

Solving Quadratics - Practice Quiz

Solve each equation by taking square roots.

1) $17x^2 + 17 = 5525$

2) $81x^2 + 6 = 150$

Solve each equation by factoring.

3) $n^2 + 5n - 24 = 0$

4) $n^2 + 2n - 3 = 0$

5) $-x^2 + 7x = -2x^2 + 3x + 32$

6) $m^2 - 4m - 37 = -5$

7) $n^2 + 5n + 13 = 7$

8) $-2n^2 = 8n - 15 - 3n^2$

$$9) 6p^2 - 19p - 20 = 0$$

$$10) 7x^2 + 18x + 8 = 0$$

$$11) 7x^2 + 46x + 24 = 0$$

$$12) 3x^2 + 31x + 56 = 0$$

$$13) 6x^2 + 8x - 6 = 2$$

$$14) 6a^2 - 21a + 16 = -2$$

$$15) 4n^2 + 12 = -14n$$

$$16) 5k^2 + 8k + 3 = -k^2 - k$$

Solve each equation with the quadratic formula. Simplify your answers.

17) $2k^2 - k - 9 = 0$

18) $5b^2 + 12b - 97 = 11$

19) $2x^2 - 99 = 10x - x^2 - 11$

Solving Quadratics - Practice Quiz

Solve each equation by taking square roots.

1) $17x^2 + 17 = 5525$

$\{18, -18\}$

2) $81x^2 + 6 = 150$

$\left\{\frac{4}{3}, -\frac{4}{3}\right\}$

Solve each equation by factoring.

3) $n^2 + 5n - 24 = 0$

$\{-8, 3\}$

4) $n^2 + 2n - 3 = 0$

$\{-3, 1\}$

5) $-x^2 + 7x = -2x^2 + 3x + 32$

$\{-8, 4\}$

6) $m^2 - 4m - 37 = -5$

$\{8, -4\}$

7) $n^2 + 5n + 13 = 7$

$\{-3, -2\}$

8) $-2n^2 = 8n - 15 - 3n^2$

$\{5, 3\}$

$$9) 6p^2 - 19p - 20 = 0$$

$$\left\{-\frac{5}{6}, 4\right\}$$

$$10) 7x^2 + 18x + 8 = 0$$

$$\left\{-\frac{4}{7}, -2\right\}$$

$$11) 7x^2 + 46x + 24 = 0$$

$$\left\{-\frac{4}{7}, -6\right\}$$

$$12) 3x^2 + 31x + 56 = 0$$

$$\left\{-\frac{7}{3}, -8\right\}$$

$$13) 6x^2 + 8x - 6 = 2$$

$$\left\{\frac{2}{3}, -2\right\}$$

$$14) 6a^2 - 21a + 16 = -2$$

$$\left\{\frac{3}{2}, 2\right\}$$

$$15) 4n^2 + 12 = -14n$$

$$\left\{-\frac{3}{2}, -2\right\}$$

$$16) 5k^2 + 8k + 3 = -k^2 - k$$

$$\left\{-\frac{1}{2}, -1\right\}$$

Solve each equation with the quadratic formula. Simplify your answers.

17) $2k^2 - k - 9 = 0$

$$\left\{ \frac{1 + \sqrt{73}}{4}, \frac{1 - \sqrt{73}}{4} \right\}$$

18) $5b^2 + 12b - 97 = 11$

$$\left\{ \frac{18}{5}, -6 \right\}$$

19) $2x^2 - 99 = 10x - x^2 - 11$

$$\left\{ \frac{22}{3}, -4 \right\}$$