

### 11.3 The Quadratic Formula

Algebra 1

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

**CA #1**

**Solve each equation using the quadratic formula.**

1.  $x^2 + 3x - 28 = 0$

2.  $x^2 - 3x + 15 = 10x - 7$

3.  $5x^2 - 9 = 2x^2 - 6x$

4.  $2x^2 + 4x - 45 = 3x$

5.  $10x^2 + x - 3 = 0$

**Solve each equation using the quadratic formula. Give your answers in both EXACT (simplified radical) and DECIMAL (round to the nearest hundredth).**

6.  $5x^2 - 1 = -7x$

EXACT:

ROUNDED:

7.  $9x^2 + 4x - 8 = 2x^2$

EXACT:

ROUNDED:

**Answers to 11.3 CA #1**

1. $x = 4, x = -7$	2. $x = 2, x = 11$	3. $x = 1, x = -3$	4. $x = \frac{9}{2}, x = -5$
5. $x = \frac{1}{2}, x = -\frac{3}{5}$	6. $x = -\frac{7}{10} \pm \frac{\sqrt{69}}{10}$ $x \approx 0.13, x \approx -1.53$	7. $x = -\frac{2}{7} \pm \frac{2\sqrt{15}}{7}$ $x \approx 0.82, x \approx -1.39$	