Vocabulary Toolkit

	Term	Definition / Additional Information
1.3 S	Logarithm	For all positive numbers a, where $a \neq 1$, and all positive numbers x, $y = \log_a x$ means the same as $x = a^y$.
1.4 T	One-to-one function	A function in which for every x there is exactly one y and for every y, there is exactly one x. A one-to-one function has an inverse that is also a function.
1.4 T	Inverse Function	A function that "reverses" another function: if the function f applied to an input x gives a result of y, then applying its inverse function g to y gives the result x. If $f(g(x)) = x = g(f(x))$ then $g(x) = f^{-1}(x)$. A function has an inverse function only if it is one-to-one. If a function is not one-to-one, it is possible to restrict the domain of the function to make it one-to-one and define an inverse function.