

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

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

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

$$\bar{x}_{haztatua} = \frac{\sum w_i x_i}{\sum w_i}$$

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

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

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

$$n_i = \frac{x_i - \min}{\max - \min}$$

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

$$IQR = Q_3 - Q_1$$

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

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

$$s_{x, sheppard}^2 = s_x^2 - \frac{b^2}{12}$$

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

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

$$RR = \frac{R}{\bar{x}}$$

$$CD_R = \frac{R}{\bar{x}}$$

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

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

$$CD_{IQR} = IQR / (Q_3 + Q_1)$$

$$DAME / Me$$

$$z_i = \frac{x_i - \bar{x}}{s_x}$$

$$z_a = \frac{x_i - Me}{1.4826 \times DAME}$$

$$|z_a| > 3.5$$

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

$$s = \sqrt{\frac{n_1 s_1^2 + n_2 s_2^2}{n_1 + n_2 - 2}}$$

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

$$G = G_a + \sum p_k q_k G_{bk} + h$$

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

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

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

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

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

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

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

$$H = -p_i \ln p_i$$

$$e^H = \frac{e^H}{S} \times S$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$P[X \leq VaR] = 0.01/0.05/0.10$$

$$\mu = \alpha_1 = \sum xp(x)$$

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

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

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

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

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