Exercise 11A

(iii) SP = Rs. 8510

Loss = 8%

$$CP = \left\{ \frac{100}{(100 - Loss\%)} \times SP \right\}$$

$$= \left\{ \frac{100}{(100 - 8)} \times 8510 \right\}$$

$$= \frac{851000}{92}$$

$$= Rs.\ 9250$$

(iv) SP = Rs. 5600

Loss = $6\frac{2}{3}\% = \frac{20}{3}\%$

$$CP = \left\{ \frac{100}{(100 - Loss\%)} \times SP \right\}$$

$$= \left\{ \frac{100}{\left(100 - \frac{20}{3}\right)} \times 5600 \right\}$$

$$= \left\{ \frac{300}{280} \times 5600 \right\}$$

$$= \frac{168000}{28}$$

$$= Rs.\ 6000$$

Q4

Answer :

Cost price of an almirah = Rs. 13600
Transportation cost = Rs. 400
Total cost price = Rs. (13600 + 400) = Rs. 14000
Selling price = Rs. 16800
Now, SP > CP

$$\textbf{Gain} \;=\; \textbf{SP} \;-\; \textbf{CP} \;=\; (16800 - 14000) = \text{Rs. } 2800$$

$$\textbf{Gain\%} \;=\; \left(\frac{\text{Gain}}{\text{CP}} \times 100 \right)\%$$

$$=\; \left(\frac{2800}{14000} \times 100 \right)\%$$

$$=\; \frac{2800}{140}\%$$

$$=\; 20\%$$

Q5

Answer :

Cost price of the house = Rs. 765000
Cost of repairing the house = Rs. 115000
Total Cost price = (765000 + 115000) = Rs. 880000
Ravi sold it at a gain of 5%.

$$\textbf{SP} = \left\{ \frac{(100 + \text{ gain } \%)}{100} \times \textbf{CP} \right\}$$

$$= \left\{ \frac{(100+5)}{100} \times 880000 \right\}$$

$$= \frac{105}{100} \times 880000$$

$$= \textbf{Rs. 924000}$$

He gets Rs. 924000.

Q6

Answer :

CP of 12 lemons (dozen) = Rs. 25

CP of one lemon = Rs. $\frac{25}{12}$

CP of five lemons = 5 × $\frac{25}{12}$ = $\frac{125}{12}$ = **Rs. 10.42**

SP of five lemons = Rs. 12   (given)

Gain = SP - CP = (12 - 10.42) = Rs 1.58

$$\textbf{Gain \%} = \left(\frac{\textbf{Gain}}{\textbf{CP}} \times 100 \right)\%$$

$$= \left(\frac{1.58}{10.42} \times 100 \right) \%$$

= 15.2%

Q7

Answer :

Let the cost price of the pen be Re 1.

Cost price of 12 pens = Rs 12

SP of 12 pens = CP of 15 pens = Rs 15

Gain = SP - CP = Rs (15 - 12) = Rs 3

$$\text{Gain\%} = \left(\frac{\text{Gain}}{\text{CP}} \times 100 \right)\%$$

$$= \left(\frac{3}{12} \times 100 \right)\%$$
$$= 25\%$$

Gain% = 25%

Q8

Answer :

Let the cost price of one spoon be Re 1.

CP of 16 spoons = Rs 16

SP of 16 spoons = CP of 15 spoons = Rs 15

Loss = CP - SP = (16 - 15) = Re 1

$$\text{Loss\%} = \left(\frac{\text{Loss}}{\text{CP}} \times 100 \right)\%$$

$$= \left(\frac{1}{16} \times 100 \right)\%$$
$$= 6.25\%$$

Loss% = 6.25%

********** END *********