

4) A boy buys an old bicycle for Rs. 162 and spends Rs. 18 on its repairs before selling the bicycle for Rs. 207. Find his gain or loss percent.

Ans → Buying price of the old bicycle = Rs. 162

money spent on repairs = Rs. 18

Real C.P of the bicycle = $162 + 18 = \text{Rs. } 180$

S.P of the bicycle = Rs. 207

Profit = S.P - C.P = $207 - 162 = \text{Rs. } 45$

Gain % = $\frac{\text{Profit}}{\text{C.P}} \times 100$

$$= \frac{45}{180} \times 100 = \frac{100}{4} = 25\%$$

EXERCISE (8.1A)

5) An article is bought from Jaipur for Rs. 4,800 and is sold in Delhi for Rs. 5,820. If Rs. 1,200 is spent on its transportations, etc. Find the loss or the gain as percent.

Ans → cost price = Rs. 4,800

Selling price = Rs. 5,820

Transport etc. charges = Rs. 1,200

Total cost price = Rs. 4,800 + Rs. 1,200 = Rs. 6,000

Loss = Rs. 6,000 - Rs. 5,820 = Rs. 180

∴ Loss % = $\frac{180}{6000} \times 100 = 3\%$

6) Mohit sold a T.V. for Rs. 3,600, gaining one-sixth of its selling price. Find:

(i) the gain

(ii) the cost price of the goods T.V

(iii) the ~~loss~~ gain as percent

Ans → S.P. of T.V. = Rs. 3,600

Gain = $\frac{1}{6}$ of (3,600) = $\frac{1}{6} \times 3,600 = \text{Rs. } 600$

(i) Thus gain = Rs. 600

(ii) cost price = 3600 - 600 = Rs. 3000

(iii) Gain % = $\frac{600}{3000} \times 100 = \frac{60}{3} = 20\%$

7) By selling a certain number of goods for Rs. 5,500; a shopkeeper loses equal to one-tenth of their selling price. Find:

(i) the loss incurred

(ii) the cost price of the goods

(iii) the loss as percent.

Ans \rightarrow S.P = Rs. 5,500

Loss = $\frac{1}{10}$ of (S.P) = $\frac{1}{10} \times 5500 = \text{Rs. } 550$

(i) Loss incurred = Rs. 550

(ii) C.P = Rs. 5,500 + Rs. 550 = Rs. 6,050

(iii) Loss % = $\frac{550 \times 100}{6050} = \frac{10 \times 100}{110} = \frac{100}{11} = 9\frac{1}{11}\%$

8) The selling price of a sofa-set is 4 times of its cost price. Find the gain or the loss as a percent.

Ans \rightarrow Let the cost price (C.P) = 1

S.P = $1 \times \frac{4}{5} = \frac{4}{5}$

\therefore Loss = $1 - \frac{4}{5} = \frac{5-4}{5} = \frac{1}{5}$

\therefore Loss % = $\frac{\text{Loss}}{\text{C.P}} = \frac{1}{5} \times 100 = \frac{1}{5} \times 100 = 20\%$