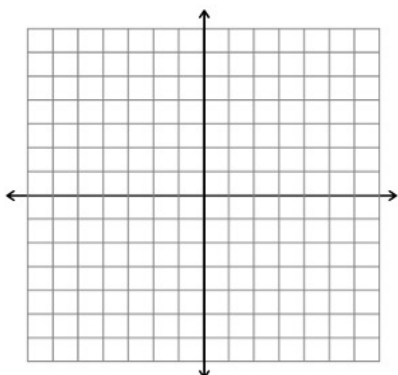


Lesson 2.7 Worksheet

Name: _____

Graph the function. Identify the graph features. *Compare* the graph with the graph of $y = |x|$.

1.) $y = |x + 2|$



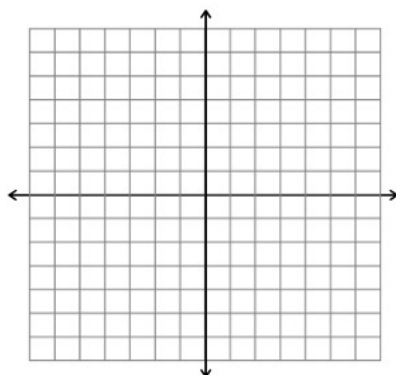
vertex:

graph opens:

x				
y				

comparison(s):

2.) $y = |x - 1| + 4$



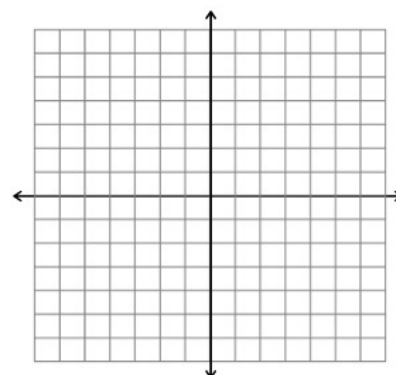
vertex:

graph opens:

x				
y				

comparison(s):

3.) $f(x) = -3|x| + 3$



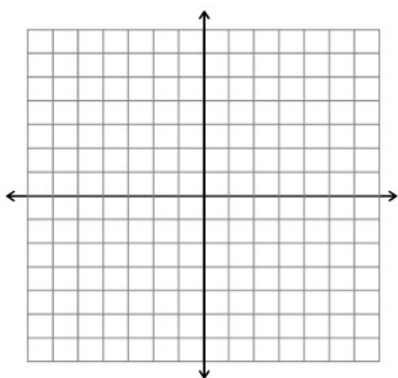
vertex:

graph opens:

x				
y				

comparison(s):

4.) $f(x) = 2|x + 1| - 6$



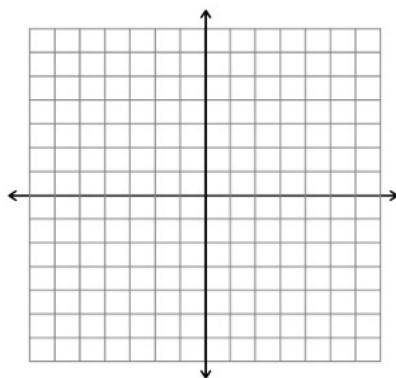
vertex:

graph opens:

x				
y				

comparison:

5.) $f(x) = -4|x + 2| + 5$



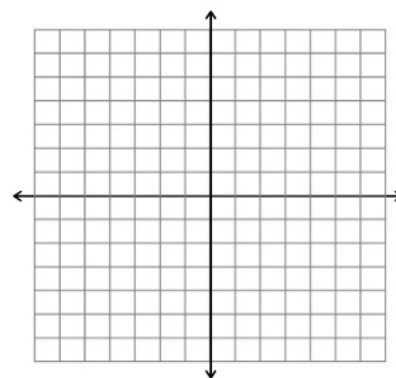
vertex:

graph opens:

x				
y				

comparison:

6.) $f(x) = -\frac{1}{2}|x - 1| + 5$



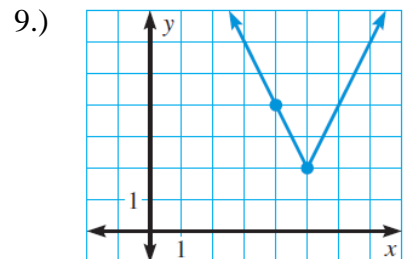
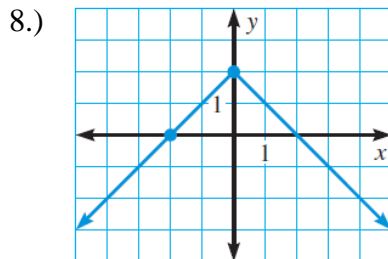
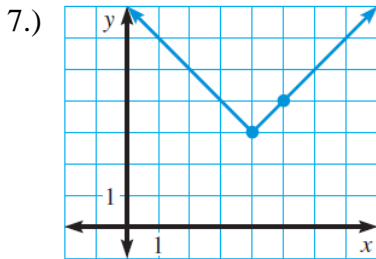
vertex:

graph opens:

x				
y				

comparison:

Write an equation of the graph shown.



Write an equation of the line, in slope-intercept form, that satisfies the given conditions.

10.) through $(4, -1)$ and $(6, -7)$

11.) through $(7, 1)$; parallel to $y = -x + 3$

Find the x - and y -intercepts of the line with the given equation. Write your intercepts as ordered pairs.

12.) $x + 5y = -15$

13.) $2x - y = 10$

14.) $-6x + 8y = -36$

x -int: _____ y -int: _____ x -int: _____ y -int: _____ x -int: _____ y -int: _____

Tell whether the lines are *parallel*, *perpendicular*, or *neither*.

15.) Line 1: through $(-1, 4)$ and $(2, 5)$
Line 2: through $(-6, 2)$ and $(0, 4)$

Graph the equation using any method. Be sure to identify the components used to graph (i.e. slope, x - or y -int.)

16.) $-6x - 2y = -4$

lines are: _____

