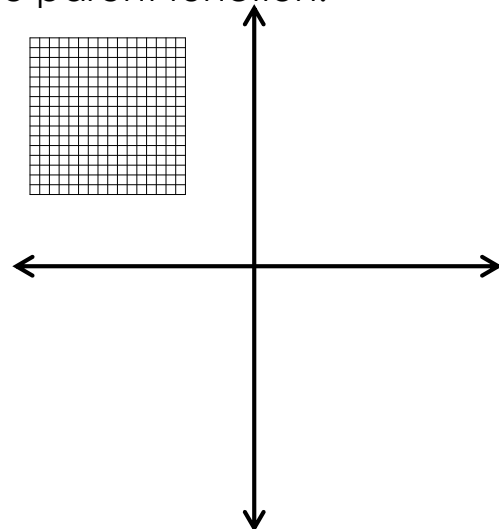


For #1-3, graph the function. Identify the parent function and determine how the new graph is different from the parent function.

1)  $g(x) = x^2 - 2$

x	y
-2	
-1	
0	
1	
2	

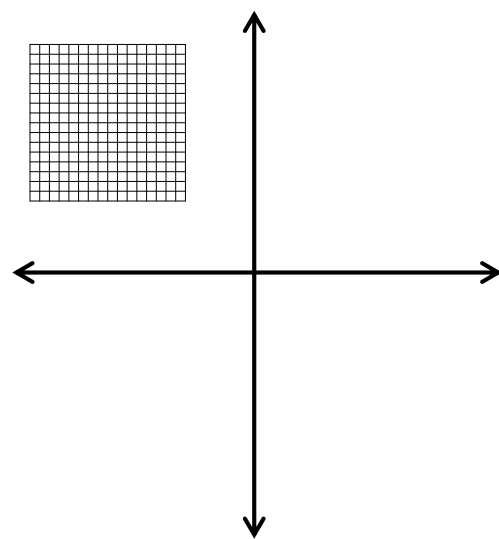
Parent Function: \_\_\_\_\_  
How did the parent function change?



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

x	y
1	
2	
3	
4	
5	

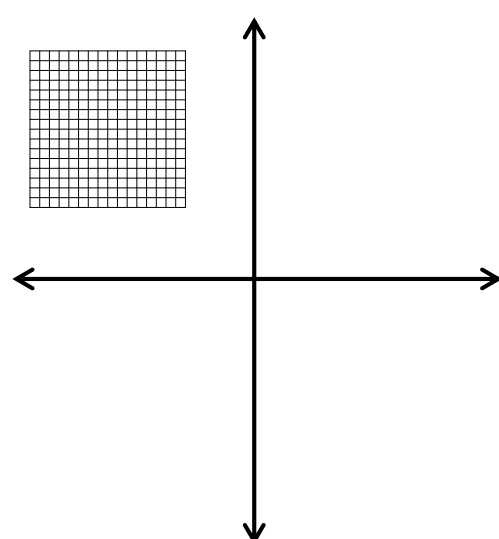
Parent Function: \_\_\_\_\_  
How did the parent function change?



3)  $g(x) = (x + 1)^2 + 3$

x	y
-3	
-2	
-1	
0	
1	

Parent Function: \_\_\_\_\_  
How did the parent function change?



4) What types of changes happened from the parent function to the new functions graphed?

These are called \_\_\_\_\_.

5) How do you know which direction to move the graph of the parent function?

If \_\_\_\_\_ then the graph moves left.

If \_\_\_\_\_ then the graph moves right.

If \_\_\_\_\_ then the graph moves up.

If \_\_\_\_\_ then the graph moves down.

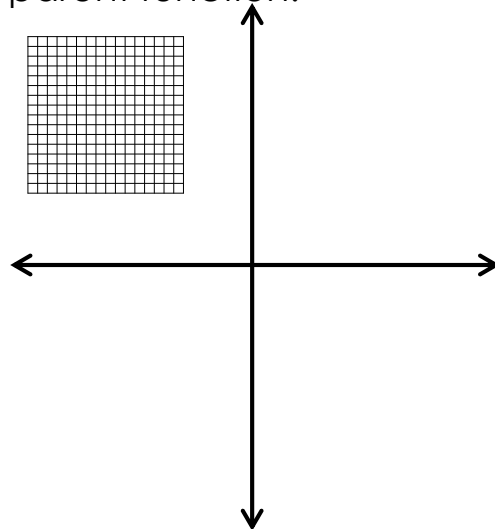
For #6-8, graph the function. Identify the parent function and determine how the new graph is different from the parent function.

