

Midterm 1

Math 31B, Winter 2022

Midterm Exam: Friday, February 4.

Please read the policies for online midterms posted on Canvas, under Modules – Syllabus and Policies.

You may solve these problems by any method you like (as long as the method is correct).

1. Evaluate

$$\frac{d}{dx} \ln \sqrt{x}.$$

2. Evaluate

$$\lim_{x \rightarrow 2} \left(\frac{x^2 - 4x + 4}{x^2 - 2x} \right).$$

3. Evaluate

$$\int_{-1}^0 e^{2x} dx.$$

4. Evaluate

$$\int x \sin(x) dx.$$

5. Evaluate

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