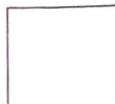


Name: _____

Unit 4: Solving Quadratic Equations



Date: _____

Bell: _____

Homework 2: Solving Quadratics by Factoring

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

Directions: Find the solutions of each quadratic equation factoring.

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

2. $10x^2 = 6x$

3. $x^2 - 36 = 0$

4. $16x^2 = 81$

5. $x^2 + 12x + 27 = 0$

6. $x^2 - 4x = 77$

7. $x^2 = x + 30$

8. $x^2 + 8x - 65 = x - 5$

9. $2x^2 + 6x - 80 = 0$

10. $5x^2 + 11x + 2 = 0$

$$11. 8x^2 - 2x = 15$$

$$12. 12x^2 - 26x - 7 = 3x + 1$$

Directions: Identify the roots of each quadratic equation below.

$$13. 7x^2 + 8x = x^2$$

$$14. 3x^2 = 81 - x^2$$

$$15. f(x) = x^2 - 4$$

$$16. 4x^2 + 41x + 98 = 2 - 3x$$

$$17. 4x^2 - 11x = x - 9$$

$$18. f(x) = -(x - 2)^2 + 4$$

19. Give the vertex form and factored form of $f(x) = x^2 - 12x + 35$. What specific information does each form provide?