

Solve Quadratics

Solve the following equations. Show your work.

a) $x^2 + x - 30 = 0$

b) $p^2 - 7p = 0$

c) $p^2 - 7p = 8$

d) $3x^2 + 6x + 3 = 0$

e) $2x^2 - 9x + 10 = 0$

f) $x^2 + 15x + 40 = 4$

Solve Quadratics

Solve the following equations. Show your work.

a) $x^2 + x - 30 = 0$

$$(x + 6)(x - 5) = 0$$
$$x = -6 \text{ or } 5$$

b) $p^2 - 7p = 0$

$$p(p - 7) = 0$$
$$p = 0 \text{ or } 7$$

c) $p^2 - 7p = 8$

$$p^2 - 7p - 8 = 0$$
$$(p - 8)(p + 1) = 0$$
$$p = 8 \text{ or } -1$$

d) $3x^2 + 6x + 3 = 0$

$$3(x + 1)(x + 1) = 0$$
$$x = -1$$

e) $2x^2 - 9x + 10 = 0$

$$(2x - 5)(x - 2) = 0$$
$$x = \frac{5}{2} \text{ or } 2$$

f) $x^2 + 15x + 40 = 4$

$$x^2 + 15x + 36 = 0$$
$$(x + 12)(x + 3) = 0$$
$$x = -12 \text{ or } -3$$