When \(a \ne 0\), there are two solutions to \(ax^2 + bx + c = 0\) and they are $$x = {-b \pm \sqrt{b^2-4ac} \over 2a}.$$

$$ax^2 + bx + c = 0$$

$$ax^2 + bx = -c$$

$$x^2 + \frac{b}{a}x = \frac{-c}{a} \quad \text{Divide out leading coefficient.}$$

$$x^2 + \frac{b}{a}x + \left(\frac{b}{2a}\right)^2 = \frac{-c(4a)}{a(4a)} + \frac{b^2}{4a^2} \quad \text{Complete the square.}$$

$$\left(x + \frac{b}{2a}\right)\left(x + \frac{b}{2a}\right) = \frac{b^2-4ac}{4a^2} \quad \text{Discriminant revealed.}$$

$$\left(x + \frac{b}{2a}\right)^2 = \frac{b^2-4ac}{4a^2}$$

$$x + \frac{b}{2a} = \sqrt{\frac{b^2-4ac}{4a^2}}$$

$$x = \frac{-b}{2a} \pm \{C\}\sqrt{\frac{b^2-4ac}{4a^2}} \quad \text{There's the vertex formula.}$$

$$x = \frac{-b \pm \{C\}\sqrt{b^2-4ac}}{2a}$$

$$\begin{pmatrix} 0 & 1 & 0 \\ 0 & 0 & 1 \\ 1 & 0 & 0 \end{pmatrix}$$

$$4.56 + 4.56 + \frac{4}{5} + 4 + 5i + 4.56e^{4.56i} + \pi + e + e + i + i + \gamma + c$$

$$17 + 29i \in \mathbb{C}$$

$$\int_0^1 \frac{\mathrm{dx}}{(a+1)\sqrt{x}} = \pi$$

$$\int_{\mathrm{E}} (\alpha f + \beta g)\,\mathrm{d}\,\mu = \alpha \int_{\mathrm{E}} f\,\mathrm{d}\,\mu + \beta \int_{\mathrm{E}} g\,\mathrm{d}\,\mu$$

$$A = \begin{pmatrix} 9 & 8 & 6 \\ 1 & 2 & 7 \\ 4 & 9 & 2 \\ 6 & 0 & 5 \end{pmatrix} \text{ or } A = \begin{bmatrix} 9 & 8 & 6 \\ 1 & 2 & 7 \\ 4 & 9 & 2 \\ 6 & 0 & 5 \end{bmatrix}$$

$$\begin{bmatrix} a_{11} - \lambda & \cdots & a_{1\mathrm{n}} \\ \vdots & \ddots & \vdots \\ a_{\mathrm{n}1} & \cdots & a_{\mathrm{nn}} - \lambda \end{bmatrix} \begin{bmatrix} x_1 \\ \vdots \\ x_{\mathrm{n}} \end{bmatrix} = 0$$

$$\sqrt{x-3} + \sqrt{3x} + \sqrt{\frac{\sqrt{3x}}{x-3}} + i\frac{y}{\sqrt{2(r+x)}}$$

$$\sum_{n=0}^{t} f(2n) + \sum_{n=0}^{t} f(2n+1) = \sum_{n=0}^{2t+1} f(n)$$

$$\sqrt{x^2} = |x| = \begin{cases} +\mathrm{x} & , \mathrm{if} \quad x > 0 \\ 0 & , \mathrm{if} \quad x = 0 \\ -\mathrm{x} & , \mathrm{if} \quad x < 0 \end{cases}$$

$$H(j\omega) = \begin{cases} x^{-j\omega\sigma_0} & \mathrm{for} \quad \mid \omega \mid < \omega_\sigma \\ 0 & \mathrm{for} \quad \mid \omega \mid \quad \omega_\sigma \end{cases} \quad x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$f\text{'}(a) = \lim_{\mathrm{h} \to 0} \frac{f(a+h) - f(a)}{h}$$

$$1+\sum_{k=1}^{\infty} \frac{q^{k+k^2}}{(1-q)(1-q^2)\ldots(1-q^{\mathrm{k}})} = \prod_{j=0}^{\infty} \frac{1}{(1-q^{5j+2})(1-q^{5j+3})},$$