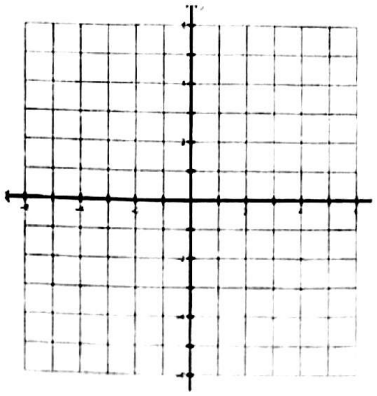
Graphing Absolute Value

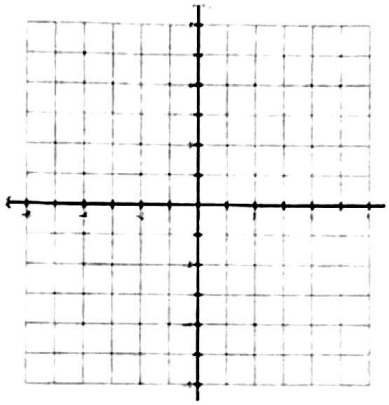
1) Make a table of values to graph the equation $f(x) = |x|$.

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



2) Make a table of values to graph the equation $g(x) = |x| + 3$.

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

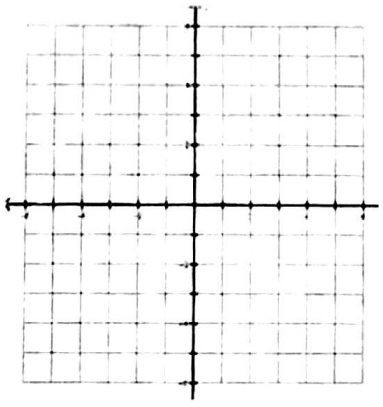


Describe how $f(x)$ changed to become $g(x)$._____

What do you think caused that change?_____

3) Make a table of values to graph the equation $h(x) = |x + 3|$.

x	y
-5	
-4	
-3	
-2	
-1	
0	
1	
2	
3	

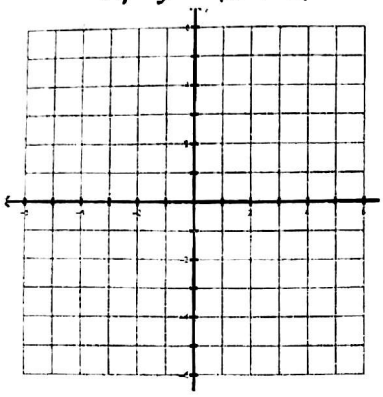


Describe how $f(x)$ changed to become $g(x)$._____

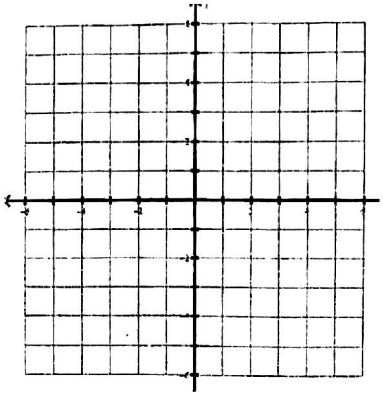
What do you think caused that change?_____

4) Now without making a table of values, sketch what you think each graph will look like.

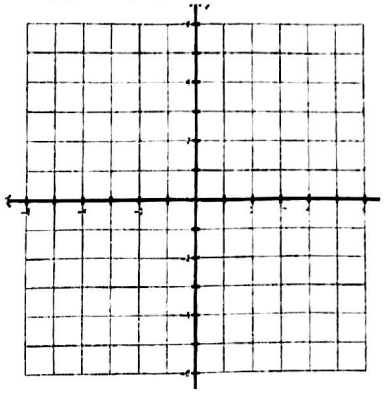
A) $y = |x + 1|$



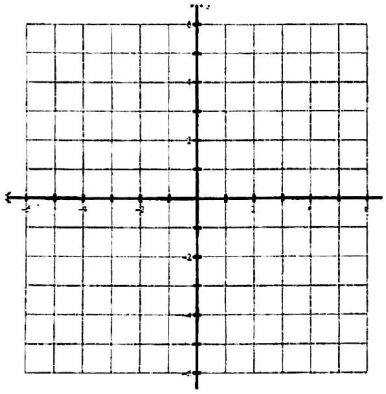
B) $y = |x - 3|$



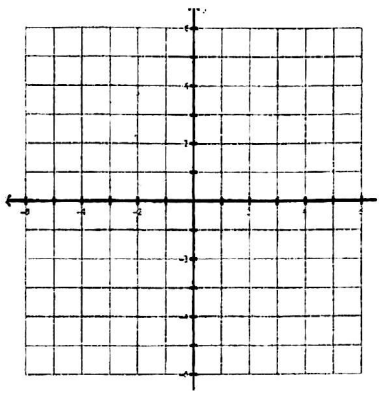
C) $y = |x| + 1$



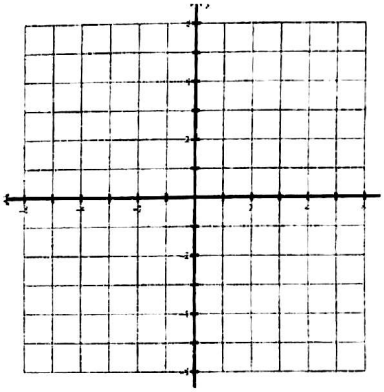
D) $y = |x| - 5$



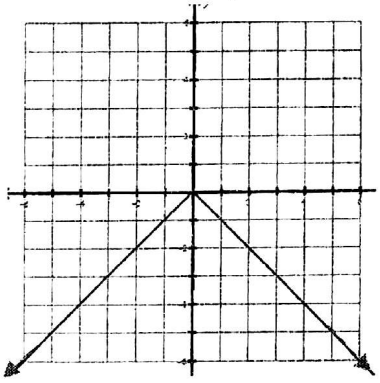
E) $y = |x - 1| + 3$



F) $y = |x + 4| - 2$



5) Consider this graph.



What change do you think was made to the original *f(x)* equation to make this graph?

6) Propose changes to *f(x)* that would create each graph below.