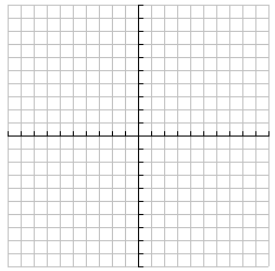
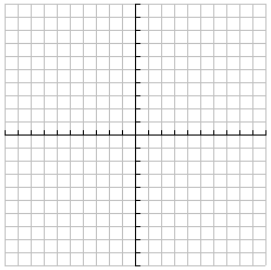
TARGET 4A: UNDERSTANDING GRAPHS OF ABSOLUTE VALUE FUNCTIONS

I can …	Sample Question	Evidence of Understanding	What level is your understanding? 4 = complete 3 = substantial 2 = developing 1 = minimal
1. determine the slope of each piece of an absolute value function.	Consider the function $f(x)=3\|x-4\|$ Describe the slope of each piece of the graph of $f(x)$.		
2. find the vertex on an absolute value function from a graph, table, or equation.	Where is the vertex on the graph of $f(x)=3\|x-4\|$?		
3. graph an absolute value function from an equation (without a calculator).	Graph $f(x)=3\|x-4\|$ on the grid provided		
4. determine the domain and range of an absolute value function.	What is the domain of $f(x)=3\|x-4\|$? What is the range of $f(x)=3\|x-4\|$?		
5. describe how changes in parameters effect the graph of an absolute value function.	Compare and contrast the graphs of $f(x)=3\|x-4\|$ and $g(x)=-5\|x-4\|$.		

TARGET 4B: UNDERSTANDING SOLUTIONS OF ABSOLUTE VALUE PROBLEMS

I can …	Sample Question	Evidence of Understanding	What level is your understanding? 4 = complete 3 = substantial 2 = developing 1 = minimal
1. use graphs to find solutions of absolute value equations/inequalities.	Solve the inequality $8 \geq \lvert p-2 \rvert$ by graphing. Show how the solution is seen in the graph.		
2. use tables to find solutions of absolute value equations/inequalities.	Let $T(m)=4\lvert m \rvert$. Solve the equation $T(m)=32$ using a table. Show how the solution is seen in the table.		
3. use algebra to find solutions of absolute value equations/inequalities.	• Using algebra, solve $\frac{2}{3}\lvert x \rvert - 4 = 29$ • Using algebra, solve $\lvert x-8 \rvert + 2 = 15$		
4. find solutions to situations modeled by absolute value functions.	The temperature in a freezer should be close to 2° Fahrenheit. The inequality $3.5 \geq \lvert T-2 \rvert$ shows a good range of temperatures where T is the temperature in degrees Fahrenheit. • Solve $3.5 \geq \lvert T-2 \rvert$ using algebra. • Explain the meaning of the solution in the context of this situation.		