

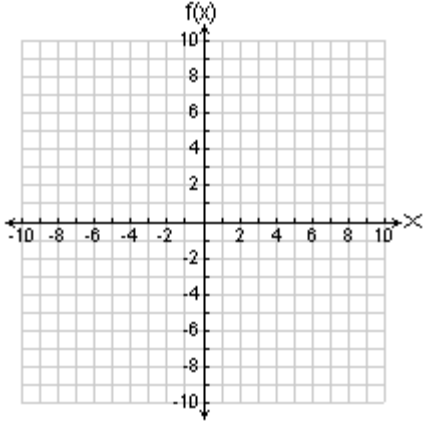
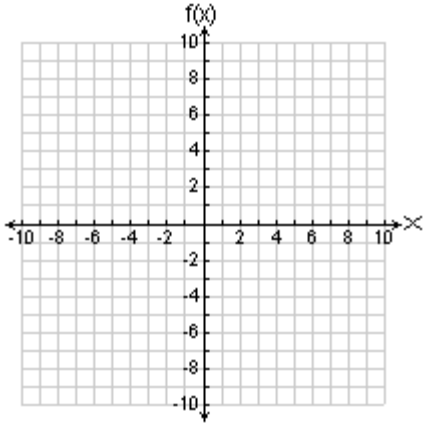
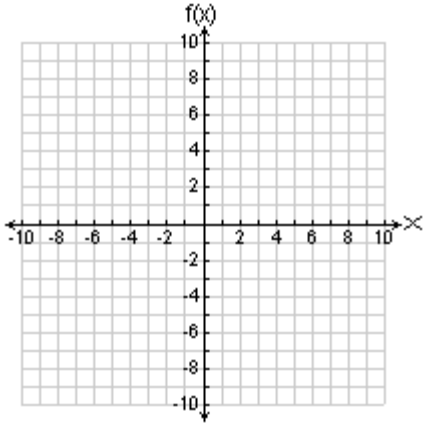
NOTES: GRAPH ABSOLUTE VALUE FUNCTIONS

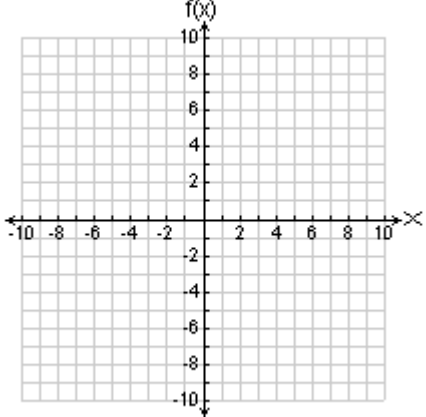
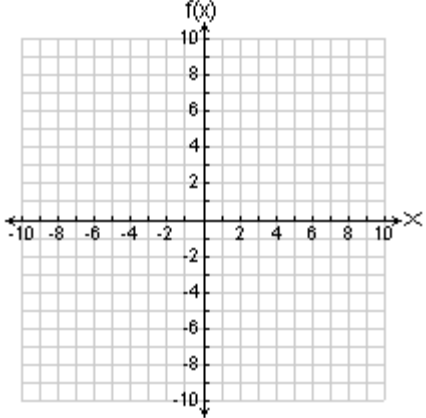
DAY 1

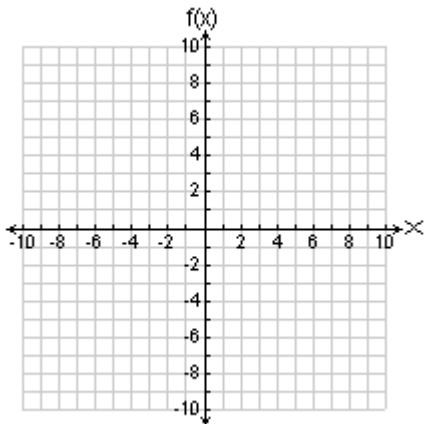
Textbook Chapter 2.7

OBJECTIVE: Today you will review graphing absolute value functions!

1.	Graph the parent function: $f(x) = x $ Describe: Slope _____ Vertex _____ Direction _____	Sketch:
2.	Graph: $f(x) = x - 3 $ and $f(x) = x $ Describe: Slope _____ Vertex _____ Direction _____ Transformation:	Sketch:
3.	Graph: $f(x) = x + 4 $ and $f(x) = x $ Describe: Slope _____ Vertex _____ Direction _____ Transformation:	Sketch:
<p>When we add “inside” the function, the graph _____.</p> <p>When we subtract “inside” the function, the graph _____.</p>		

4.	<p>Graph: $f(x) = x - 2$ and $f(x) = x$</p> <p>Describe:</p> <p>Slope _____</p> <p>Vertex _____</p> <p>Direction _____</p> <p>Transformation:</p>	<p>Sketch:</p> 
5.	<p>Graph: $f(x) = x + 3$ and $f(x) = x$</p> <p>Describe:</p> <p>Slope _____</p> <p>Vertex _____</p> <p>Direction _____</p> <p>Transformation:</p>	<p>Sketch:</p> 
6.	<p>Graph: $f(x) = x - 1 + 5$ and $f(x) = x$</p> <p>Describe:</p> <p>Slope _____</p> <p>Vertex _____</p> <p>Direction _____</p> <p>Transformation:</p>	<p>Sketch:</p> 
<p>When we add “outside” the function, the graph _____</p> <p>When we subtract “outside” the function, the graph _____</p>		

7.	<p>Graph: $f(x) = 3 x$ and $f(x) = x$</p> <p>Describe:</p> <p>Slope _____</p> <p>Vertex _____</p> <p>Direction _____</p> <p>Transformation:</p>	<p>Sketch:</p> 
8.	<p>Graph: $f(x) = \frac{1}{2} x$ and $f(x) = x$</p> <p>Describe:</p> <p>Slope _____</p> <p>Vertex _____</p> <p>Direction _____</p> <p>Transformation:</p>	<p>Sketch:</p> 
<p>When we multiply “outside” the function by _____, the graph:</p> <p>When we multiply “outside” the function by _____, the graph:</p>		

9.	<p>Graph: $f(x) = - x$ and $f(x) = x$</p> <p>Describe:</p> <p>Slope _____</p> <p>Vertex _____</p> <p>Direction _____</p> <p>Transformation:</p>	<p>Sketch:</p> 
<p>When there is a negative “outside” the function, the graph:</p>		

Putting it all together:		
	<p>First identify what each value does: $y = a x - b + k$</p> <p>a value: _____</p> <p>h: _____</p> <p>k: _____</p>	
12.	<p>Graph: $f(x) = -\frac{1}{3} x + 2 - 1$ and $f(x) = x$</p> <p>Describe:</p> <p>Slope _____</p> <p>Vertex _____</p> <p>Direction _____</p> <p>Transformation:</p>	<p>Sketch:</p> 