

Take Home Quiz 4

Official name (printed):

1. Find the antiderivative of each of the following functions.

a) $f(x) = x^2 + 2$

b) $f(x) = 2 \cos(x)$

c) $f(x) = e^x + \frac{1}{x^2}$

d) $f(x) = \frac{3}{x}$

2. Suppose $f''(x) = 6x + 2$, $f(0) = 3$, and $f(1) = 5$. Find $f(x)$.

3. Use a right Riemann sum with 5 intervals to estimate

$$\int_0^{5\pi/4} 2 \sin(x) dx$$