

Profit & Loss

Cost Price-The price at which an article is purchased is called its cost price (C.P.)

Selling Price-The price at which the article is sold is called its selling price (S.P.)

If the cost price (C.P.) of the article is equal to the selling price (S.P.), Then there is no loss or gain.

If the selling price (S.P.) > cost price (C.P.), then the seller is said to have a profit or gain,
Gain or Profit = S.P. - C.P.

If the cost price (C.P.) > selling price (S.P.), then the seller is said to have a loss,
Loss = C.P. - S.P.

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

$$\text{Loss\%} = \{\text{Loss} \times 100\} / \{\text{C.P.}\}$$

$$\text{S.P.} = \{(100 + \text{Gain\%}/100) \times \text{C.P.}\}$$

$$\text{S.P.} = \{(100 - \text{Loss\%}/100) \times \text{C.P.}\}$$

$$\text{C.P.} = \{(100) / (100 + \text{Gain\%}) \times \text{S.P.}\}$$

$$\text{C.P.} = \{(100) / (100 - \text{Loss\%}) \times \text{S.P.}\}$$

If an article is sold at a profit/gain of 30%, then S.P. = 130% of the C.P.

If an article is sold at a loss of 20%, then S.P. = 80% of the C.P.

When there are two successive Profit of x % and y % then the resultant profit per cent is given by

$$\mathbf{[x + y + (x \times y / 100)]}$$

If there is a Profit of x% and loss of y % in a transaction, then the resultant profit or loss% is given by

$$\mathbf{[x - y - (x \times y / 100)]}$$

Note- For profit use sign + in previous formula and for loss use – sign.

if resultant come + then there will be overall profit . if it come – then there will be overall loss.

If a cost price of m articles is equal to the selling Price of n articles, then Profit percentage
 $\mathbf{(m-n)/n \times 100\%}$

If m part is sold at x% profit, n part is sold at y% profit, and p part is sold at z% profit and Rs. R is earned as overall profit then the value of total consignment
 $R \times 100 / (mx + ny + pz)$

A man purchases a certain no. of article at m a rupee and the same no. at n a rupee. He mixes them together and sold them at p a rupee then his gain or loss %
 $\left\{ \frac{2mn}{(m+n)p} - 1 \right\} \times 100$
Note += profit, - = loss

When a person sells two similar items, one at a gain of say x%, and the other at a loss of x%, then in this transaction the seller always incurs a loss given by: = **$\{x^2/100\}$ %**

A single discount equivalent to discount series of x% and y% given by the seller is equal to
 $(x + y - xy/100)$ %

If a seller marks his goods at x% above his cost price and allows purchasers a discount of y% for cash, then overall gain or loss
 $(x - y - xy/100)$ %
Profit or loss according to sign .+ = gain, - = loss

If a trader professes to sell his goods at cost price, but uses false weights, then
Gain% = $\left\{ \frac{\text{Error}}{\text{True value} - \text{Error}} \times 100 \right\}$ %