

SUBSTITUTING A, B, AND C

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

For each of the following equations, name *a*, *b*, and *c*. Then, substitute them into the quadratic formula to show the setup **ONLY**. You **DO NOT** need to simplify or solve.

1. $2x^2 + 3x - 4 = 0$

2. $x^2 + 7 + 2 = 0$

3. $4x^2 - 4x + 6 = 0$

4. $-3x^2 - 8x - 12 = 0$

5. $x^2 - x + 9 = 0$

6. $x^2 - 6x = 0$

7. $x^2 + 8x = 1$

8. $4x^2 - 11x = -5$

(Adv. Alg. I only):

9. $2x^2 - 3 = -7x$

10. $9x^2 - 8x - 7 = 6$

QUADRATIC FUNCTIONS

Name _____

Simplify the following expressions. (Show all work.)

<p>1. $x = \frac{7 \pm \sqrt{36}}{2}$</p>	<p>2. $x = \frac{-2 \pm \sqrt{16}}{4}$</p>
<p>3. $x = \frac{4 \pm \sqrt{48}}{6}$</p>	<p>4. $x = \frac{4 \pm \sqrt{32}}{8}$</p>
<p>5. $x = \frac{-12 \pm \sqrt{144 - 48}}{6}$</p>	<p>6. $x = \frac{-7 \pm \sqrt{49 - 40}}{10}$</p>
<p>7. $x = \frac{-9 \pm \sqrt{81 - 4(2)(7)}}{5}$</p>	<p>8. $x = \frac{-6 \pm \sqrt{6^2 - 4(2)(3)}}{2(2)}$</p>
<p>9. $x = \frac{6 \pm \sqrt{(-6)^2 - 4(1)(4)}}{2(1)}$</p>	<p>10. $x = \frac{11 \pm \sqrt{(-11)^2 - 4(3)(10)}}{2(3)}$</p>