Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_

**Assignment: Solving Absolute Value Inequalities Algebraically**

**Solve algebraically and graph the solution using a number line. Show Work!**

1. 2. 3.

4. 5. 6.

7. 8. 9.

10. The IQ scores for the middle 50% of the population can be written as , where *x* is a person’s IQ. Solve this inequality to find an interval for the IQ scores for the middle 50% of the population.

11. Twenty cubic feet of marble can weigh 3400 pounds, plus or minus 100 pounds. This can be modeled by the inequality . Solve the inequality to find the possible weights of a cubic foot of marble.