

Mean

$$AM = \frac{\sum x_i}{n} = \frac{(x_1 + x_2 + \dots + x_n)}{n}$$

$$AM = \frac{\sum f_i x_i}{\sum f_i}$$

$$GM = (x_1 \times x_2 \times \dots \times x_n)^{\frac{1}{n}}$$

$$GM = (x_1^{f_1} \times x_2^{f_2} \times \dots \times x_n^{f_n})^{\frac{1}{\sum f_i}}$$

$$HM = \frac{n}{\frac{1}{x_1} + \dots + \frac{1}{x_n}}$$

$$HM = \frac{\sum f_i}{\frac{f_1}{x_1} + \dots + \frac{f_n}{x_n}}$$

$$WM = \frac{\sum w_i x_i}{\sum w_i}$$

$$Avg. Growth Rate = \{(1 + r_1) \times \dots \times (1 + r_n)\}^{\frac{1}{n}} - 1$$

$$Avg. Diminishing Rate = \{(1 - r_1) \times \dots \times (1 - r_n)\}^{\frac{1}{n}} - 1$$

$$Increase rate = \frac{(Profit\ in\ current\ year - Profit\ in\ Base\ year)}{Profit\ in\ base\ year} \times 100$$

Median

$$Me = \frac{(n+1)}{2}th\ observation\ [n = odd]$$

$$Me = L_m + \frac{\left(\frac{N}{2} - L_c\right)}{f_m} \times c$$

$$Me = \frac{\left(\frac{n}{2}\right)th\ obs. + \left(\frac{n}{2} + 1\right)th\ obs.}{2} [n = even]$$

Mode

$$M_0 = L_0 + \frac{\Delta_1}{(\Delta_1 + \Delta_2)} \times c$$