

Mathematics Education and Support Hub (MESH)

Accounting: Equations

Sample Questions - Solutions

1. $\text{Assets} = \text{Liabilities} + \text{Equity}$

$$\text{Assets} = \$60,500$$

$$\text{Equity} = \$29,750$$

Therefore;

$$\$60,500 = \text{Liabilities} + \$29,750$$

$$\text{Liabilities} = \$60,500 - \$29,750$$

$$\text{Therefore, Liabilities} = \$30,750$$

2. $\text{Assets} = \text{Liabilities} + \text{Equity}$

$$\text{Assets} = \$124,650$$

$$\text{Liabilities} = \$75,350$$

Therefore;

$$\$124,650 = \$75,350 + \text{Equity}$$

$$\text{Equity} = \$124,650 - \$75,350$$

$$\text{Therefore, Equity} = \$49,300$$

3. Wage = Hours worked x Hourly rate

This can be rearranged as;

Hourly rate = Wage / Hours worked

Wage = \$636.50

Hours worked = 38

Therefore;

$$\begin{aligned}\text{Hourly rate} &= \$636.50 / 38 \\ &= \$16.75\end{aligned}$$

Therefore Sam's hourly rate is \$16.75 per hour.

4. Shop B = \$86.50

Since Shop A is \$9 cheaper;

Shop A = Shop B - \$9

Therefore;

$$\begin{aligned}\text{Shop A} &= \$86.50 - \$9 \\ &= \$77.50\end{aligned}$$

Therefore, Shop A sells the part for \$77.50

5. Number of shoes required = Total net profit / net profit per shoe

Net profit per shoe = \$25

Total net profit = \$3,500

Therefore;

$$\begin{aligned}\text{Number of shoes required} &= \$3,500 / \$25 \\ &= 140\end{aligned}$$

Therefore, the company needs to manufacture 140 shoes to make a total net profit of \$3,500.