Ch-8

Profit, Loss and Discount

Ex- 8(A)

1. Megha bought 10 note-books for ₹40 and sold them at ₹ 4.75 per notebook. Find her gain percent.

Ans-

CP of 10 note-books = ₹40

SP of 10 notebooks ₹ 4.75 per notebook

$= 4.75 \times 10 = ₹47.50$

Gain = SP - CP

$= ₹47.50 - ₹40 = ₹7.50$

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

$= \frac{7.50}{40} \times 100 = \frac{750}{40}$

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$= \frac{75}{4}\% = 18\frac{3}{4}\%$

2. A fruit seller buys oranges at 4 ₹ 3 and sells them at 3 for ₹ 4 find his profit percent.

Ans- Let no of oranges bought = 12

[Note : L.C.M of 4 and 3 = 12]

CP of oranges = $₹ \frac{3}{4} \times 12^{3} = ₹ 9$

and SP of oranges = $₹ \frac{4}{3} \times {}^{4}12 = ₹ 16$

Profit = 16 - 9

= ₹ 7

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

$= \frac{7}{9} \times 100 = \frac{700}{9}\% = 77\frac{7}{9}\%$

9. A man buys a certain number of articles at 15 for ₹112.50 and sells them at 12 for ₹108. Find;

(i) his gain as percent

(ii) the no of articles sold to make a profit of ₹75.

Ans

Let no of articles bought = 60

LCM of 15 and 12 = 60

C.P of the articles = ₹ $\frac{112.50}{15} \times 60$

$= ₹ \frac{112.50}{15} \times \overset{4}{60} = 112.50 \times 4 = ₹450.00$

and S.P of the articles = ₹ $\frac{108}{12} \times \overset{5}{60}$

$= ₹ 108 \times 5 = ₹540$

(i) Gain = S.P − C.P = ₹540 − ₹450

= ₹90

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

$= \frac{90}{450} \times \overset{20}{100} = 20\%$

(ii) To make a profit of ₹90, the no of articles needed to be sold = 60

To make a profit of Re 1 the no of articles needed to be sold = $\frac{60}{90}$

To make a profit of ₹75, the no of articles needed to be sold

$$= \frac{60}{90} \times 75 = \frac{4500}{90}^{50}$$

$$= 50$$