*Objective:

*Absolute Value Parent Function $f(x) = |x|$		
*Table	*Function	*Graph

Got It? **1. a.** What is the graph of the function $y = |x| + 2$? How is this graph different from the parent function?

b. Reasoning Do transformations of the form $y = |x| + k$ affect the axis of symmetry? Explain.
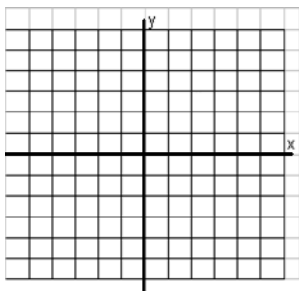
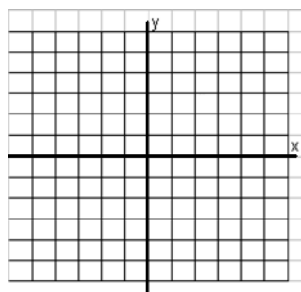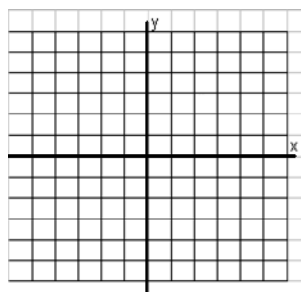| *The Family of Absolute Value Functions	
*Vertical Translation	*Horizontal Translation
*Vertical Stretch and Compression	*Reflection

Got It? 2. What is the graph of the function $y = |x - 2| + 1$?
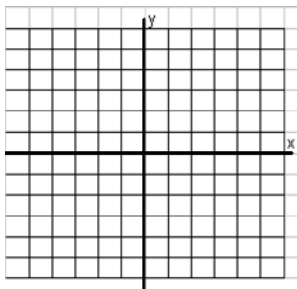
The right branch of the graph $y = a|x|$ has a slope of a.
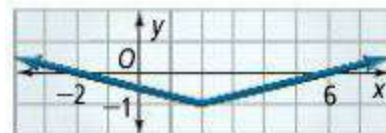
Got It? 3. What is the graph of each function?

    a. $y = 2|x|$ **b.** $y = -\frac{2}{3}|x|$

*General Form of the Absolute Value Function

Got It? 4. What are the vertex and axis of symmetry of $y = -2|x - 1| - 3$? How is $y = |x|$ transformed?

Got It? 5. What is the equation of the absolute value function?

Inclass: p. 111 #16, 22, 26, 30
Homework: p. 111 #9-29(odd)
Interactmath: #9, 11, 13, 14, 15, 19, 21, 23, 29