$$p_i = \frac{n_i}{n} \qquad kn_i = \sum_{j=1}^{i} n_j \qquad kp_i = \sum_{j=1}^{i} p_j \qquad x_P = d_P + \frac{P - kp_{P-1}}{p_P} \cdot h$$

$$\bar{x} = \frac{1}{\sum_{i=1}^{k} n_i} \cdot \sum_{i=1}^{k} x_i \cdot n_i \qquad \bar{x}_h = \frac{n}{\sum_{i=1}^{n} \frac{1}{x_i}} \qquad \bar{x}_h = \frac{\sum_{i=1}^{k} n_i}{\sum_{i=1}^{k} \frac{n_i}{x_i}} \qquad \bar{x}_g = \sqrt[n]{\prod_{i=1}^{n} x_i}$$

$$\bar{d} = \frac{1}{\sum_{i=1}^{k} n_i} \cdot \sum_{i=1}^{n} \left| x_i - \tilde{x} \right| \cdot n_i \qquad \bar{d} = \frac{1}{\sum_{i=1}^{k} n_i} \cdot \sum_{i=1}^{n} \left| x_i - \bar{x} \right| \cdot n_i$$

$$s_x^2 = \frac{1}{n} \cdot \sum_{i=1}^{k} (x_i - \bar{x})^2 \cdot n_i \qquad s_x = \sqrt{s_x^2} \qquad v_x = \frac{s_x}{\bar{x}}$$

$$I_{yx}^2 = \frac{s_{y'}^2}{s_y^2} = \frac{\sum_{i=1}^{n} (y_i' - \bar{y})^2}{\sum_{i=1}^{n} (y_i - \bar{y})^2} = \frac{\sum y_i \cdot y_i' - n \cdot \bar{y}^2}{\sum y_i^2 - n \cdot \bar{y}^2} \qquad I_{yx} = \sqrt{I_{yx}^2}$$

$$y' = a_{yx} + b_{yx} \cdot x \qquad x' = a_{xy} + b_{xy} \cdot y$$

$$r = \frac{\sum x_i y_i - n\bar{x}\bar{y}}{\sqrt{\left[\sum x_i^2 - n\bar{x}^2\right] \cdot \left[\sum y_i^2 - n\bar{y}^2\right]}} = \frac{s_{xy}}{s_x \cdot s_y} = \pm\sqrt{b_{yx} \cdot b_{xy}}$$

$$n_{ij}' = \frac{n_i \cdot n_j}{n} \qquad \chi^2 = \sum_{i=1}^{r} \sum_{j=1}^{s} \frac{\left(n_{ij} - n_{ij}'\right)^2}{n_{ij}'} \qquad \Phi^2 = \frac{\chi^2}{n}$$

$$P = \sqrt{\frac{\Phi^2}{1 + \Phi^2}} = \sqrt{\frac{\chi^2}{\chi^2 + n}} \qquad C = \sqrt{\frac{\Phi^2}{\min\{r-1; s-1\}}} = \sqrt{\frac{\chi^2}{n \cdot \min\{r-1; s-1\}}}$$

$$T = \sqrt{\frac{\chi^2}{n \cdot \sqrt{(r-1) \cdot (s-1)}}} \qquad V = \frac{n \cdot n_{11} - n_{1*} \cdot n_{*1}}{\sqrt{n_{1*} \cdot n_{*1} \cdot n_{0*} \cdot n_{*0}}}$$

$$P(A) = \frac{n(A)}{n} \qquad P\left(\bigcup_{i=1}^{n} A_i\right) = 1 - \prod_{i=1}^{n} \left[1 - P(A_i)\right]$$

$$P(X) = \binom{n}{x} p^x (1-p)^{n-x} \qquad E(X) = n \cdot p \qquad D^2(X) = n \cdot p \cdot (1-p)$$

$$P(X) = \frac{e^{-\lambda}}{x!} \qquad E(X) = D^2(X) = \lambda$$

$$P(X) = \frac{\binom{M}{x}\binom{N-M}{n-x}}{\binom{N}{n}} \qquad E(X) = n \cdot \frac{M}{N} \qquad D^2(X) = n \cdot \frac{M}{N} \cdot \left(1 - \frac{M}{N}\right) \cdot \left(\frac{N-M}{N-1}\right)$$

$$E(X) = \frac{\alpha + \beta}{2} \qquad D^2(X) = \frac{(\beta - \alpha)^2}{12}$$

$$U = \frac{X - \mu}{\sigma} \qquad X = U \cdot \sigma + \mu$$

$$\left\langle \bar{x} - u_{1-\frac{\alpha}{2}} \cdot \frac{\sigma}{\sqrt{n}};\ \bar{x} + u_{1-\frac{\alpha}{2}} \cdot \frac{\sigma}{\sqrt{n}} \right\rangle \qquad n \geq \frac{\left(u_{1-\frac{\alpha}{2}}\right)^2 \cdot \sigma^2}{\Delta^2}$$

$$\left\langle (\bar{x}_1 - \bar{x}_2) - u_{1-\frac{\alpha}{2}} \cdot \sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}};\ (\bar{x}_1 - \bar{x}_2) + u_{1-\frac{\alpha}{2}} \cdot \sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}} \right\rangle$$

$$U = \frac{\bar{X} - \mu_0}{\sigma} \cdot \sqrt{n} \qquad U = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}} \qquad \left\langle -\infty; -u_{1-\frac{\alpha}{2}} \right\rangle \cup \left\langle u_{1-\frac{\alpha}{2}}; \infty \right\rangle$$