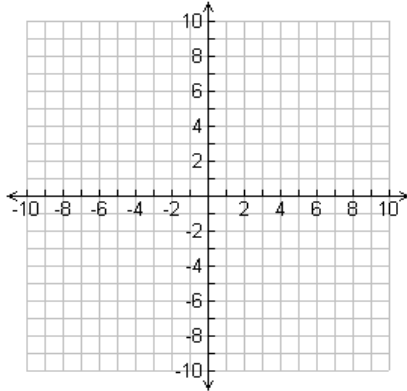## Worksheet: Graphing Functions

For each function, make a table of values and use these values to graph the function. For some of the problems, the inputs have been chosen for you. For others, you should choose the values yourself. If your values go off the graph, you should pick new inputs. Remember to connect your points at the end!
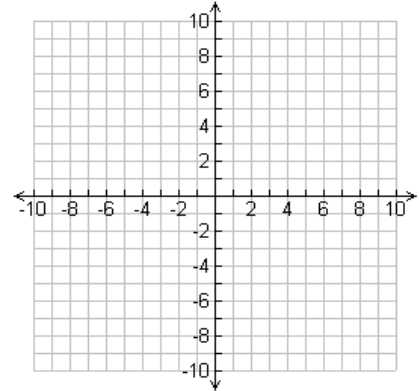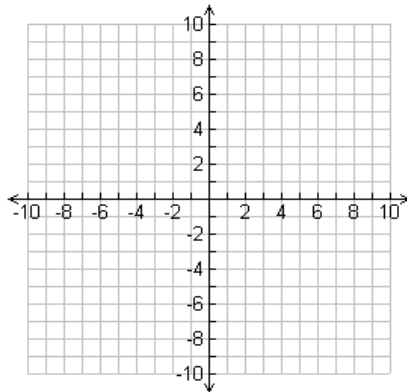
1) $a(x) = 2x - 4$

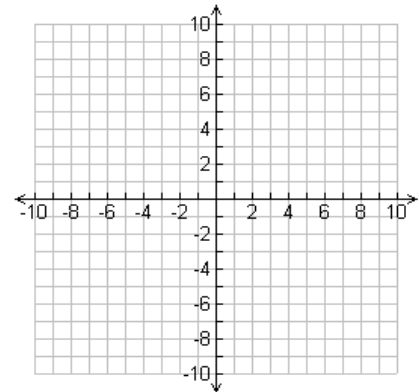| x	a(x)

2) $b(x) = \frac{1}{2}x + 8$

x	b(x)

3) $c(x) = x^2 - 3$

x	c(x)
-3	
-2	
-1	
0	
1	
2	
3	

4) $d(x) = -2x^2 + 1$

x	d(x)
-3	
-2	
-1	
0	
1	
2	
3	

5) $e(x) = |x - 2|$

x	e(x)
0	
1	
2	
3	
4	
5	
6	
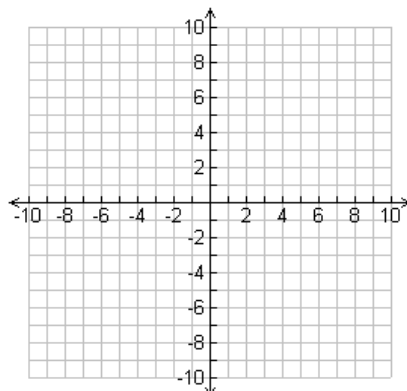
6) $f(x) = |x| - 4$

x	f(x)
-3	
-2	
-1	
0	
1	
2	
3	
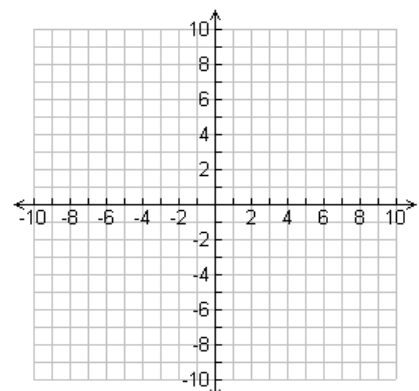
7) $g(x) = \sqrt{x-1}$

x	g(x)
1	
2	
5	
10	
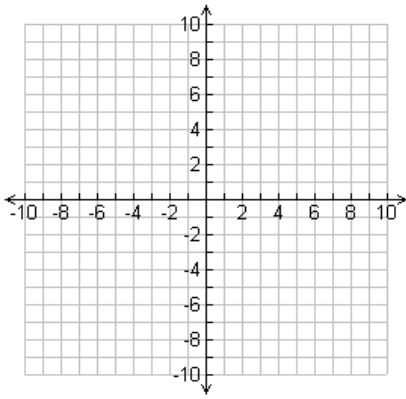
8) $h(x) = \sqrt{x+10}$

x	h(x)
-10	
-9	
-6	
-1	
6	
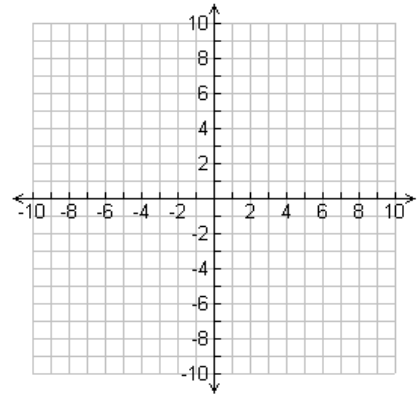
9) When graphing functions, WHY is it important that you connect the points?

10) When graphing functions, WHY is it important that you put arrows on the ends?

11) Sketch the different types of function graphs.

Linear $f(x) = x$ Quadratic $f(x) = x^2$ Absolute Value $f(x) = |x|$ Square Root $f(x) = \sqrt{x}$