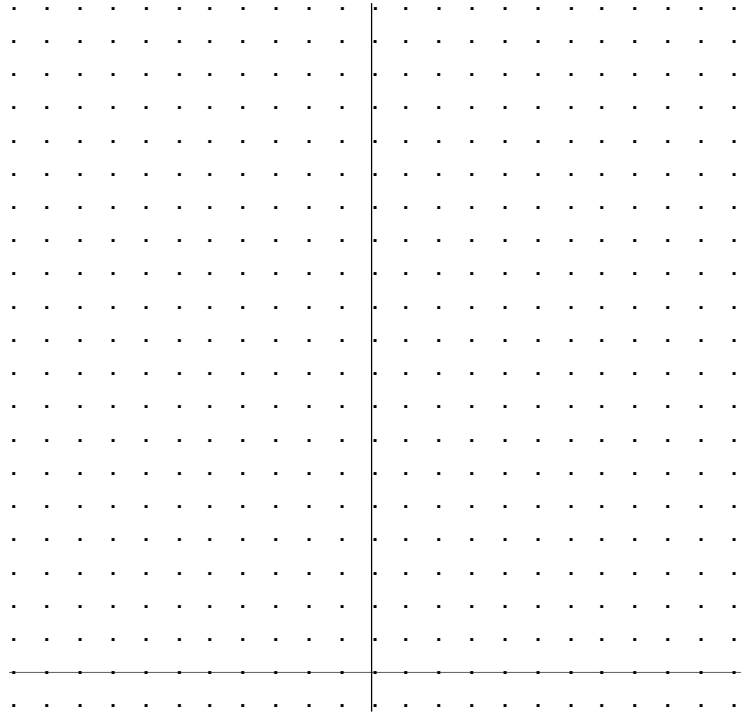


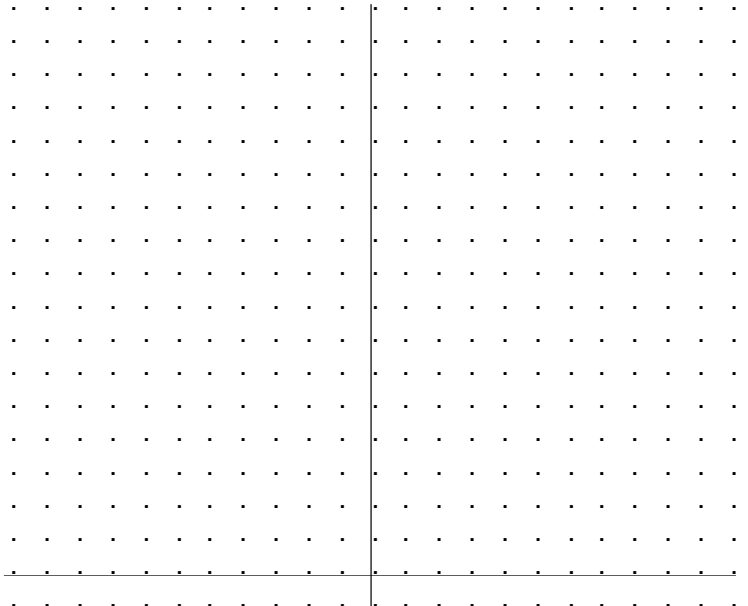
1. Complete the table of function values below. Place on the graph those that belong to the curve $y = 2^x$. Sketch the curve.

x	$f(x) = 2^x$	$g(x) = x^2$
-10	$1/1024$	100
-5		
-3		
-2		
-1		
0		
1		
2		
3		
4		
5		
6		
10		
20	1048576	



2. Do you see a relationship between the functions f and g in #1? Do the functions f and g exhibit the same kind of behavior?
3. Consider the function $g(x) = 2^{-x}$. How does it compare with $f(x) = 2^x$?
4. Consider the function $h(x) = (1/2)^x$. How does it compare with $f(x) = 2^x$? Fill in the table values and graph the two functions:

x	$f(x) = 2^x$	$h(x) = (1/2)^x$
-10		
-5		
-3		
-2		
-1		
0		
1		
2		
3		
4		
5		
10		
20		



5. How does the graph of $y = 3^x$ compare with that of $y = 2^x$? Sketch $y = 3^x$ on the coordinate set above.
6. We never talk about functions such as $f(x) = (-3)^x$. Why not? (Hint: plot points to find the graph...)