Fórmula General

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

Resolver la ecuación: **$2x^2 + 3x - 5 = 0$**

Vemos claramente que **$a = 2$**, **$b = 3$** y **$c = -5$**, así es que:

$$x = \frac{-3 \pm \sqrt{3^2 - 4 \cdot 2 \cdot (-5)}}{2 \cdot 2} = \frac{-3 \pm \sqrt{9 + 40}}{4} = \frac{-3 \pm 7}{4} \begin{cases} x = \frac{-3+7}{4} = \frac{4}{4} = 1 \\ x = \frac{-3-7}{4} = \frac{-10}{4} = \frac{-5}{2} \end{cases}$$

Resuelve las ecuaciones cuadráticas por fórmula general

$3x^2 + x - 14 = 0$

$$x = \frac{-(\quad) \pm \sqrt{(\quad)^2 - 4(\quad)(\quad)}}{2(\quad)} = \frac{(\quad) \pm \sqrt{(\qquad)}}{(\quad)}$$

$$= \frac{(\quad) \pm (\quad)}{(\quad)} = \begin{cases} x_1 = \frac{(\quad) + (\quad)}{(\quad)} = \frac{(\quad)}{(\quad)} \\ x_2 = \frac{(\quad) - (\quad)}{(\quad)} = \frac{(\quad)}{(\quad)} \end{cases}$$

$6x^2 + 7x + 2 = 0$

$$= \frac{-(\quad) \pm \sqrt{(\quad)^2 - 4(\quad)(\quad)}}{2(\quad)} = \frac{(\quad) \pm \sqrt{(\qquad)}}{(\quad)}$$

$$= \frac{(\quad) \pm (\quad)}{(\quad)} = \begin{cases} x_1 = \frac{(\quad) + (\quad)}{(\quad)} = \frac{(\quad)}{(\quad)} \\ x_2 = \frac{(\quad) - (\quad)}{(\quad)} = \frac{(\quad)}{(\quad)} \end{cases}$$

$x^2 - 7x - 10 = 0$

$$= \frac{-(\quad) \pm \sqrt{(\quad)^2 - 4(\quad)(\quad)}}{2(\quad)} = \frac{(\quad) \pm \sqrt{(\qquad)}}{(\quad)}$$

$$= \frac{(\quad) \pm (\quad)}{(\quad)} = \begin{cases} x_1 = \dfrac{(\quad) + (\quad)}{(\quad)} = \dfrac{(\quad)}{(\quad)} \\ x_2 = \dfrac{(\quad) - (\quad)}{(\quad)} = \dfrac{(\quad)}{(\quad)} \end{cases}$$

$6x^2 - 5x = 6$

$$= \frac{-(\quad) \pm \sqrt{(\quad)^2 - 4(\quad)(\quad)}}{2(\quad)} = \frac{(\quad) \pm \sqrt{(\qquad)}}{(\quad)}$$

$$= \frac{(\quad) \pm (\quad)}{(\quad)} = \begin{cases} x_1 = \dfrac{(\quad) + (\quad)}{(\quad)} = \dfrac{(\quad)}{(\quad)} \\ x_2 = \dfrac{(\quad) - (\quad)}{(\quad)} = \dfrac{(\quad)}{(\quad)} \end{cases}$$

$2x^2 - 2x + 1 = 0$

$$= \frac{-(\quad) \pm \sqrt{(\quad)^2 - 4(\quad)(\quad)}}{2(\quad)} = \frac{(\quad) \pm \sqrt{(\qquad)}}{(\quad)}$$

$$= \frac{(\quad) \pm (\quad)}{(\quad)} = \begin{cases} x_1 = \dfrac{(\quad) + (\quad)}{(\quad)} \\ x_2 = \dfrac{(\quad) - (\quad)}{(\quad)} \end{cases}$$

$-x^2+3x-8=0$

$$=\frac{-(\quad)\pm\sqrt{(\quad)^2-4(\quad)(\quad)}}{2(\quad)}=\frac{(\quad)\pm\sqrt{(\qquad)}}{(\quad)}$$

$$=\frac{(\quad)\pm(\quad)}{(\quad)}=\begin{cases} x_1=\dfrac{(\quad)+(\quad)}{(\quad)} \\ x_2=\dfrac{(\quad)-(\quad)}{(\quad)} \end{cases}$$

$4x^2+8x=-3$

$$=\frac{-(\quad)\pm\sqrt{(\quad)^2-4(\quad)(\quad)}}{2(\quad)}=\frac{(\quad)\pm\sqrt{(\qquad)}}{(\quad)}$$

$$=\frac{(\quad)\pm(\quad)}{(\quad)}=\begin{cases} x_1=\dfrac{(\quad)+(\quad)}{(\quad)}=\dfrac{(\quad)}{(\quad)} \\ x_2=\dfrac{(\quad)-(\quad)}{(\quad)}=\dfrac{(\quad)}{(\quad)} \end{cases}$$

$3x^2-x-5=0$

$$=\frac{-(\quad)\pm\sqrt{(\quad)^2-4(\quad)(\quad)}}{2(\quad)}=\frac{(\quad)\pm\sqrt{(\qquad)}}{(\quad)}$$

$$=\frac{(\quad)\pm(\quad)}{(\quad)}=\begin{cases} x_1=\dfrac{(\quad)+(\quad)}{(\quad)}=\dfrac{(\quad)}{(\quad)} \\ x_2=\dfrac{(\quad)-(\quad)}{(\quad)}=\dfrac{(\quad)}{(\quad)} \end{cases}$$