

MAT 21B, Winter 2023  
Homework 5

**Due before 2:00pm on Wednesday, February 22**

*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.*

Compute the following integrals:

1.

$$\int x e^{3x} dx$$

2.

$$\int \frac{2x + 1}{x^2 - 7x + 12} dx$$

3.

$$\int \frac{x^4}{x^2 + 1} dx$$

4.

$$\int \cos^7 x dx$$