

Inverse Derivatives

Directions: Do what it says.

1. If g is the inverse function of $f(x) = \frac{1}{x}$, find $g'(3)$.
2. If h is the inverse function of $g(x) = 2x + 3$, find $h'(-5)$.
3. If $f(x) = 3 + e^{3x}$, and $g(x) = f^{-1}(x)$ for all x , and the point $(0,4)$ is on the graph of f , then what is $g'(4)$?
4. If $f(x) = 4 + e^{4x}$, and $g(x) = f^{-1}(x)$ for all x , and the point $(0,5)$ is on the graph of f , then what is $g'(5)$?