

Math 4241: Integral Calculus & Differential Equations
Quiz 1

ID:
28th December 2021

1. Determine $f(x)$ given that $f'(x) = 12x^2 - 4x$ and $f(-3) = 17$ 6
(CO2)
2. Find the area under the curve bounded by $y = x$ inside the limit $[0, b]$ using both the Riemann sum and Leibniz theorem. 10
(CO1)
3. What is the difference between the area under one hump of $\sin(x)$ and $\sin(2x)$? 4
(CO2)