1. A person bought 2 purses at Rs 500 each. He sold one at 10% profit and the other 2 % loss. Find his total percentage of gain or loss.

N.S.P. of the first purse = \( \frac{(100+p\%)}{100} \times c.p. = \frac{(100+10)}{100} \times 500 = Rs.550. \)

N.S.P. of the second purse = \( \frac{(100-l\%)}{100} \times 500 = \frac{(100-2)}{100} \times 500 = Rs 490. \)

Total Profit = Total N.S.P. – Total C.P.

= 1040 - 1000 = Rs 40

\( P\% = \frac{total \ profit}{total \ c.p.} \times 100 = \frac{4}{1000} \times 100 = 4\%. \)

2. A person sold 2 necklaces for Rs 990 each and thus earned a 10% profit on one and incurred a 10% loss on the other. Find total percentage profit or loss.

3. A and B are partners sharing profit in the ratio 3:7. They admit C, giving him \( \frac{3}{13} \) th share in the total profit. In what ratio will A, B and C share the total profit?

C’s share = \( \frac{3}{13} \) \( \text{total profit} \)

Remaining Profit = (Total Profit) - \( \frac{3}{13} \) (Total profit)

= \( (1 - \frac{3}{13}) \) (total profit)

\( A’s \ share = \frac{3}{10} \times \) remaining profit

= \( \frac{3}{10} \times \frac{10}{13} \) (Total profit)

\( B’s \ share = \frac{7}{10} \times \) remaining profit

= \( \frac{7}{10} \times \frac{10}{13} \) (Total profit)

A, B and C will share the total profit in the ratio 3:7:3.
4. A and B are partners sharing profit in the ratio 4:5. They admit C, giving him $\frac{1}{10}$th share in the total profit. In what ratio will A, B and C share the total profit?

5. A, B and C invested Rs 50000, and Rs 40000 and Rs 90000 respectively in a business. At the end of the year, A received Rs 8000 as his share in the profit. Also find B’s and C’s share of profit.

   - Profit sharing ratio 5:4:9.
   - A’s share = $\frac{5}{18} \times $ Total Profit = $8000
   - B’s share = $\frac{4}{18} \times $28800 = Rs 6,400
   - C’s share = $\frac{9}{18} \times $28800 = Rs 14,400

6. A, B and C invested Rs 70000, and Rs 50000 and Rs 80000 respectively in a business. At the end of the year, C received Rs 16000 as his share in the profit. Find the total profit. Also find B’s and A’s share of profit.

7. A firm allows a trade discount of 30% on the list price and further discount of 2% on cash payment. Find the cost price of an item, which is marked at rupees 4000/- and is sold with a profit, at the rate of 37.2%.

   - I.P. = $\frac{(100-T.D.\%)}{100} \times$ L.P. = $\frac{(100-30)}{100} \times$ 4000 = 2800
   - N.S.P. = $\frac{(100-C.D.\%)}{100} \times$ I.P. = $\frac{(100-2)}{100} \times$ 2800 = 2744
   - N.S.P. = $\frac{(100+P\%)}{100} \times$ c.p. = 2744

8. A firm allows a trade discount of 25% on the list price and further discount of 4% on cash payment. Find the cost price of an item, which is marked at rupees 830/- and is sold with a profit, at the rate of 19.52%.

I have done one sum of each type and given one sum as an assignment. Answer for the above assignment will be given in next Tutorial lesson.