

$$n_0 = \frac{z^2 \cdot p(1-p)}{e^2}$$

$$\bar{X} = \frac{\sum_{i=1}^k f_i x_i}{\sum_{i=1}^k f_i} = \frac{f_1 x_1 + f_2 x_2 + \dots + f_k x_k}{f_1 + f_2 + \dots + f_k}$$

$$X^2 = \sum \frac{(fo - fe)^2}{fe}$$

$$\sigma = \sqrt{\frac{\sum (x - \mu)^2}{N}} \quad SD = \sqrt{\frac{\sum \{(x - \bar{x})^2 + (y - \bar{y})^2\}}{n}}$$

$$\bar{X} = \frac{\sum_{i=1}^n x_i}{n}$$

$$\bar{X} = \frac{\sum_{i=1}^n x_i w_i}{\sum_{i=1}^n w_i} \quad S = \sqrt{\frac{\sum f_i x_i^2 - \frac{(\sum f_i x_i)^2}{\sum f_i}}{\sum f_i - 1}}$$

$$I = (A - R)/(M - R)$$

$$r = \frac{\sum Y_i X_i - \frac{(\sum Y_i)(\sum X_i)}{n}}{\sqrt{\sum Y_i^2 - \frac{(\sum Y_i)^2}{n}} \sqrt{\sum X_i^2 - \frac{(\sum X_i)^2}{n}}}$$

$$Z = \left(\frac{x - \bar{x}}{S} \right)$$

$$r_{YX_1} = \frac{n \sum YX_1 - \sum Y \sum X_1}{\sqrt{N \sum Y_i^2 - (\sum Y_i)^2} \sqrt{n \sum X_1^2 - (\sum X_1)^2}}$$

$$S = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}} \quad SD = \frac{\sqrt{(\sum d_i^2)}}{n}$$

$$S^2 = \frac{\sum (x_i - \bar{x})^2}{n - 1}$$

$$M.D = \frac{\sum |x_i - \bar{x}|}{n}$$

$$C.V = \frac{S}{\bar{X}} \times 100$$

$$\bar{H} = \frac{\sum \frac{f_i}{x_i}}{\sum \frac{f_i}{x_i}}$$

$$\bar{H} = \frac{n}{\frac{1}{x_1} + \frac{1}{x_2} + \dots + \frac{1}{x_n}} = \frac{n}{\sum \frac{1}{x_i}}$$

$$n = \frac{n_0 \cdot N}{n_0 + (N - 1)}$$

$$\mu = \frac{\sum_{i=1}^N x_i}{N} \quad \bar{Y} = \frac{\sum_{i=1}^n w_i f_i x_i}{\sum_{i=1}^n w_i f_i}$$

$$\log \bar{G} = \frac{\sum \text{Log}(x_i)}{n}$$

$$S.E = \frac{s}{\sqrt{n}}$$

$$r_s = 1 - \frac{6 \sum_{i=1}^n d_i^2}{n(n^2 - 1)}$$

$$R_{YX_1 X_2} = \sqrt{\frac{r^2_{YX_1} + r^2_{YX_2} - 2r_{YX_1} r_{YX_2} r_{X_1 X_2}}{1 - r^2_{X_1 X_2}}}$$

$$R_{YX_1 X_2} = \frac{r_{YX_1} - r_{YX_2} r_{X_1 X_2}}{\sqrt{1 - r^2_{X_1 X_2}} \sqrt{1 - r^2_{YX}}}$$

$$Y = B_0 + B_1 X$$