Algebra 1: 12.6, 12.7 & 13.1 Test Review **Name _____ Period _____**
SHOW ALL WORK!

1. **Write the Quadratic Formula:**

$x =$

Simplify each radical. Remember, square roots have both + and – values.

2. $\sqrt{75}$ 3. $\sqrt{144}$ 4. $\sqrt{108}$ 5. $\sqrt{80}$

Determine the number of solutions for each quadratic equation using the discriminant. Then, use the Quadratic Formula to find the solutions.

6. $x^2 - 4x + 4 = 0$ 7. $2x^2 + 10x - 9 = 0$ 8. $3x^2 + 2x + 15 = 0$

Solve each quadratic equation by Completing the Square.

9. $x^2 - 6x - 39 = 0$

10. $x^2 - 2x - 63 = 0$

11. $x^2 + 22x + 85 = 0$

Solve each quadratic equation using the Quadratic Formula.

12. $4x^2 - 5x - 84 = 0$

13. $2x^2 + 4x - 7 = 0$