## Always, Sometimes, Never

Complete each sentence with always, sometimes, or never to make it true. Explain your reasoning.

1. The value of a logarithm is $\qquad$ equal to the exponent of the corresponding exponential equation.
2. The argument of a logarithmic expression is $\qquad$ a negative number.
3. The value of a logarithm is $\qquad$ equal to a negative number.
4. The base of a logarithm is $\qquad$ a negative number.
5. A logarithm is $\qquad$ a value that is not an integer.
6. For a base greater than 1 , if $b>c$ then the value of $\log _{a} b$ is greater than $\log _{a} c$.
7. If $a>b$, then the value of $\log _{a} 1$ is less than $\log _{b} 1$.
8. The base of a logarithm is $\qquad$ equal to 1.
