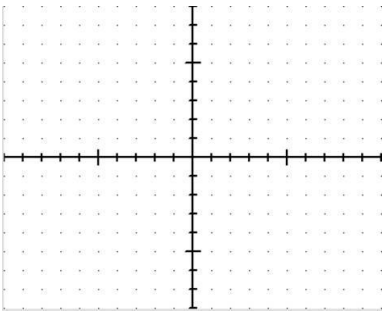
Name:_____Date:_____Period:___ F.BF.3

I can identify specific transformations on exponential functions.

Complete the table for $f(x) = 2^x$ and plot the points on ***EACH*** graph

This will be the main, parent function for the rest of the functions below.

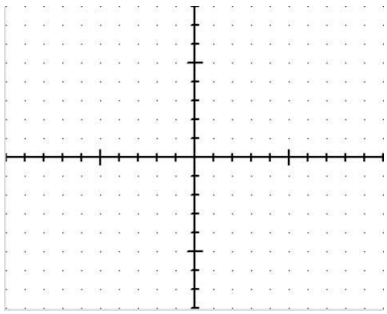
x	$f(x)$
-3	
-2	
-1	
0	
1	
2	
3	



x	$g(x)$
-3	
-2	
-1	
0	
1	
2	
3	

1)Complete the table and graph $g(x) = 2^x - 7$

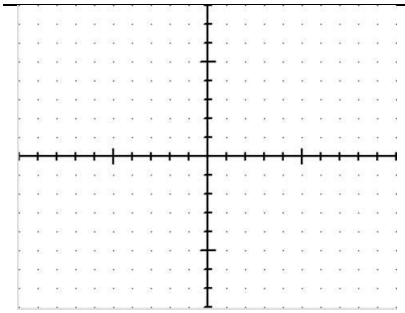
Describe the transformation in words of $g(x)$ from $f(x)$.



x	$h(x)$
-3	
-2	
-1	
0	
1	
2	
3	

2)Complete the table and graph $h(x) = -2^x$

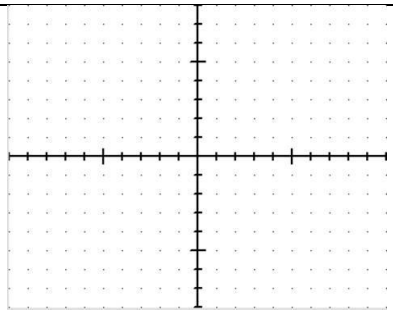
Describe the transformation in words of $h(x)$ from $f(x)$.



x	$q(x)$

3)Complete the table and graph $q(x) = 2^{x-3}$

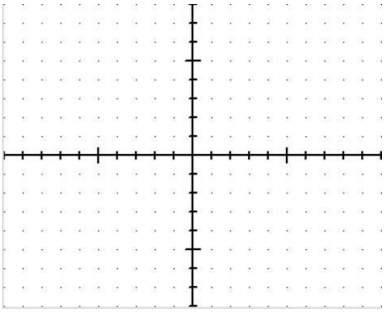
Describe the transformation in words of $q(x)$ from $f(x)$.



x	$r(x)$

4)Complete the table and graph $r(x) = 2^{x+3}$

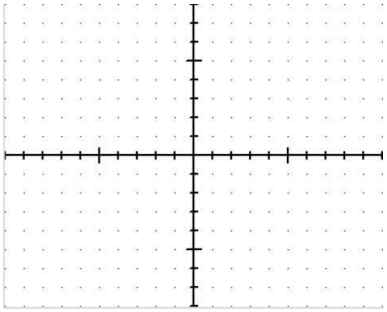
Describe the transformation in words of $r(x)$ from $f(x)$.



x	$s(x)$
-3	
-2	
-1	
0	
1	
2	
3	

5)Complete the table and graph $s(x) = 2^{-x}$

Describe the transformation in words of $s(x)$ from $f(x)$.



x	$t(x)$

6)Complete the table and graph $t(x) = 2^{x+8} + 3$

Describe the transformation in words of $t(x)$ from $f(x)$.