6)  $g(x) = 2|x|$

x	y
-2	
-1	
0	
1	
2	

Parent Function: \_\_\_\_\_

How did the parent function change?

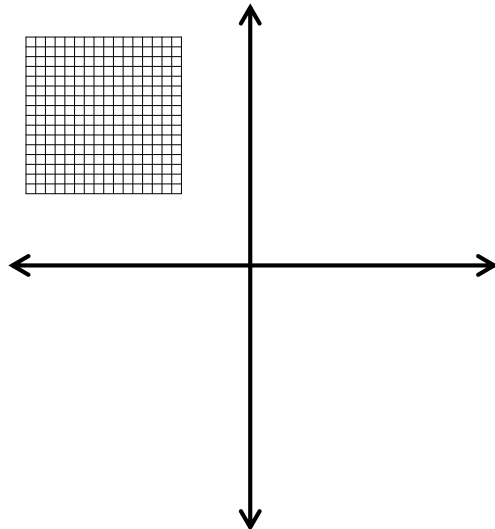


7)  $g(x) = \frac{1}{2}|x|$

x	y
-4	
-2	
0	
2	
4	

Parent Function: \_\_\_\_\_

How did the parent function change?

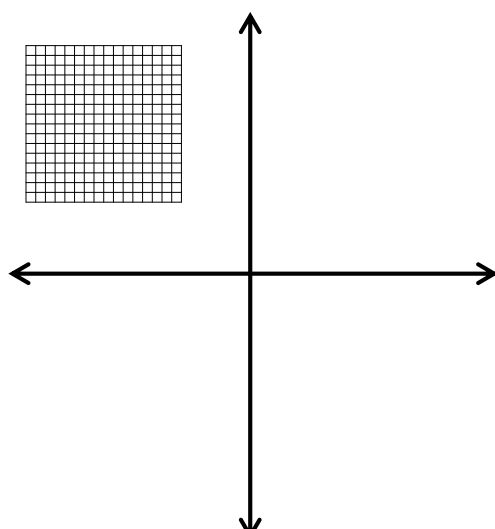


8)  $g(x) = 3|x|$

x	y
-2	
-1	
0	
1	
2	

Parent Function: \_\_\_\_\_

How did the parent function change?



9) What types of changes happened from the parent function to the new functions graphed?

These are called \_\_\_\_\_.

10) How do you know which direction to move the graph of the parent function?

If \_\_\_\_\_ then the graph \_\_\_\_\_.

If \_\_\_\_\_ then the graph \_\_\_\_\_.

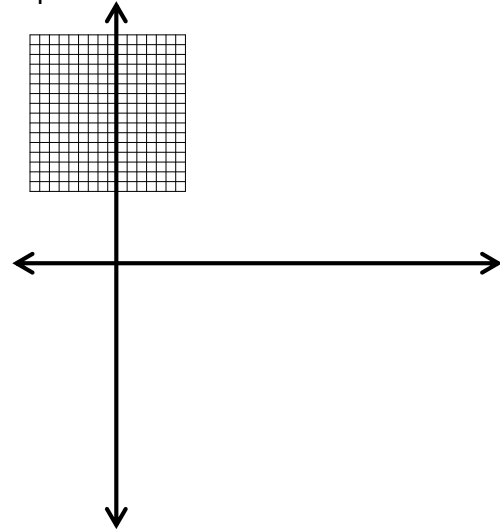
For #11-13, graph the function. Identify the parent function and determine how the new graph is different from the parent function.

11)  $g(x) = -\sqrt{x}$

x	y
0	
1	
4	
9	

Parent Function: \_\_\_\_\_

How did the parent function change?

