



Polynomial, Equation, Factoring

Nombre _____

Día _____

Given a second-degree equation, solve it by factoring the trinomial first.

(1) $x^2 - 20x + 100 = 0$

(2) $x^2 + 16x + 64 = 0$

(3) $x^2 + 12x + 36 = 0$

(4) $x^2 - x - 90 = 0$

(5) $x^2 + 12x + 35 = 0$

(6) $x^2 + 4x - 32 = 0$

(7) $x^2 - x - 20 = 0$

(8) $x^2 + 15x + 50 = 0$

(9) $x^2 - 6x + 8 = 0$

(10) $x^2 + 5x - 14 = 0$

(11) $x^2 - 16 = 0$

(12) $x^2 + 3x - 18 = 0$



Soluciones

Given a second-degree equation, solve it by factoring the trinomial first.

$$\begin{aligned}(1) \quad x^2 - 20x + 100 &= 0 \\ (x - 10)(x - 10) &= 0 \\ x = 10, x = 10\end{aligned}$$

$$\begin{aligned}(2) \quad x^2 + 16x + 64 &= 0 \\ (x + 8)(x + 8) &= 0 \\ x = -8, x = -8\end{aligned}$$

$$\begin{aligned}(3) \quad x^2 + 12x + 36 &= 0 \\ (x + 6)(x + 6) &= 0 \\ x = -6, x = -6\end{aligned}$$

$$\begin{aligned}(4) \quad x^2 - x - 90 &= 0 \\ (x + 9)(x - 10) &= 0 \\ x = -9, x = 10\end{aligned}$$

$$\begin{aligned}(5) \quad x^2 + 12x + 35 &= 0 \\ (x + 5)(x + 7) &= 0 \\ x = -5, x = -7\end{aligned}$$

$$\begin{aligned}(6) \quad x^2 + 4x - 32 &= 0 \\ (x + 8)(x - 4) &= 0 \\ x = -8, x = 4\end{aligned}$$

$$\begin{aligned}(7) \quad x^2 - x - 20 &= 0 \\ (x - 5)(x + 4) &= 0 \\ x = 5, x = -4\end{aligned}$$

$$\begin{aligned}(8) \quad x^2 + 15x + 50 &= 0 \\ (x + 10)(x + 5) &= 0 \\ x = -10, x = -5\end{aligned}$$

$$\begin{aligned}(9) \quad x^2 - 6x + 8 &= 0 \\ (x - 2)(x - 4) &= 0 \\ x = 2, x = 4\end{aligned}$$

$$\begin{aligned}(10) \quad x^2 + 5x - 14 &= 0 \\ (x - 2)(x + 7) &= 0 \\ x = 2, x = -7\end{aligned}$$

$$\begin{aligned}(11) \quad x^2 - 16 &= 0 \\ (x + 4)(x - 4) &= 0 \\ x = -4, x = 4\end{aligned}$$

$$\begin{aligned}(12) \quad x^2 + 3x - 18 &= 0 \\ (x - 3)(x + 6) &= 0 \\ x = 3, x = -6\end{aligned}$$