

Name: _____ Date: _____ Period: _____

CHAPTER 9 REVIEW

Quadratic Functions and Equations

Solve by using SQUARE ROOTS.

1. $3x^2 - 48 = 0$

2. $-k^2 + 7 = 3$

3. $3p^2 + 20 = -7$

Solve by FACTORING.

4. $3x^2 + 12x = 63$

5. $4m^2 - 6m = 0$

6. $2x^2 - 11x - 6 = 0$

Solve by QUADRATIC FORMULA. (Find discriminant first to determine number of solutions)

7. $2x^2 - 8x - 3 = 0$

8. $9x^2 + 12x + 4 = 0$

9. $2x^2 - 5x + 8 = 0$

SOLVE USING ANY METHOD. (SQUARE ROOTS, FACTORING, QUADRATIC FORMULA)

10. $x^2 - 3x - 4 = 0$

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

12. $2x^2 = 50$

13. $4y^2 = 6y$

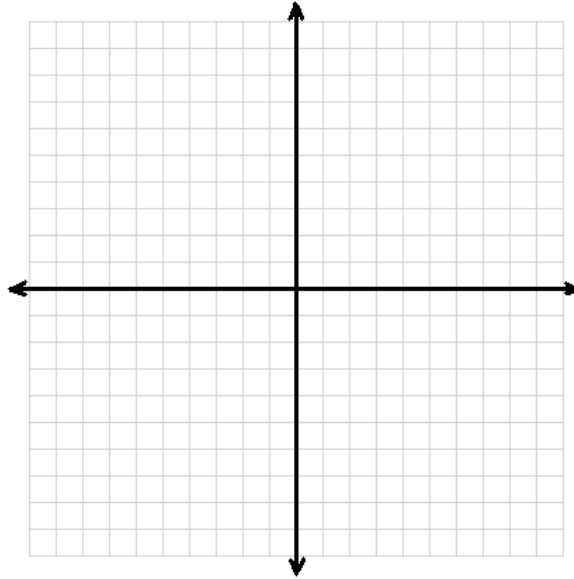
14. $-3x^2 + 4x + 10 = 0$

15. $2p^2 + 12 = 20$

16. Graph by plotting and labeling 5 points (one needs to be the vertex).

$$y = 2x^2 - 4x - 3$$

Vertex: _____
Axis of Sym: _____
Min: _____
Max: _____



17. A soccer ball is kicked into the air with an upward velocity of 5 m/s and is modeled by the equation $h = -\frac{1}{2}t^2 + 5t + 2$.

- a.) How long does it take for the ball to reach its highest point?
- b.) What is the maximum height of the ball?
- c.) How long is the ball in the air?

