

微積分作業8

November 28, 2025

1 Find the derivative of the function.

$$f(x) = \ln\left(\frac{2x}{x+3}\right)$$

2 Find the indefinite integral.

$$\int \frac{x^2 + 4x}{x^3 + 6x^2 + 5} dx$$

3 Find the indefinite integral by making a change of variables.
(Hint: Let u be the denominator of the integrand.)

$$\int \frac{4}{1 + \sqrt{5x}} dx$$