

Microsoft Equation

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \quad A_n^k = \frac{n!}{(n-k)!}$$

$$C_n^k = \frac{n!}{k!(n-k)!} \quad C_{n+1}^{k+1} = C_n^k + C_n^{k+1}$$

$$S = \sqrt{p(p-a)(p-b)(p-c)}$$

$$m_a = \frac{1}{2} \sqrt{2b^2 + 2c^2 - a^2}$$

$$h_a = \frac{2\sqrt{p(p-a)(p-b)(p-c)}}{a}$$

$$\frac{a}{\sin\alpha} = \frac{b}{\sin\beta} = \frac{c}{\sin\gamma} = 2R$$

$$\frac{y - y_1}{y_2 - y_1} = \frac{x - x_1}{x_2 - x_1}$$

$$d = \frac{|Ax_0 + By_0 + C|}{\sqrt{A^2 + B^2}}$$



$$S = \frac{1}{2} \begin{vmatrix} x_1 & y_1 & 1 \\ x_2 & y_2 & 1 \\ x_3 & y_3 & 1 \end{vmatrix} \quad \begin{cases} x = x' + a \\ x = y' + b \end{cases}$$

$$x = \frac{x' + \frac{m}{p+n}x_3}{1 + \frac{m}{p+n}} \quad x_i = \frac{\prod_{k=1}^n (b - a_k)}{(b - a_i) \prod_{k \neq i} (a_i - a_k)}$$

$$\rho = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \quad |BC| = \frac{\sqrt{5}}{4}$$

$$x = (\sqrt[3]{7}/2)a + (1/2)b \quad x = \cos(\theta - \alpha), \quad \alpha \in (-\infty; +\infty)$$

