Test Retake Review on Quadratic Functions Name:

SHOW WORK

Graph each equation.

7. $y = 3x^2$ 8. $y = (x + 3)^2 + 1$ 9. $y = 2x^2 + 4$ 10. $y = \frac{1}{2}(x - 3)^2$

Factor each expression.

15. $x^2 + 3x - 54$ 16. $x^2 + 10x + 24$ 17. $x^2 - 36$ 18. $x^2 - 9x - 36$

19. $x^2 - 15x + 56$ 20. $25x^2 + 70x + 49$ 21. $7x^2 - 20x - 3$ 22. $5x^2 + 23x - 10$

Lesson 5-5 **Solve each equation by factoring, by taking square roots, or by graphing. When necessary, round your answer to the nearest hundredth.**

27. $x^2 + 4x - 1 = 0$ 28. $4x^2 - 100 = 0$ 29. $x^2 = -2x + 1$ 30. $x^2 - 9 = 0$

31. $2x^2 + 4x = 70$ 32. $x^2 - 30 = 10$ 33. $x^2 + 4x = 0$ 34. $x^2 + 3x + 2 = 0$