1. The inverse of squaring a number is _____.

8. Solve $x^2 + 10x = 39$.

2. What is the standard form of a quadratic equation?

If the discriminant is negative, the equation has ______.

3. Solve $x^2 = 49$.

10. How many real solutions does the equation below have?

 $8m^2 + 2m + 3 = 0$

4. What are the solutions of $(x + 2)^2 = 16$?

11. What values of a, b, and c should be substituted into the quadratic formula to solve $6x^2 - 4x + 3 = 0$?

5. Solve $-2(x-4)^2 + 3 = -125$

6. Solve $4x^2 = 14x + 8$

12. Which formula is used to "complete the square"?

- 7. Which are the solutions of $x^2 2x 24 = 0$?
- 13. What number should be added to both sides of the equation to complete the square on $x^2 - 12x = 34$?

14. What are the solutions of $2v^2 + 128 = 0$?

15. If a quadratic equation has two solutions, it's graph would cross the x-axis _____.

WRITTEN RESPONSE (5 pts each on test)

16. Solve using square roots.

18. Solve using the quadratic formula.

 $3(x+2)^2 + 4 = 112$

 $-3x^2 + 5x + 2 = 0$

17. Solve by completing the square.

$$x^2 - 4x = 12$$