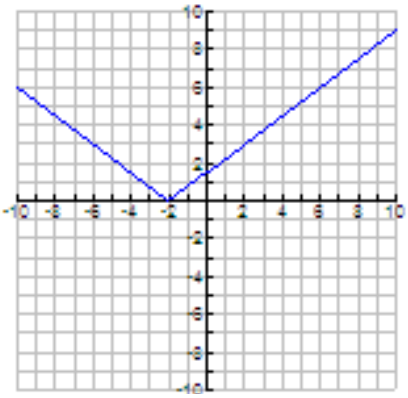
Algebra 1, Unit 4 Review **Name**_____

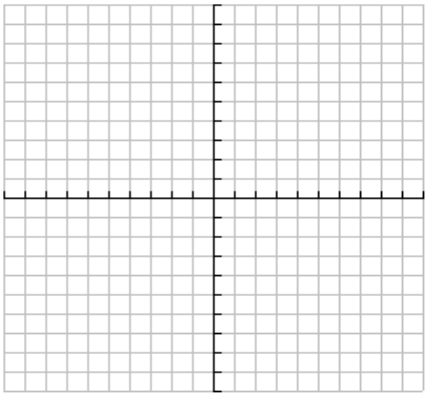
Period_____

TARGET 4A – UNDERSTANDING GRAPHS OF ABSOLUTE VALUE FUNCTIONS

1. Write the equation for the graph to the right?



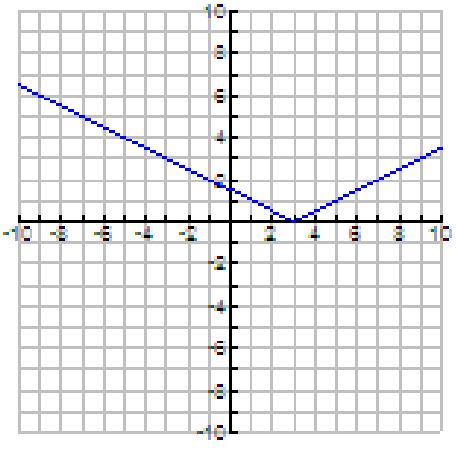
2. Consider the function $g(x)=-\frac{3}{2}|x-4|$.
   - Graph $g(x)$ on the grid provided.
   - Where is the vertex on the graph of $g(x)$?
   - Describe the slope of each piece of the graph of $g(x)$.



3. Compare and contrast the graphs of $p(m)=3|m-13|$ and $f(m)=3|m-7|$.

4. What is the domain of the graph to the right?

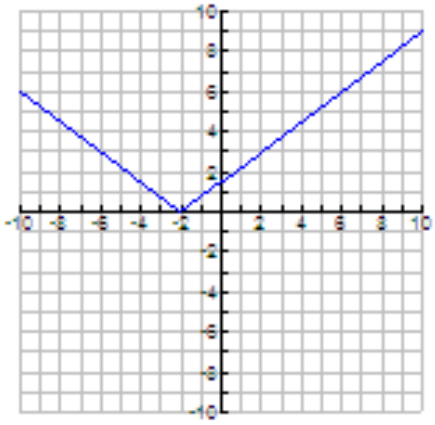
   What is the range of the graph to the right?



TARGET 4B – UNDERSTANDING SOLUTIONS OF ABSOLUTE VALUE PROBLEMS

5. Let $f(x)=4|x|$. Solve the equation $f(x)=40$ using a table. Show how the solution is seen in your table.

6. From the graph given, what is the solution to the inequality $\frac{3}{4}|p+2|\leq 6$?



7. In Mr. Garcia's class, a student receives a B if the average of the student's test scores is 85 or if the average of the scores differs from this value by at most 4 points. The inequality $|s-85|\leq 4$ describes the range of scores that results in a B.
   - Solve this inequality using algebra.
   - Describe in your own words the range of scores that will result in a B in Mr. Garcia's class.

8. Solve $2|x+3|-7=21$ with algebra.