Graphing logarithmic functions. Name _____ Class/section _____ Date_____

Graph each logarithmic function. Please remember:

1. If the input argument to log(x) is not positive, the log function is undefined.
2. The $\log_b(x)$ function has a vertical asymptote at x=0.
3. The $\log_b(x)$ function is the inverse function of the exponential function b^x.
   This means, for example, that if $b^3=5$, then $\log_b(5) = 3$.

	Function	Work	**Table of values**		Graph
1	$\log_2(x)$				
2	$\log_3(x)$				
3	$\log_{0.5}(x)$				
4	$\log_{10}(x)$				
5	$\log_2(-x)$				
6	$-\log_2(x)$				
7	$-\log_3(-x)$				