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

$$ax^2+bx+c=0$$
  $ax^2+bx=-c$   $x^2+rac{b}{a}x=rac{-c}{a}$  Divide out leading coefficient.  $x^2+rac{b}{a}x+\left(rac{b}{2a}
ight)^2=rac{-c(4a)}{a(4a)}+rac{b^2}{4a^2}$  Complete the square.  $\left(x+rac{b}{2a}
ight)\left(x+rac{b}{2a}
ight)=rac{b^2-4ac}{4a^2}$  Discriminant revealed.  $\left(x+rac{b}{2a}
ight)^2=rac{b^2-4ac}{4a^2}$   $x+rac{b}{2a}=\sqrt{rac{b^2-4ac}{4a^2}}$   $x=rac{-b}{2a}\pm\{C\}\sqrt{rac{b^2-4ac}{4a^2}}$  There's the vertex formula.  $x=rac{-b\pm\{C\}\sqrt{b^2-4ac}}{2a}$ 

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

$$4.56 + 4.56 + \tfrac{4}{5} + 4 + 5i + 4.56e^{4.56i} + \pi + e + e + i + i + \gamma + \infty$$

$$17+29i\in\mathbb{C} \qquad \qquad \int\limits_{0}^{1}rac{\mathrm{dx}}{(a+1)\sqrt{x}}=\pi$$

$$\int_{\mathrm{E}} \left( lpha f + eta g 
ight) \mathrm{d}\, \mu = lpha \, \int_{\mathrm{E}} \, f \, \mathrm{d}\, \mu + eta \, \int_{\mathrm{E}} \, g \, \mathrm{d}\, \mu$$

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

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

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

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

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

$$H(j\omega) = \left\{egin{array}{ccc|ccc} x^{-j\omega\sigma_0} & ext{for} & \omega & < & \omega_\sigma \ 0 & ext{for} & \omega & > & \omega_\sigma \end{array}
ight. \quad x = rac{-b\pm\sqrt{b^2-4ac}}{2a}$$

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

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$$-\sum_{k=1}^{\infty}rac{q^{k+k^2}}{(1-q)(1-q^2)\dots(1-q^k)}=\prod_{j=0}^{\infty}rac{1}{(1-q^{5j+2})(1-q^{5j+3})}, ext{ for } \ |q|<\infty$$