



Profit, Loss, Discount, Value Added Tax (VAT) Ex 13.1 Q3

Answer :

C. P of 9 apples = Rs 9.60

\therefore C. P of 1 apple = Rs $\frac{9.60}{9}$ = Rs $\frac{16}{15}$

S. P of 11 apples = Rs 12

\therefore S. P of 1 apple = Rs $\frac{12}{11}$

Clearly, S. P of 1 apple > C. P of 1 apple

So, we get profit on selling apples

$$\begin{aligned} \text{Gain \%} &= \left(\frac{\text{gain} \times 100}{\text{C.P.}} \right) \\ &= \left(\frac{\frac{12}{11} - \frac{16}{15}}{\frac{16}{15}} \right) \times 100 \\ &= \left(\frac{12 \times 15 - 16 \times 11}{15 \times 11} \right) \times \frac{15}{16} \times 100 \\ &= \left(\frac{180 - 176}{11 \times 16} \right) \times 100 \\ &= \left(\frac{4}{11 \times 16} \right) \times 100 \\ &= 2 \frac{3}{11} \% \end{aligned}$$

Profit, Loss, Discount, Value Added Tax (VAT) Ex 13.1 Q4

Answer :

Let the cost price of one article be Rs. C and the selling price be Rs. S

Therefore, $10C = 9S$

$$C = \frac{9}{10} S$$

So, the cost price is less than the selling price.

$$\text{S. P.} = \left(\frac{100 + \text{Profit \%}}{100} \right) \text{C. P.}$$

$$S = \left(\frac{100 + \text{Profit \%}}{100} \right) C$$

$$\frac{S}{C} = \left(\frac{100 + \text{Profit \%}}{100} \right)$$

$$\frac{10}{9} = \left(\frac{100 + \text{Profit \%}}{100} \right)$$

$$\frac{1000}{9} = 100 + \text{Profit \%}$$

$$\frac{1000}{9} - 100 = \text{Profit \%}$$

$$\text{Profit \%} = \frac{1000 - 900}{9}$$

$$= 11 \frac{1}{9} \%$$

Therefore, the required profit percent is $11 \frac{1}{9} \%$.

***** END *****

