$$\frac{\bar{X}-\mu}{\frac{\sigma}{\sqrt{n}}} \to N(0;1)$$

$$\frac{\bar{X}-\mu}{\frac{S_{n-1}}{\sqrt{n}}} \to t_{(n-1)}$$

$$\frac{\hat{p}-p}{\sqrt{\frac{pq}{n}}} \to N(0;1)$$

$$\frac{\sum_{i=1}^{n}(X_i-\mu)^2}{\sigma^2} \to \chi_n^2$$

$$\frac{\sum_{i=1}^{n}(X_i-\bar{X})^2}{\sigma^2} \to \chi_{n-1}^2$$

$$\frac{(n-1)S_{n-1}^2}{\sigma^2} \to \chi_{(n-1)}^2$$

$$\frac{nS_n^2}{\sigma^2} \to \chi_{(n-1)}^2$$

$$\frac{S_{n-1}^2}{S_{m-1}^2}\frac{\sigma_2^2}{\sigma_1^2} \to F_{(n-1;\,m-1)}$$

$$\frac{(\bar{X}-\bar{Y})-(\mu_1-\mu_2)}{\sqrt{\frac{\sigma_1^2}{n}+\frac{\sigma_2^2}{m}}} \to N(0;1)$$

$$\frac{(\bar{X}-\bar{Y})-(\mu_1-\mu_2)}{\sqrt{\frac{(n-1)S_{n-1}^2+(m-1)S_{m-1}^2}{n+m-2}}\sqrt{\frac{1}{n}+\frac{1}{m}}} \to t_{(n+m-2)}$$

$$\frac{(\bar{X}-\bar{Y})-(\mu_1-\mu_2)}{\sqrt{\frac{S_{n-1}^2}{n}+\frac{S_{m-1}^2}{m}}} \to t_{(\nu)}$$

$$\nu = \text{parte entera de} \frac{\left(\frac{S_{n-1}^2}{n}+\frac{S_{m-1}^2}{m}\right)^2}{\frac{S_{n-1}^4}{n^2(n-1)}+\frac{S_{m-1}^4}{m^2(m-1)}}$$

$$\frac{(\bar{X}-\bar{Y})-(\mu_1-\mu_2)}{\sqrt{\frac{S_{n-1}^2}{n}+\frac{S_{m-1}^2}{m}}} \to N(0;1)$$

$$\frac{(\hat{p}_1-\hat{p}_2)-(p_1-p_2)}{\sqrt{\frac{p_1q_1}{n}+\frac{p_2q_2}{m}}} \to N(0;1)$$

$$\frac{\frac{SCE}{k-1}}{\frac{SCR}{n-k}} \to F_{k-1,n-k}$$

$$SCE = \sum_{i=1}^{k}\sum_{j=1}^{n_i}(\bar{x}_i-\bar{x})^2 = \sum_{i=1}^{k}(\bar{x}_i-\bar{x})^2 n_i$$

$$SCR = \sum_{i=1}^{k}\sum_{j=1}^{n_i}(x_{ij}-\bar{x}_i)^2 \qquad SCT = \sum_{i=1}^{k}\sum_{j=1}^{n_i}(x_{ij}-\bar{x})^2$$

$$\chi^2 = \sum_{i=1}^{k}\frac{(n_i-np_{i0})^2}{np_{i0}} \to \chi_{k-t-1}^2$$

$$D_{\exp} = \underset{x_{(i)}}{\text{máx}}\left|F_n(x_{(i)})-F_0(x_{(i)})\right|$$

$$W_{\exp} = \frac{\left(\sum_{i=1}^{k} a_i\left(x_{(n-i+1)}-x_{(i)}\right)\right)^2}{\sum_{i=1}^{n}(x_i-\bar{x})^2}$$

$$D_{\exp} = \underset{x_{(i)}}{\text{máx}}\left|F_n(x_{(i)})-F_m(x_{(i)})\right|$$

Signos-Rangos

$$\mu = \frac{n(n+1)}{4} \qquad \sigma^2 = \frac{n(n+1)(2n+1)}{24}$$

Mann Whitney

$$U_1 = nm + \frac{n(n+1)}{2} - R_1 \qquad \mu = \frac{n\,m}{2} \qquad \sigma^2 = \frac{n\,m(n+m+1)}{12}$$

Rachas

$$\mu = \frac{2nm}{n+m}+1 \qquad \sigma^2 = \frac{2nm(2nm-n-m)}{(n+m)^2(n+m+1)}$$