

## Ecuaciones de segundo grado

1 Resuelve las siguientes ecuaciones:

a)  $x^2 + 4x - 5 = 0$

$$\left. \begin{array}{l} a = \boxed{\phantom{00}} \\ b = \boxed{\phantom{00}} \\ c = \boxed{\phantom{00}} \end{array} \right\} \rightarrow x = \frac{-\boxed{\phantom{00}} \pm \sqrt{\boxed{\phantom{00}}^2 - 4 \cdot \boxed{\phantom{00}} \cdot \boxed{\phantom{00}}}}{2 \cdot \boxed{\phantom{00}}} = \frac{-\boxed{\phantom{00}} \pm \boxed{\phantom{00}}}{\boxed{\phantom{00}}} \quad \begin{array}{l} x = \boxed{\phantom{00}} \\ x = \boxed{\phantom{00}} \end{array}$$

b)  $2x^2 - 7x + 3 = 0$

$$\left. \begin{array}{l} a = \boxed{\phantom{00}} \\ b = \boxed{\phantom{00}} \\ c = \boxed{\phantom{00}} \end{array} \right\} \rightarrow x = \frac{-\boxed{\phantom{00}} \pm \sqrt{\boxed{\phantom{00}}^2 - 4 \cdot \boxed{\phantom{00}} \cdot \boxed{\phantom{00}}}}{2 \cdot \boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}} \pm \boxed{\phantom{00}}}{\boxed{\phantom{00}}} \quad \begin{array}{l} x = \boxed{\phantom{00}} \\ x = \boxed{\phantom{00}} \end{array}$$

c)  $-x^2 + x + 6 = 0$

$$\left. \begin{array}{l} a = \boxed{\phantom{00}} \\ b = \boxed{\phantom{00}} \\ c = \boxed{\phantom{00}} \end{array} \right\} \rightarrow x = \frac{-\boxed{\phantom{00}} \pm \sqrt{\boxed{\phantom{00}}^2 - 4 \cdot \boxed{\phantom{00}} \cdot \boxed{\phantom{00}}}}{2 \cdot \boxed{\phantom{00}}} = \frac{-\boxed{\phantom{00}} \pm \boxed{\phantom{00}}}{-\boxed{\phantom{00}}} \quad \begin{array}{l} x = \boxed{\phantom{00}} \\ x = \boxed{\phantom{00}} \end{array}$$

d)  $2x^2 - 7x - 4 = 0$

$$\left. \begin{array}{l} a = \boxed{\phantom{00}} \\ b = \boxed{\phantom{00}} \\ c = \boxed{\phantom{00}} \end{array} \right\} \rightarrow x = \frac{-\boxed{\phantom{00}} \pm \sqrt{\boxed{\phantom{00}}^2 - 4 \cdot \boxed{\phantom{00}} \cdot \boxed{\phantom{00}}}}{2 \cdot \boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}} \pm \boxed{\phantom{00}}}{\boxed{\phantom{00}}} \quad \begin{array}{l} x = \boxed{\phantom{00}} \\ x = -\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} \end{array}$$

e)  $x^2 - 10x + 25 = 0$

$$\left. \begin{array}{l} a = \boxed{\phantom{00}} \\ b = \boxed{\phantom{00}} \\ c = \boxed{\phantom{00}} \end{array} \right\} \rightarrow x = \frac{-\boxed{\phantom{00}} \pm \sqrt{\boxed{\phantom{00}}^2 - 4 \cdot \boxed{\phantom{00}} \cdot \boxed{\phantom{00}}}}{2 \cdot \boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}} \pm \boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \boxed{\phantom{00}}$$

f)  $x^2 - x + 2 = 0$

$$\left. \begin{array}{l} a = \boxed{\phantom{00}} \\ b = \boxed{\phantom{00}} \\ c = \boxed{\phantom{00}} \end{array} \right\} \rightarrow x = \frac{-\boxed{\phantom{00}} \pm \sqrt{\boxed{\phantom{00}}^2 - 4 \cdot \boxed{\phantom{00}} \cdot \boxed{\phantom{00}}}}{2 \cdot \boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}} \pm \sqrt{-\boxed{\phantom{00}}}}{\boxed{\phantom{00}}} = \boxed{\phantom{00}}$$

**2** Completa el siguiente cuadro:

	<i>a</i>	<i>b</i>	<i>c</i>	¿TIENE SOLUCIÓN?	<i>x</i> <sub>1</sub>	<i>x</i> <sub>2</sub>
$5x^2 - 8x = 0$						
$x^2 - 64 = 0$						
$x^2 - 3x + 4 = 0$						
$4x^2 + x - 3 = 0$						