

Solving Quadratic Equations with Square Roots

Solve each equation by taking square roots.

1) $k^2 = 76$

2) $k^2 = 16$

3) $x^2 = 21$

4) $a^2 = 4$

5) $x^2 + 8 = 28$

6) $2n^2 = -144$

7) $-6m^2 = -414$

8) $7x^2 = -21$

9) $m^2 + 7 = 88$

10) $-5x^2 = -500$

11) $-7n^2 = -448$

12) $-2k^2 = -162$

13) $x^2 - 5 = 73$

14) $16n^2 = 49$

$$15) n^2 - 5 = -4$$

$$16) n^2 + 8 = 80$$

$$17) 7v^2 + 1 = 29$$

$$18) 10n^2 + 2 = 292$$

$$19) 2m^2 + 10 = 210$$

$$20) 9n^2 + 10 = 91$$

$$21) 5n^2 - 7 = 488$$

$$22) 8n^2 - 6 = 306$$

$$23) 10n^2 - 10 = 470$$

$$24) 8n^2 - 4 = 532$$

$$25) 4r^2 + 1 = 325$$

$$26) 8b^2 - 7 = 193$$

$$27) 2k^2 - 2 = 144$$

$$28) 3 - 4x^2 = -85$$

Solving Quadratic Equations with Square Roots

Solve each equation by taking square roots.

1) $k^2 = 76$

$\{8.717, -8.717\}$

2) $k^2 = 16$

$\{4, -4\}$

3) $x^2 = 21$

$\{4.582, -4.582\}$

4) $a^2 = 4$

$\{2, -2\}$

5) $x^2 + 8 = 28$

$\{4.472, -4.472\}$

6) $2n^2 = -144$

No solution.

7) $-6m^2 = -414$

$\{8.306, -8.306\}$

8) $7x^2 = -21$

No solution.

9) $m^2 + 7 = 88$

$\{9, -9\}$

10) $-5x^2 = -500$

$\{10, -10\}$

11) $-7n^2 = -448$

$\{8, -8\}$

12) $-2k^2 = -162$

$\{9, -9\}$

13) $x^2 - 5 = 73$

$\{8.831, -8.831\}$

14) $16n^2 = 49$

$\{1.75, -1.75\}$

$$15) n^2 - 5 = -4$$

$$\{1, -1\}$$

$$16) n^2 + 8 = 80$$

$$\{8.485, -8.485\}$$

$$17) 7v^2 + 1 = 29$$

$$\{2, -2\}$$

$$18) 10n^2 + 2 = 292$$

$$\{5.385, -5.385\}$$

$$19) 2m^2 + 10 = 210$$

$$\{10, -10\}$$

$$20) 9n^2 + 10 = 91$$

$$\{3, -3\}$$

$$21) 5n^2 - 7 = 488$$

$$\{9.949, -9.949\}$$

$$22) 8n^2 - 6 = 306$$

$$\{6.244, -6.244\}$$

$$23) 10n^2 - 10 = 470$$

$$\{6.928, -6.928\}$$

$$24) 8n^2 - 4 = 532$$

$$\{8.185, -8.185\}$$

$$25) 4r^2 + 1 = 325$$

$$\{9, -9\}$$

$$26) 8b^2 - 7 = 193$$

$$\{5, -5\}$$

$$27) 2k^2 - 2 = 144$$

$$\{8.544, -8.544\}$$

$$28) 3 - 4x^2 = -85$$

$$\{4.69, -4.69\}$$