Name: _____ **Unit 8:** Quadratic Equations

Date: _____ **Bell:** _____ **Homework 10:** Solving Quadratics by The Quadratic Formula

**** This is a 2-page document! ****

Solve each quadratic equation by the quadratic formula. Simplify all irrational solutions. round decimals to 1 place.

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

1. $x^2 - 2x - 48 = 0$ a= b= c=

2. $6x^2 - 15x = 0$ a= b= c=

3. $-x^2 + 8x = 7$ a= b= c=

4. $x^2 + 4x + 17 = 8 - 2x$ a= b= c=

5. $4x^2 - 25 = 0$ a= b= c=

6. $6x^2 + 18x = x - 12$ a= b= c=

7. $x^2 + 2x = 3 - 2x$ a= b= c=

8. $-x^2 + 7x - 18 = 0$ a= b= c=

9. $2x^2 - 8x - 2 = 3$ a= b= c=

10. $10x^2 - 19 = 5$ a= b= c=

11. $4x^2 - 1 = 6x$ a= b= c=

12. $2x^2 + 12x = 4 - x^2$ a= b= c=