

## 11.2 Solve Quadratics Using Square Roots

CA #1

Algebra 1

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

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

1.  $x^2 - 5 = 44$

2.  $4x^2 + 3 = 51$

3.  $7x^2 + 11 = 39$

4.  $\frac{x^2}{5} - 6 = 14$

5.  $2x^2 + 21 = 121$

6.  $(x - 2)^2 - 10 = 54$

7.  $3(x + 3)^2 + 8 = 83$

8.  $\frac{(x-6)^2}{2} - 7 = 29$

9.  $4(x + 3)^2 + 7 = 3$

10.  $9(x + 8)^2 - 4 = 32$

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

11.  $(x + 3)^2 + 6 = 13$

12.  $7(x - 15)^2 - 21 = 10$

**Answers to 11.2 CA #1**

1. $\pm 7$	2. $\pm 2\sqrt{3}$	3. $\pm 2$	4. $\pm 10$	5. $\pm 5\sqrt{2}$	6. $-6$ or $10$
7. $-8$ or $2$	8. $6 \pm 6\sqrt{2}$	9. no solution	10. $-10$ or $-6$	11. $-0.35$ or $-5.65$	12. $12.90$ or $17.10$