM + DL + MO$$

$$CC = DL + MO$$

$$COGS = \text{Beg Fin Inv} + COGM - \text{End Fin Inv}$$

$$PC = DM + DL$$

$$I = RM + WIP + FG$$

$$COGM = RM + DL + MO + \text{BegWIP} - \text{EndWIP}$$

Manufacturing costs = direct materials plus direct labor plus manufacturing overhead

Prime costs = direct materials plus direct labor

Conversion costs = direct labor plus manufacturing overhead

Total inventory = raw materials plus work in process plus finished goods

Income statement:

Sales

Less costs of goods sold = gross margin

Less operating expenses = net operating income

Costs of goods sold in a merchandising company

Beginning merchandising inventory

Add: purchases

Less: ending merchandising inventory = cost of goods sold

Costs of goods sold in a manufacturing company

Beginning finished goods inventory

Add: cost of goods manufactured

Less: ending finished goods inventory = cost of goods sold

Cost of goods manufactured

Direct materials:

Beginning raw materials inventory

Add purchases of raw materials

Less: raw materials end inventory = raw materials
used in production

Add direct labor

Add manufacturing labor = manufacturing costs

Add beginning work in process

Less: ending work in process = cost of goods manufactured

Product costs = raw materials direct labor and manufacturing overhead

Period costs = selling and administrative