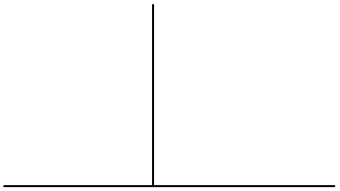
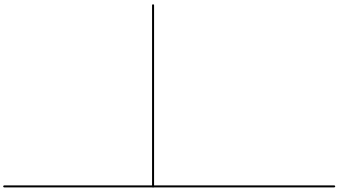
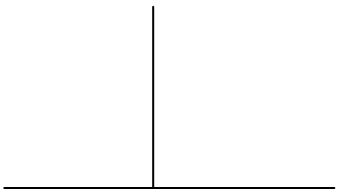
Graphing Exponential Functions_A. Section _____ Name _____ Date _____

Exponential function: $f(x) = A\,b^x$. Base = b. Always, $b>0$, $b \neq 1$, $A>0$.

If $b>1$, it's an exponential growth function. If $0<b<1$, it's an exponential decay function.

Directions: from the given information fill in the six columns of the table below.

	Formula	**Base**	**Const.**	**Table of values**	**Growth or decay?**	**Graph**
1	$f(x) = 2\cdot 3^x$	3	2	x: -2, -1, 0, 1, 2 / f(x): 2/9, 2/3, 2, 6, 18	Growth, because b>1	
2	$f(x) =$	2/3	5	x: -2, -1, 0, 1, 2 / f(x):		
3	$f(x)=(2/3)(1/2)^x$			x: -2, -1, 0, 1, 2 / f(x):		
4	$f(x) = (½)2^{-x}$			x: -2, -1, 0, 1, 2 / f(x):		
5	$f(x) =$			x: -2, -1, 0, 1, 2 / f(x): 6, 8		
6	$f(x) =$	4/3		x: -2, -1, 0, 1, 2 / f(x): 4		
7	$f(x) = (1.5)3^x$			x: -2, -1, 0, 1, 2 / f(x):