

Homework 8

1. Use the function f and the given real number a to find $(f^{-1})'(a)$.

$$f(x) = \sqrt{x-4}, a = 2$$

2. Find the derivative of the function.

(a)

$$y = \frac{2}{e^x + e^{-x}}$$

(b)

$$y = \log_2 \sqrt[3]{2x+1}$$

3. Find the integral.

$$\int_{-2}^1 x^2 e^{\frac{x^3}{2}} dx$$