

Solving Quadratics

Solve each equation by factoring.

1) $m^2 + 4m - 21 = 0$

2) $b^2 - 6b + 9 = 0$

3) $m^2 + 13m + 47 = 5$

4) $k^2 = -8k$

Solve each equation by completing the square.

5) $a^2 - 14a + 24 = 0$

6) $n^2 - 12n + 30 = -5$

7) $n^2 - 81 = 16n$

8) $x^2 - 22x + 20 = -10x$

Solve each equation with the quadratic formula.

9) $5b^2 - 9b - 44 = 0$

10) $2v^2 + 2 = 4$

11) $2v^2 + 9 = -9v$

12) $9x^2 + 1 = -5$

Answers to Solving Quadratics

1) $\{-7, 3\}$

5) $\{12, 2\}$

9) $\{4, -2.2\}$

2) $\{3\}$

6) $\{7, 5\}$

10) $\{1, -1\}$

3) $\{-7, -6\}$

7) $\{20.042, -4.042\}$

11) $\{-1.5, -3\}$

4) $\{-8, 0\}$

8) $\{10, 2\}$

12) No solution.