Equations for Income Statements and Cost Concepts

\[ MC = DM + DL + MO \]
\[ CC = DL + MO \]
\[ COGS = \text{Beg Fin Inv} + \text{COGM} - \text{End Fin Inv} \]
\[ PC = DM + DL \]
\[ I = RM + WIP + FG \]
\[ \text{COGM} = RM + DL + MO + \text{BegWIP} - \text{EndWIP} \]

**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