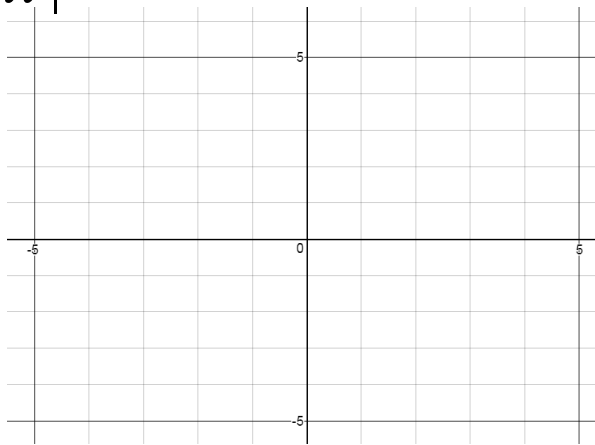


Basic or “parent” Graph: $y = |x|$

Graph by a table of values:

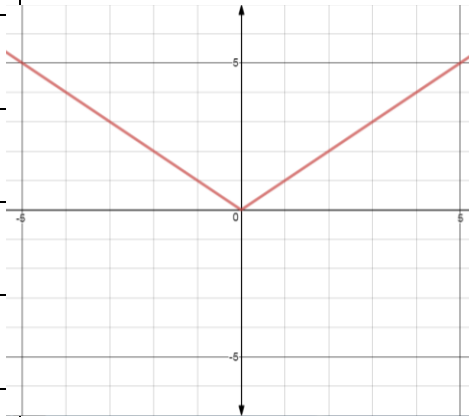
x	y = x
-2	
-1	
0	
1	
2	



Important characteristics:

A. $y = |x| + 3$

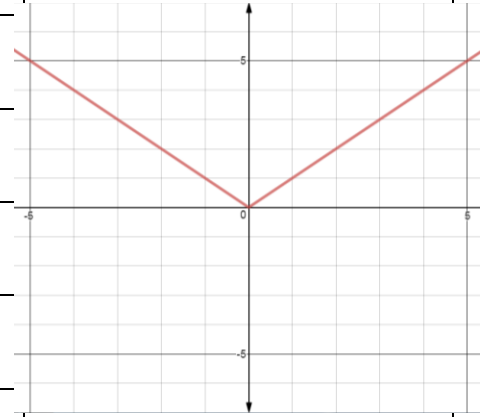
x	y = x + 3
-2	
-1	
0	
1	
2	



Contrast to Parent Function:

B. $y = |x| - 3$

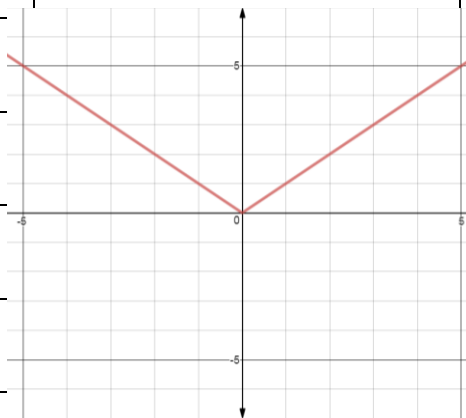
x	y = x - 3
-2	
-1	
0	
1	
2	



Contrast to Parent Function:

C. $y = |x + 3|$

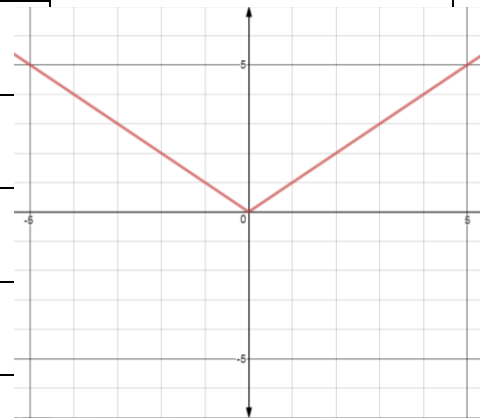
x	y = x + 3
-5	
-4	
-3	
-2	
-1	



Contrast to Parent Function:

