

Homework 8

November 22, 2024

1. Find a derivative of $f(x)$

(a) $f(x) = \ln(\sin(2x)\cos(2x))$

(b) $f(x) = \ln(\ln(x^2 + \sin x))$

2. Find an indefinite integral of $f(x)$

(a) $f(x) = \frac{1}{x \ln(\frac{x}{2})}$

(b) $f(x) = \frac{\sin x}{1 + \cos x}$

3. $f(x) = x^5 + 3x + 1$. Find $(f^{-1})'(5)$.