$$y_D = y_{BLANK} + 3s_{BLANK}$$

$$y_Q = y_{BLANK} + 10s_{BLANK}$$

$$s = \text{sqrt}[(\Sigma x_i^2 - (\Sigma x_i)^2/n)/(n-1)]$$

$$y = \alpha + \beta x$$

$$Sxx = \Sigma x_i^2 - (\Sigma x_i)^2/n$$

$$Sxy = \Sigma x_i y_i - \Sigma x_i \Sigma y_i/n$$

$$\beta = \frac{Sxy}{Sxx} \qquad \alpha = \bar{y} - \beta \bar{x}$$

$$\sigma_x^2 = \sigma_a^2 + \sigma_b^2 + \sigma_c^2$$

$$\left(\frac{\sigma_x}{x}\right)^2 = \left(\frac{\sigma_a}{a}\right)^2 + \left(\frac{\sigma_b}{b}\right)^2 + \left(\frac{\sigma_c}{c}\right)^2$$

$$LOD = (y_D - \bar{y}_{BLANK})/\beta$$

$$LOQ = (y_Q - \bar{y}_{BLANK})/\beta$$

$$\Pi = P_{IN} - P_{OUT} = RT\,(c_{IN} - c_{OUT})$$

$$\ln\,(1 - R) = -k\,N^{b}\,P^{a}$$

$$R = 1 - \exp^{(-t/\tau)}$$

$$\tau\omega = \left( \frac{P}{d^{2}\,\omega^{2}\,\rho} \right)^{\alpha}$$

$$\ln(1 - R) = -\,(0.0149 - 2.75 \times 10^{-5}\,X)\,N^{0.71}\,P^{1.165}$$

$$f_P = \frac{m^{P}\,e^{-m}}{P!}$$

$$\psi_E(r) = \psi_{E0}\,\exp\,(-\kappa r)$$

$$\frac{1}{\kappa} = R_{Debye} = \sqrt{\frac{\varepsilon RT}{8\pi\,F^{2}\,\Sigma c_i z_i^{2}}}$$