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.

(1) $x^2 - 20x + 100 = 0$
$(x - 10)(x - 10) = 0$
$x = 10, x = 10$

(2) $x^2 + 16x + 64 = 0$
$(x + 8)(x + 8) = 0$
$x = -8, x = -8$

(3) $x^2 + 12x + 36 = 0$
$(x + 6)(x + 6) = 0$
$x = -6, x = -6$

(4) $x^2 - x - 90 = 0$
$(x + 9)(x - 10) = 0$
$x = -9, x = 10$

(5) $x^2 + 12x + 35 = 0$
$(x + 5)(x + 7) = 0$
$x = -5, x = -7$

(6) $x^2 + 4x - 32 = 0$
$(x + 8)(x - 4) = 0$
$x = -8, x = 4$

(7) $x^2 - x - 20 = 0$
$(x - 5)(x + 4) = 0$
$x = 5, x = -4$

(8) $x^2 + 15x + 50 = 0$
$(x + 10)(x + 5) = 0$
$x = -10, x = -5$

(9) $x^2 - 6x + 8 = 0$
$(x - 2)(x - 4) = 0$
$x = 2, x = 4$

(10) $x^2 + 5x - 14 = 0$
$(x - 2)(x + 7) = 0$
$x = 2, x = -7$

(11) $x^2 - 16 = 0$
$(x + 4)(x - 4) = 0$
$x = -4, x = 4$

(12) $x^2 + 3x - 18 = 0$
$(x - 3)(x + 6) = 0$
$x = 3, x = -6$