$\qquad$ Date: $\qquad$ Period: $\qquad$

## Solving Absolute Value Inequalities Assignment

Solve the following, and graph the solutions on the number line.
Then write a compound inequality to represent the graph.

1. $|x-4|=10$

2. $|x+7|=14$

inequality:
3. $|x+7|<14$

inequality:
4. $|x+7| \geq 14$

inequality:
5. $|x-8|+4 \leq 5$

6. $|x-5|-3>6$

inequality:
7. $6|x-6| \geq 66$

inequality:
8. $1+|x-8|>3$

inequality:
9. $|x-4|>6$

10. $4|x-3|-7 \leq 1$


Write the compound inequality represented by the graph.
11.

12.

13.

14.

15.


