Weighted Average Formula	$$\text{Average} = \frac{\text{Sum of Quantities} \times \text{Their Values}}{\text{Total Quantity}}$$
Rule of Alligation	$$\frac{\text{Quantity of Cheaper}}{\text{Quantity of Dearer}} = \frac{C_2 - C_m}{C_m - C_1}$$
Ratio of Quantities (Alligation Method)	$$Q_1 : Q_2 = (C_2 - C_m) : (C_m - C_1)$$
Replacement Formula (Repeated Dilution)	$$\text{Quantity of Original Left} = V\left(1 - \frac{R}{V}\right)^n$$
Concentration Formula	$$\text{Concentration } \% = \frac{m}{M} \times 100$$
Mean Value (Weighted Average for Multiple Items)	$$\text{Mean Value} = \frac{\sum(Q_i \times C_i)}{\sum Q_i}$$
Profit and Loss in Mixtures	$$\text{Profit } \% = \frac{\text{Gain per kg}}{\text{Cost price per kg of mixture}} \times 100$$