



Profit, Loss, Discount, Value Added Tax (VAT) Ex 13.2 Q11

Answer :

Let C.P be Rs x and M.P be Rs y .

$$\text{Gain}\% = 50$$

We know that,

$$\begin{aligned}\text{S.P} &= \left[\frac{(100 + \text{Gain}\%)}{100} \times \text{C.P} \right] \\ &= \left[\frac{150}{100} \times x \right] \\ &= \frac{3}{2} x\end{aligned}$$

$$\text{Discount}\% = 25$$

$$\text{Discount} = 25\% \text{ of } y$$

$$= \text{Rs } 0.25y$$

$$\text{So, S.P} = \text{M.P} - \text{Discount}$$

$$= y - 0.25y$$

$$= 0.75y$$

$$\text{So, S.P} = 0.75y$$

$$\text{Also, S.P} = \frac{3}{2} x$$

Comparing both values for S.P., we get:

$$\frac{3}{2} x = 0.75y$$

$$\frac{x}{y} = \frac{0.75 \times 2}{3}$$

$$= \frac{1.5}{3}$$

$$= \frac{1}{2}$$

$$\text{Thus, C.P} : \text{M.P} = 1 : 2$$

***** END *****