$$p\{T - z_\alpha \cdot D(T_n) < \theta < T + z_\alpha \cdot D(T_n)\} = 1 - \alpha$$

$$p\left\{\bar{x} - z_\alpha \frac{\sigma}{\sqrt{n}} < m < \bar{x} + z_\alpha \frac{\sigma}{\sqrt{n}}\right\} = 1-\alpha \qquad p\left\{\bar{x} - t_{\alpha,n-1} \frac{S(x)}{\sqrt{n-1}} < m < \bar{x} + t_{\alpha,n-1} \frac{S(x)}{\sqrt{n-1}}\right\} = 1-\alpha$$

$$p\left\{\bar{x} - z_\alpha \frac{S(x)}{\sqrt{n}} < m < \bar{x} + z_\alpha \frac{S(x)}{\sqrt{n}}\right\} \approx 1-\alpha$$

$$p\left\{\frac{m}{n} - z_\alpha \sqrt{\frac{\frac{m}{n}(1-\frac{m}{n})}{n}} < p < \frac{m}{n} + z_\alpha \sqrt{\frac{\frac{m}{n}(1-\frac{m}{n})}{n}}\right\} = 1-\alpha$$

$$p\left\{\frac{nS^2(x)}{\chi^2_{\frac{\alpha}{2},n-1}} < \sigma^2 < \frac{nS^2(x)}{\chi^2_{1-\frac{\alpha}{2},n-1}}\right\} = 1-\alpha \qquad p\left\{S(x) - z_\alpha \frac{S(x)}{\sqrt{2n}} < \sigma < S(x) + z_\alpha \frac{S(x)}{\sqrt{2n}}\right\} = 1-\alpha$$

$$n = \frac{z_\alpha^2 \cdot p \cdot q}{d^2} \qquad n = \frac{z_\alpha^2}{4d^2} \qquad n = \frac{z_\alpha^2 \cdot \sigma^2(x)}{d^2} \qquad n = \frac{t^2_{\alpha,n-1} \cdot \hat{S}^2(x)}{d^2} \qquad n = \frac{z_\alpha^2 \cdot S^2(x)}{d^2}$$

$$z = \frac{\bar{x} - m_0}{\sigma(x)} \cdot \sqrt{n} \qquad t = \frac{\bar{x} - m_0}{S(x)} \cdot \sqrt{n-1} \qquad z = \frac{\bar{x} - m_0}{S(x)} \cdot \sqrt{n}$$

$$z = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{\sigma_1^2(x)}{n_1} + \frac{\sigma_2^2(x)}{n_2}}} \qquad t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{n_1 S_1^2(x) + n_2 S_2^2(x)}{n_1 + n_2 - 2}\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \qquad z = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S_1^2(x)}{n_1} + \frac{S_2^2(x)}{n_2}}}$$

$$z = \frac{\frac{m}{n} - p_0}{\sqrt{\frac{p_0 \cdot q_0}{n}}} \qquad z = \frac{\frac{m_1}{n_1} - \frac{m_2}{n_2}}{\sqrt{\frac{\bar{p} \cdot \bar{q}}{n}}} \qquad n = \frac{n_1 \cdot n_2}{n_1 + n_2} \qquad \bar{p} = \frac{m_1 + m_2}{n_1 + n_2}$$

$$\chi^2 = \frac{n\,S^2(x)}{\sigma_0^2} \qquad z = \sqrt{2\chi^2} - \sqrt{2(n-1)-1} \qquad F = \frac{\hat{S}_1^2(x)}{\hat{S}_2^2(x)} \qquad \hat{S}^2(x) = \frac{n}{n-1} S^2(x)$$

$$D_n = \sup_x |F(x) - F_0(x)| \qquad \lambda = D_n \sqrt{n}$$

$$D_{n1,n2} = \sup_x \left|F_{n1}(x) - F_{n2}(x)\right| \qquad \lambda = D_{n1,n2} \sqrt{n} \qquad n = \frac{n_1 \cdot n_2}{n_1 + n_2}$$

$$\chi^2 = \sum_{i=1}^{r} \frac{(n_i - np_i)^2}{np_i} = \sum_{i=1}^{r} \frac{(n_i - \hat{n}_i)^2}{\hat{n}_i} \qquad \chi^2_{\alpha,r-k-1}$$

$$\chi^2 = N\left(A_s^2/6 + (K-3)^2/24\right)$$

k – liczba serii, $P(k \le k_1) = \frac{\alpha}{2}$, $P(k \le k_2) = 1 - \frac{\alpha}{2}$

$$\chi^2 = \sum_{i=1}^{k}\sum_{j=1}^{r}\frac{(n_{ij} - \hat{n}_{ij})^2}{\hat{n}_{ij}} \qquad \chi^2_{\alpha,(r-1)(k-1)}$$

$$P\left\{r - z_\alpha \frac{1-r^2}{\sqrt{n}} < \rho < r + z_\alpha \frac{1-r^2}{\sqrt{n}}\right\} = 1-\alpha$$

$$P\left\{z - u_\alpha \frac{1}{\sqrt{n-3}} < \rho < z + u_\alpha \frac{1}{\sqrt{n-3}}\right\} \approx 1-\alpha \qquad z = \frac{1}{2}\ln\frac{1+r}{1-r} \qquad F(u_\alpha) = 1 - \frac{\alpha}{2}$$

$$t = \frac{r}{\sqrt{1-r^2}}\sqrt{n-2} \qquad z = \frac{r}{\sqrt{1-r^2}}\sqrt{n}$$

$$P\{\mathrm{a}_1 - \mathrm{t}_{\alpha,n-2}\cdot s(a_1) < \alpha_1 < \mathrm{a}_1 + \mathrm{t}_{\alpha,n-2}\cdot s(a_1)\} = 1-\alpha$$

$$t = \frac{a_1}{s(a_1)}$$

$$\mathrm{P}(\mathrm{X}=\mathrm{k}) = \binom{\mathrm{n}}{\mathrm{k}}\cdot \mathrm{p}^{\mathrm{k}}\cdot \mathrm{q}^{\mathrm{n-k}} \qquad P(X=k) = \frac{\lambda^k}{k!}\cdot e^{-\lambda} \qquad f(x) = \frac{1}{\sigma(X)\cdot\sqrt{2\pi}}\cdot e^{-\frac{[X-m]^2}{2\cdot\sigma^2(X)}}$$