

# MAT 21B, Winter 2023

## Homework 1

**Due before 2:00pm on Wednesday, January 18**

*Please write the homework solutions in connected sentences and explain your work. Mark the answers to each question. Scan or take pictures of your homework and upload it to Gradescope before due time.*

Use the Fundamental Theorem of Calculus to compute the integrals:

1.

$$\int_{-2}^3 (x^3 - 2x + 3)dx$$

2.

$$\int_0^2 e^x dx$$

3.

$$\int_0^\pi (1 + \cos x)dx$$

4.

$$\int_{-3}^{-1} \frac{y^5 - 2y}{y^3} dy.$$