Tip sheet: Summary
Business Math Series

MARKUP AND MARKDOWN

- **Selling Price** of an item covers the cost of buying the item, the overhead cost/expenses and the profit.

\[ S = C + E + P \]

where,
\[ S = \text{Regular selling price}, \]
\[ C = \text{Cost of buying}, \]
\[ E = \text{Overhead expenses}, \]
\[ P = \text{Profit} \]

- Rearrange the above selling price formula:

\[ S - C = E + P \]

**Markup** covers the extra price added to the cost of buying goods in order to ensure that there is profit earned.

So, **Markup** covers the overhead expenses and profit earned.

\[ M = E + P \]

or

\[ M = S - C \]

- **Markup** formula above can also be rearranged.

\[ M = S - C \]

or

\[ S = C + M \]

- **Bonus tip for Markup:** **Markup** can either be based on cost price or selling price, i.e., **Markup** can be written as a percent of cost price or selling price. In other words, Markup depends on the cost price as well as selling price.
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Rate of Markup based on cost = \frac{\text{Markup}}{\text{Cost}} = \frac{M}{C}

Rate of Markup based on selling price = \frac{\text{Markup}}{\text{Selling Price}} = \frac{M}{S}

- A discounted **regular selling price** is called a **sale price**. And, the reduction in price is called **Markdown**.

  \textit{Regular Selling Price} – \textit{Markdown} = \textit{Sale Price}

- **Total Cost** = Cost of buying + Expenses

  \textit{Total Cost} = C + E

- **Sale Price** = **Regular Selling Price** – **Markdown**

  \textit{Sale Price} = S – Sd = S(1 – d) = S \times \text{Net Price Factor}

- **Operating Profit** = **Sale Price** – **Total Cost**

- **Bonus tip for Markdown**: **Markdown** can only be based on selling price, i.e., **Markdown** can be written as a percent of selling price. In other words, Markdown depends on selling price.

  \textit{Rate of Markdown based on selling price} = \frac{\text{Markdown}}{\text{Selling Price}}