

MA125-8B Quiz 3

Name: Key

Exercise 1. (5 points) Find the given indefinite integral.

$$\int x^2 + x - 2 dx$$

$$\int x^2 + x - 2 dx = \frac{1}{3}x^3 + \frac{1}{2}x^2 - 2x + C$$

Exercise 2. (5 points) Evaluate the following definite integral.

$$\int_0^{\pi} \sin(x) dx$$

$$\int_0^{\pi} \sin(x) dx = \left(-\cos(x) \right) \Big|_0^{\pi}$$

$$= \left(-\cos(\pi) \right) - \left(-\cos(0) \right)$$

$$= \left(-(-1) \right) - \left(-(1) \right)$$

$$= 2$$