

Chapter 9 Review 3

Date _____ Period _____

Simplify.

1) $-4\sqrt{45}$

2) $-5\sqrt{100}$

3) $\frac{\sqrt{32}}{2}$

4) $-\frac{\sqrt{72}}{6}$

Solve each equation by taking square roots.

5) $8m^2 + 7 = 87$

6) $5b^2 + 6 = 251$

7) $8m^2 - 3 = -18$

8) $8x^2 + 5 = 61$

Solve each equation with the quadratic formula.

9) $2n^2 + 11n - 6 = 0$

10) $11x^2 - x - 2 = 0$

11) $9x^2 + 4x - 2 = 0$

12) $r^2 - 11r + 17 = 0$

Determine how many solutions.

13) $2n^2 - 10n - 11 = 0$

14) $7a^2 - 10a + 7 = 0$

Answers to Chapter 9 Review 3 (ID: 1)

1) $-12\sqrt{5}$

2) -50

3) $2\sqrt{2}$

4) $-\sqrt{2}$

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

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

7) No solution.

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

9) $\{\frac{1}{2}, -6\}$

10) $\{\frac{1+\sqrt{89}}{22}, \frac{1-\sqrt{89}}{22}\}$

11) $\{\frac{-2+\sqrt{22}}{9}, \frac{-2-\sqrt{22}}{9}\}$

12) $\{\frac{11+\sqrt{53}}{2}, \frac{11-\sqrt{53}}{2}\}$

13) 2 solutions

14) No solution.