

## (i) Calculate gross profit

To obtain the gross profit we need cost of sales

$$\text{Cost of sales} = \text{Opening inventory} + \text{purchases} - \text{Closing inventory}$$

$$\rightarrow \text{opening inventory} = 5,000$$

$$\rightarrow \text{Closing inventory} = 6,000$$

$$\rightarrow \text{Gross profit} = \text{Sales} - \text{Cost of sales}$$

Therefore we need to calculate the value of purchases first

## (ii) Calculate the value of purchases

From the net profit provided we can get the gross profit

$$\text{Net profit} = \text{gross profit} - \text{Total Expenses}$$

$$6000 = \text{gross profit} - 5,600$$

$$\begin{aligned} \text{Gross profit} &= 6,000 + 5,600 \\ &= 11,600 \end{aligned}$$

Now we can use the gross profit to find the cost of sales

$$\text{Gross profit} = \text{Sales} - \text{Cost of sales}$$

$$11,600 = 35,000 - \text{Cost of sales}$$

$$\begin{aligned} \text{Cost of sales} &= 35,000 - 11,600 \\ &= 23,400 \end{aligned}$$

Using Sales Formula to find purchases

$$\text{Cost of sales} = \text{opening inventory} + \text{purchases} - \text{closing inventory}$$

$$23,400 = 5,000 + \text{purchases} - 6,000$$

$$\therefore 23,400 = \text{purchases} - 1,000$$

$$\begin{aligned} \text{purchases} &= 23,400 + 1,000 \\ &= 24,400 \end{aligned}$$

$$\text{purchases} = \underline{\underline{24,400}}$$

$$\text{Gross profit} = \underline{\underline{11,600}}$$