## 11.3 The Quadratic Formula

Solve each equation using the quadratic formula.

$$1. \ x^2 + 3x - 10 = 0$$

$$2. \ x^2 + 100 = 40 - 16x$$

$$3. \ x^2 + 2x - 16 = -4x$$

4. 
$$28x^2 = 2 - x$$

$$5. \ 18x^2 + 4x + 2 = 7x + 12$$

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

6.  $2 + 3x = 4x^2$ 7.  $x^2 + 4x = 3$ 

6. 
$$2 + 3x = 4x^2$$

EXACT:

EXACT:

ROUNDED:

ROUNDED:

**Answers to 11.3 CA #2** 

1. $x = -5, x = 2$	$2. \ x = -6, x = -10$	3. $x = 2, x = -8$	4. $x = -\frac{2}{7}, x = \frac{1}{4}$
$5. \ x = -\frac{2}{3}, x = \frac{5}{6}$	6. $x = \frac{3 \pm \sqrt{41}}{8}$ $x \approx 1.18, x \approx -0.43$		7. $x = -2 \pm \sqrt{7}$ $x \approx 0.65, x \approx -4.65$