

## 11.2 Solve Quadratics Using Square Roots

CA #2

Algebra 1

Name: \_\_\_\_\_

Solve each equation. Give EXACT answers (simplified radical form).

1.  $x^2 + 3 = 28$

2.  $\frac{x^2}{4} = 9$

3.  $3x^2 + 8 = 53$

4.  $\frac{x^2}{2} + 6 = 1$

5.  $\frac{x^2}{7} - 9 = -2$

6.  $3(x - 15)^2 = 12$

7.  $2(x + 7)^2 - 9 = 5$

8.  $\frac{(x-2)^2}{8} - 5 = -3$

9.  $5(x + 6)^2 + 30 = 25$

10.  $\frac{(x+7)^2}{2} - 10 = 22$

**Solve each equation. Give DECIMAL answers (round to the nearest hundredth).**

11.  $(x + 3)^2 - 5 = 21$

12.  $6(x - 10)^2 + 2 = 50$

**Answers to 11.2 CA #2**

1. $\pm 5$	2. $\pm 6$	3. $\pm\sqrt{15}$	4. No solution	5. $\pm 7$	6. 13 or 17
7. $-7 \pm \sqrt{7}$	8. -2 or 6	9. no solution	10. -15 or 1	11. -8.10 or 2.10	12. 7.17 or 12.83