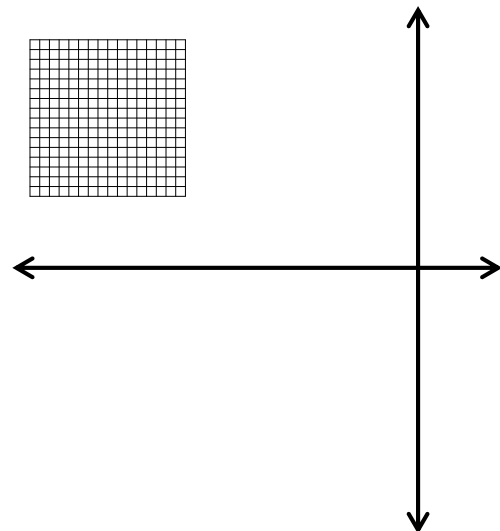


12)  $g(x) = \sqrt{-x}$

x	y
0	
-1	
-4	
-9	

Parent Function: \_\_\_\_\_

How did the parent function change?

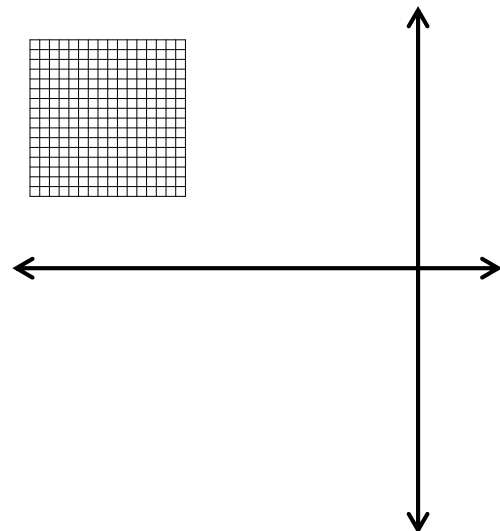


13)  $g(x) = 2\sqrt{-x}$

x	y
0	
-1	
-4	
-9	

Parent Function: \_\_\_\_\_

How did the parent function change?



14) What types of changes happened from the parent function to the new functions graphed?

These are called \_\_\_\_\_.

15) How do you know which direction to move the graph of the parent function?

If \_\_\_\_\_ then the graph \_\_\_\_\_.

If \_\_\_\_\_ then the graph \_\_\_\_\_.

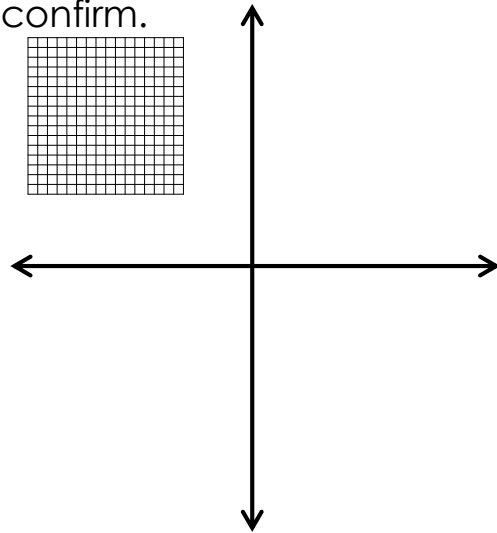
For #16-18, there are multiple changes to the parent function graph. See if you can find all of them. Then graph to confirm.

16)  $g(x) = \frac{1}{2}|x| - 2$

Parent Function: \_\_\_\_\_

How will the parent function change?

x	y
-4	
-2	
0	
2	
4	

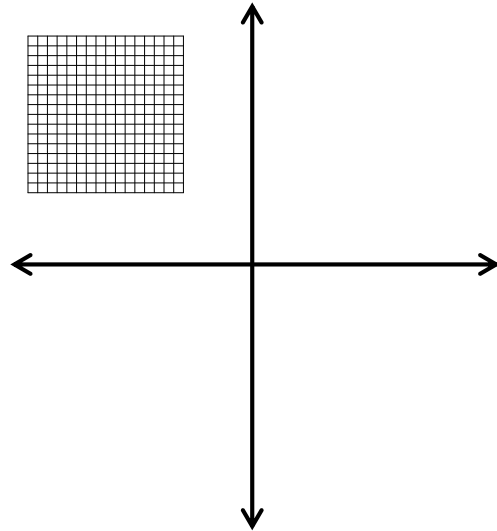


17)  $g(x) = 2(x - 3)^2 - 1$

Parent Function: \_\_\_\_\_

How did the parent function change?

x	y
1	
2	
3	
4	
5	



18)  $g(x) = -2\sqrt{x+1}$

Parent Function: \_\_\_\_\_

How did the parent function change?

x	y
-1	
0	
3	
8	
15	

