1. The inverse of squaring a number is $\qquad$ .
2. Solve $x^{2}+10 x=39$.
3. What is the standard form of a quadratic equation?
4. Solve $x^{2}=49$.
5. How many real solutions does the equation below have?

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

9. If the discriminant is negative, the equation has $\qquad$ .
10. What are the solutions of $(x+2)^{2}=16$ ?
11. Solve $-2(x-4)^{2}+3=-125$
12. Solve $4 x^{2}=14 x+8$
13. Which formula is used to "complete the square"?
14. What number should be added to both sides of the equation to complete the square on $x^{2}-12 x=34$ ?
15. What are the solutions of $2 v^{2}+128=0$ ?
16. If a quadratic equation has two solutions, it's graph would cross the x-axis $\qquad$ _.

## WRITTEN RESPONSE (5 pts each on test)

16. Solve using square roots.

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

18. Solve using the quadratic formula.

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

17. Solve by completing the square.

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

