

Quiz 2
2/9/2023

1. Find the indefinite integral

$$\int x^3(2 + x^4)dx$$

using the substitution $u = 2 + x^4$.

2. Evaluate the definite integral

$$\int_0^1 \sqrt[3]{1 + 7x} dx$$

using the substitution $u = 1 + 7x$.

3. Find the inverse function of $f(x) = 1 + \sqrt{1 - 2x}$.

4. Find the derivative of $f(x) = \ln(\sin(2x))$.