

## Practice Set 33

1. Maganlal bought trousers for ₹400 and a shirt for ₹200 and sold them for ₹448 and ₹250 respectively. Which of these transactions was more profitable?

Sol<sup>n</sup>:- Let, Maganlal got A% profit on trousers and B% profit on shirt.

\* For trouser:-

$$C.P. = ₹ 400$$

$$S.P. = ₹ 448$$

$$\begin{aligned} \therefore \text{Profit} &= S.P. - C.P. \\ &= 448 - 400 \end{aligned}$$

$$\therefore \text{profit} = ₹ 48$$

$$\therefore \frac{A}{100} = \frac{48}{400}$$

$$\therefore A = \frac{48}{\cancel{400}^4} \times \cancel{100}^1$$

$$\therefore A = \frac{48}{4}$$

$$\therefore A = 12\%$$

\* For shirt :-

$$C.P. = ₹ 200$$

$$S.P. = ₹ 250$$

$$\therefore \text{Profit} = S.P. - C.P.$$

$$= 250 - 200$$

$$\text{Profit} = ₹ 50$$

$$\therefore \frac{B}{100} = \frac{50}{200}$$

$$\therefore B = \frac{50}{\cancel{200}^2} \times \cancel{100}^1$$

$$\therefore B = \frac{50}{2}$$

$$\therefore B = 25\%$$

Here, profit on shirt is more than profit on trouser. Transaction in shirt is more profitable.

2. Ramrao bought a cupboard for ₹4500 and sold it for ₹4950. Shamrao bought a sewing machine for ₹3500 and sold it for ₹3920. Whose transaction was more profitable?

Sol<sup>n</sup>:- Let, the percentage profit for Ramrao is A% and the percentage profit for Shamrao is B%.

\* For cupboard :-

$$C.P. = ₹ 4500$$

$$S.P. = ₹ 4950$$

$$\therefore \text{Profit} = S.P. - C.P.$$

$$= 4950 - 4500$$

$$\therefore \text{Profit} = ₹ 450$$

$$\frac{A}{100} = \frac{450}{4500}$$

$$\therefore A = \frac{\cancel{450}}{\cancel{4500}} \times \cancel{100}$$

$$\therefore A = 10\%$$

\* For Sewing machine :-

$$C.P. = ₹ 3500$$

$$S.P. = ₹ 3920$$

$$\text{Profit} = S.P. - C.P.$$

$$= 3920 - 3500$$

$$\text{Profit} = ₹ 420$$

$$\therefore \frac{B}{100} = \frac{420}{3500}$$

$$\therefore B = \frac{420}{3500} \times 100$$

$$\therefore B = \frac{420}{35}$$

$$\therefore B = \frac{60}{5}$$

$$\therefore B = 12\%$$

Here, profit in sewing machine for Shamrao is more than profit in cupboard for Ramrao.

∴ Transaction made by Shamrao is more profitable.

3. Hanif bought one box of 50 apples for ₹400. He sold all the apples at the rate of ₹10 each. Was there a profit or a loss? What was its percentage?

Sol<sup>n</sup>:- Hanif bought 50 apples for ₹400.

$$\therefore \text{C.P.} = ₹ 400.$$

Now, he sold each apple for ₹10.

$$\therefore \text{S.P.} = 10 \times 50$$

$$\therefore \text{S.P.} = ₹ 500$$

Here,  $\text{S.P.} > \text{C.P.}$

∴ There is a profit.

$$\begin{aligned} \therefore \text{Profit} &= \text{S.P.} - \text{C.P.} \\ &= 500 - 400 \end{aligned}$$

$$\text{Profit} = ₹ 100$$

Let, the % profit be A.

$$\therefore \frac{A}{100} = \frac{100}{400}$$

$$\therefore A = \frac{100}{400} \times 100$$

$$\therefore A = \frac{100}{4}$$

$$\therefore \boxed{A = 25\%}$$

$\therefore$  % profit for Hanif is 25%.