

CHAPTER 08**Comparing Quantities****Profit and Loss:**

Percentage is useful in problems involving cost price and selling price.

Cost Price:

The price at which an article is purchased is the Cost Price (C.P).

Note:

The overhead expenses like taxes, labour charges, transport, repair charges etc. are included in the cost price. Such cases is given by

Cost Price =

{Payment made while purchasing the goods} + Overhead expenses

Selling Price:

The price at which an article is sold is the Selling Price (S.P).

Profit:

When the selling price is greater than the cost price there is profit (or) gain.

$$\therefore \text{Profit / Gain} = \text{SP} - \text{CP} (\because \text{If } \text{SP} > \text{CP})$$

Profit percentage:

The profit is calculated on the cost price only. Profit percentage is given by

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

Note:

When profit percentage is given, then C.P (or) S.P is given by

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

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