

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

Ans) $CP = ₹162$

Repairing = ₹18

Total $CP = ₹180$

$SP = ₹207$

$SP > CP$

Profit = $207 - 180 = 27$

$P\% = \frac{P}{CP} \times 100 = \frac{27}{180} \times 100 = 15\%$

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

Ans) $CP = ₹4,800$

$SP = ₹5,820$

Transport charges spent = ₹1,200

Total $CP = ₹6,000$

$CP > SP$

Loss = $6000 - 5820 = 180$

$L\% = \frac{L}{CP} \times 100 = \frac{180}{6000} \times 100 = 3\%$

- 6) Mohit sold a T.V. for ₹3,600; gaining one-sixth of its selling price. Find:
- the gain.
 - The cost price of the T.V.
 - the gain percent.

Ans) $\$P$ of the T.V. = ₹3,600

$$\text{Gain} = \frac{1}{6} \text{ of } (3600)$$

$$= \frac{1}{6} \times 3600 = ₹600$$

$$\text{Gain} = ₹600$$

$$\text{C.P.} = 3600 - 600 = ₹3000$$

$$\text{Gain}\% = \frac{600}{3000} \times 100 = \frac{60}{3} = 20\%$$

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

- the loss incurred
- the cost price of the goods
- the loss as percent.

Ans) $\$P = ₹5,500$

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

$$\text{Loss incurred} = 550$$

$$\text{C.P.} = 5500 + 550 = ₹6,050$$

$$\text{L}\% = \frac{\cancel{550} 550}{\text{C.P.}} = \frac{550}{6,050} = \frac{10 \times 100}{110} = \frac{100}{11} = 9\frac{1}{11}\%$$

8) The selling price of a sofa-set is $\frac{4}{5}$ times of its cost price. Find the gain or the loss as percent.

Ans) Let the CP be ₹100

$$SP = \frac{4}{5} \text{ of } 100$$

$$\cancel{SP} \times 100 = \frac{4}{5} \times 100$$

$$\cancel{SP} = 80$$