

Consumer Arithmetic – Cost Price, Selling Price, Profit & Loss

Key Terms:

Cost Price (C.P):

The initial or original amount of money utilized by a manufacturer to produce an item. In other words, it is the price at which an item is purchased. It is also referred to as the manufacturer or factory price.

Selling Price (S.P):

The amount of money a dealer sells an item to consumers. In other words, it is the price at which an item is sold. It is also referred to as the “marked price”, “marketed value” or “store bought price”

Profit Amount (P):

The amount of money gained during a transaction or investment. It is also referred to as financial gain, benefit, surplus, excess or interest.

Profit Percentage (P %):

It is a percentage used to represent the profit amount with respect to the cost price. It is usually used to read and easily display information on various charts such as a pie chart, bar graph etc.

Loss Amount (L):

The amount of money not gained (loss) during a transaction or investment. It is also referred to as reduction, deduction, financial drop or decrease.

Loss Percentage (L %):

It is a percentage used to represent the loss amount with respect to the cost price. It is usually used to read and easily display information on various charts such as a pie chart, bar graph etc.

MMA Definitions & Formula Sheet

Basic Formulae:

$$\diamond P = S.P - C.P \text{ (occurs when the } S.P > C.P)$$

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

$$\diamond L = C.P - S.P \text{ (occurs when the } C.P > S.P)$$

$$\diamond L \% = \frac{L}{C.P} \times 100\%$$

Formulae for finding Selling Price when given Cost Price and Profit % or Loss %

Given Cost Price & Profit %:

$$\diamond S.P = (100\% + P\%) \times C.P$$

$$\diamond S.P = \left(\frac{100 + P\%}{100}\right) \times C.P$$

Given Cost Price & Loss %:

$$\diamond S.P = (100\% - L\%) \times C.P$$

$$\diamond S.P = \left(\frac{100 - L\%}{100}\right) \times C.P$$

Formulae for finding Cost Price when given Selling Price and Profit % or Loss %

Given Selling Price & Profit %:

$$\diamond C.P = \left(\frac{100}{100 + P\%}\right) \times S.P$$

Given Selling Price & Loss %:

$$\diamond C.P = \left(\frac{100}{100 - L\%}\right) \times S.P$$