

Solving Quadratics by Taking the Square Root

Date _____ Period _____

Solve each equation by taking square roots.

1) $n^2 = 97$

2) $n^2 = 9$

3) $x^2 = 24$

4) $n^2 = 4$

5) $m^2 - 8 = 8$

6) $n^2 + 10 = -1$

7) $-2n^2 = -156$

8) $3n^2 = 162$

9) $16v^2 - 6 = 10$

10) $9r^2 - 9 = 828$

11) $8n^2 - 1 = -62$

12) $-7 - 9k^2 = -646$

Answers to Solving Quadratics by Taking the Square Root (ID: 1)

1) $\{\sqrt{97}, -\sqrt{97}\}$

5) $\{4, -4\}$

9) $\{1, -1\}$

2) $\{3, -3\}$

6) No solution.

10) $\{\sqrt{93}, -\sqrt{93}\}$

3) $\{2\sqrt{6}, -2\sqrt{6}\}$

7) $\{\sqrt{78}, -\sqrt{78}\}$

11) No solution.

4) $\{2, -2\}$

8) $\{3\sqrt{6}, -3\sqrt{6}\}$

12) $\{\sqrt{71}, -\sqrt{71}\}$