$$k = \frac{ln\ n}{ln\ 2} + 1$$

$$d = \frac{f}{z}$$

$$\overline{x} = \frac{\sum x_i}{n}$$

$$\overline{x}_w = \frac{\sum w_i x_i}{\sum w_i}$$

$$K = \sqrt{\frac{\sum x_i^2}{n}}$$

$$G = (x_1 \cdot x_2 \cdot \ldots \cdot x_n)^{\frac{1}{n}}$$

$$H = \frac{n}{\sum \frac{1}{x_i}}$$

$$R = x_{max} - x_{min}$$

$$IQR = Q_3 - Q_1$$

$$s_x = \sqrt{\frac{\sum (x_i - \overline{x})^2}{n}}$$

$$s_x = \sqrt{\frac{\sum x_i^2}{n} - \overline{x}^2}$$

$$\hat{s}_x^2 = \frac{n}{n-1} s_x^2$$

$$DAME = Me(|x_i - Me|)$$

$$A_x = \frac{s_x}{\overline{x}}$$

$$IQR/Me$$

$$DAME/Me$$

$$\pm 2.57 : 1/100$$

$$\pm 3.09 : 1/500$$

$$\pm 3.29 : 1/1000$$

$$\pm 3.72 : 1/5000$$

$$\pm 3.89 : 1/10000$$

$$d = \frac{\bar{x}_1 - \bar{x}_2}{s}$$

$$s = \sqrt{\frac{(n_1 - 1)\hat{s}_1^2 + (n_2 - 1)\hat{s}_2^2}{n_1 + n_2 - 2}}$$

$$G = \frac{\sum (p_i - q_i)}{\sum_{i=1}^{n-1} p_i}$$

$$R_{20:20} = \frac{\overline{x}_{(x_i > P_{80})}}{\overline{x}_{(x_i < P_{20})}}$$

$$Palma\ ratioa = \frac{\%10\ aberats - zatia}{\%40\ pobre - zatia}$$

$$Pertzentil\ ratioa = \frac{D_9}{D_1}$$

$$H = \frac{p}{n}$$

$$I = \frac{\sum_{i=1}^{p} (z - x_i)}{pz}$$

$$S = \frac{2\sum_{i=1}^{p} (z - x_i)(p + 1 - i)}{(p+1)nz}$$

$$n = 1 + 0.7(H - 1) + 0.5h$$

$$H = -p_i \ln p_i$$

$$X^2 = \sum_{gelaska} \frac{(O - E)^2}{E}$$

$$\phi = \sqrt{\frac{X^2}{n}}$$

$$C = \sqrt{\frac{X^2}{X^2 + n}}$$

$$C_{max} = \sqrt{\frac{m-1}{m}}$$

$$C_{max} = \left(\frac{r}{r+1} \times \frac{c}{c+1}\right)^{1/4}$$

$$V = \sqrt{\frac{X^2}{n(m-1)}}$$

$$\gamma = \frac{k - d}{k + d}$$

$$\eta^2 = \frac{\sum_x n_x (\overline{y}_x - \overline{y})^2}{\sum_{x,i} (y_{xi} - \overline{y})^2}$$

$$s_{xy} = \frac{\sum_i x_i y_i}{n} - \overline{x} \cdot \overline{y}$$

$$r_{xy} = \frac{s_{xy}}{s_x \cdot s_y}$$

$$\alpha = \left[\frac{k}{k-1}\right]\left[1 - \frac{\sum_{i=1}^{k} S_i^2}{S_t^2}\right]$$

$$r_{xy.z} = \frac{r_{xy} - r_{xz} r_{yz}}{\sqrt{1 - r_{xz}^2}\sqrt{1 - r_{yz}^2}}$$

$$C_{p0}^t = \frac{1}{k} \sum_i I_{i0}^t \times 100$$

$$D_0^t = \frac{\overline{p}_t}{\overline{p}_0} \times 100 = \frac{\sum_{i=1}^{k} p_{it}}{\sum_{i=1}^{k} p_{i0}} \times 100$$

$$L_{p0}^t = \frac{\sum_{i=1}^{k} p_{i0} q_{i0} I_{i0}^t}{\sum_{i=1}^{k} p_{i0} q_{i0}} = \frac{\sum_{i=1}^{k} p_{it} q_{i0}}{\sum_{i=1}^{k} p_{i0} q_{i0}}$$

$$P_{p0}^t = \frac{\sum_{i=1}^{k} p_{i0} q_{it} I_{i0}^t}{\sum_{i=1}^{k} p_{i0} q_{it}} = \frac{\sum_{i=1}^{k} p_{it} q_{it}}{\sum_{i=1}^{n} p_{i0} q_{it}}$$

$$ME_{p0}^t = \frac{\sum_{i=1}^{k} p_{it}(q_{i0} + q_{it})}{\sum_{i=1}^{k} p_{i0}(q_{i0} + q_{it})}$$

$$F_{p0}^t = \sqrt{L_{p0}^t \times P_{p0}^t}$$

$$R_{it} = \frac{\Delta p_{it} q_{io}}{\sum_{i=1}^{k} p_{i0} q_{i0}}$$

$$C_{q0}^t = \frac{1}{k} \sum_{i=1}^{k} \frac{q_{it}}{q_{i0}} \times 100$$

$$L_{q0}^t = \frac{\sum_{i=1}^{k} q_{it} p_{i0}}{\sum_{i=1}^{k} q_{i0} p_{i0}}$$

$$P_{q0}^t = \frac{\sum_{i=1}^{k} q_{it} p_{it}}{\sum_{i=1}^{k} q_{i0} p_{it}}$$

$$B_{pq0}^t = \frac{\sum_{i=1}^{k} p_{it} q_{it}}{\sum_{i=1}^{k} p_{i0} q_{i0}}$$

$$F(x) = \int_{inf}^{x} f(x) dx$$

$$f(x) = F'(x)$$

$$\mu = \int_{\Omega} x f(x) dx$$

$$\sigma^2 = \alpha_2 - \alpha_1^2$$

$$\alpha_2 = \sum_{\Omega} x^2 p(x)$$

$$\alpha_2 = \int_{\Omega} x^2 f(x) dx$$

$$P[|X - \mu| \geq \epsilon] \leq \frac{\sigma^2}{\epsilon^2}$$

$$P[|X - \mu| < \epsilon] \geq 1 - \frac{\sigma^2}{\epsilon^2}$$