Gemiddelde: $\bar{y} = \frac{\sum_{i=1}^{n} y_i}{n}$

Standard deviatie: $s = \sqrt{\frac{\sum_{i=1}^{n}(y_i - \bar{\bar{y}})^2}{n-1}}$

Sampling SD $\sigma_{\bar{y}} = \frac{\sigma}{\sqrt{n}}$

Variatie: $VAR = s^2$

Z-waarde: $Zscore = \frac{x_i - \bar{x}}{s}$

Covariantie $cov(x, y) = \frac{1}{n-1}\sum(x_i - \bar{x})(y_i - \bar{y})$

Correlatie coëfficiënt $cor(x, y) = \frac{1}{n-1}\sum\left(\frac{x_i - \bar{x}}{s_x}\right)\left(\frac{y_i - \bar{y}}{s_y}\right)$

$cor(x, y) = cov(x, y)/(s_x s_y)$

Slope (helling) $\hat{\beta}_1 = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sum(x_i - \bar{x})^2} = cor(x, y)\frac{s_y}{s_x}$

Intercept (interceptie) $\hat{\beta}_0 = \bar{y} - \hat{\beta}_1 \bar{x}$

Student's t (one sample) $$t_s = \frac{\bar{y} - \mu}{SE_{\bar{y}}}$$

Standard error of mean $$SE_1 = SE_{\bar{y}} = \frac{s_1}{\sqrt{n_1}}$$

Vrijheidsgraden (df) $$df = n - 1$$

95% confidence interval $$\mu = \bar{y} \pm t_{df}^{0.05} SE_{\bar{y}}$$

Student's t (two sample) $$t_s = \frac{\bar{y}_1 - \bar{y}_2}{SE_{\bar{y}_1 - \bar{y}_2}}$$

Standard error of mean $$SE_{\bar{y}_1 - \bar{y}_2} = \sqrt{SE_1^2 + SE_2^2}$$

Standard error of mean $$SE_{(\bar{y}_1 - \bar{y}_2)} = \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$$

95% confidence interval $$\mu_1 - \mu_2 = (\bar{y}_1 - \bar{y}_2) \pm t_{df}^{0.05} SE_{\bar{y}_1 - \bar{y}_2}$$

Vrijheidsgraden (df) $$df = n_1 + n_2 - 2$$

Chi squared $$X_s^2 = \sum_{i=1}^{4} \frac{(o_i - e_i)^2}{e_i}$$

Expected values $$e_i = \frac{row\ total * column\ total}{grand\ total}$$

Vrijheidsgraden (df) $$df = (n_{row} - 1)(n_{column} - 1)$$

Conditionele kans $$\Pr\{E_1 | E_2\} = \frac{\Pr\{E_1 and E_2\}}{\Pr\{E_1\}}$$