D. $y = |x - 3|$

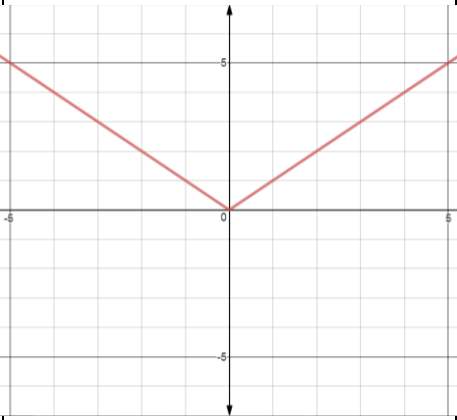
x	y = x - 3
1	
2	
3	
4	
5	



Contrast to Parent Function:

E. $y = 2|x|$

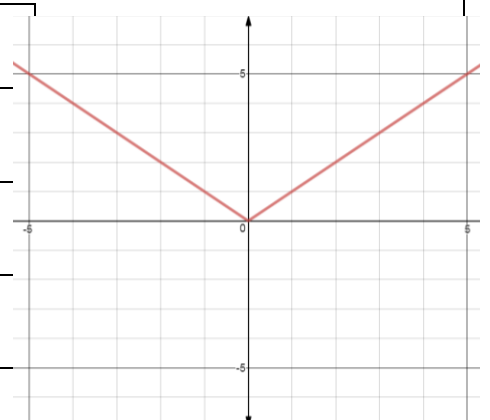
x	$y = 2 x $
-2	
-1	
0	
1	
2	



Contrast to Parent Function:

F. $y = \frac{1}{2}|x|$

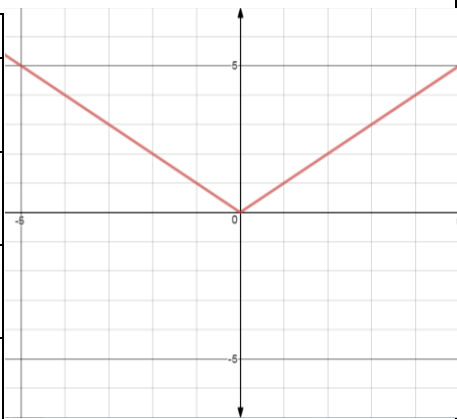
x	$y = \frac{1}{2} x $
-2	
-1	
0	
1	
2	



Contrast to Parent Function:

G. $y = -|x|$

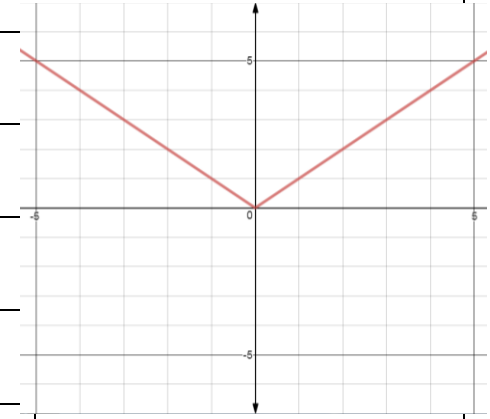
x	$y = - x $
-2	
-1	
0	
1	
2	



Contrast to Parent Function:

H. $y = \left|-\frac{1}{2}x\right|$

x	$y = \left -\frac{1}{2}x\right $
-2	
-1	
0	
1	
2	

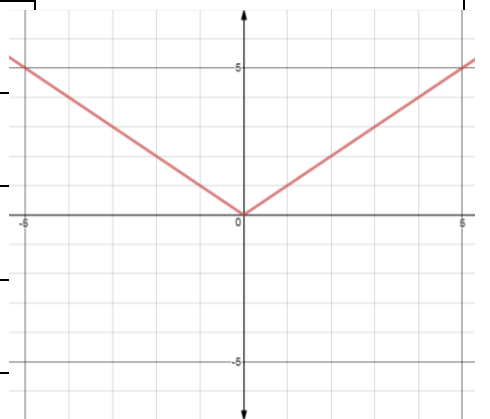


Contrast to Parent Function:

VERTEX FORM of an Absolute Value Function

H. $g(x) = -2|x - 1| + 3$

x	$y = \left -\frac{1}{2}x\right $
-2	
-1	
0	
1	
2	



Contrast to Parent Function: