## Math 223, Winter Term 2022 Pre-Midterm Sheet

March 7, 2022

## Material

The material for the exam consists of the material covered in the lectures up to determinants (discussed on Friday, March 3), as well as Problem Sets 1 through 7, concentrating on the material since the cutoff for the last midterm. Here are some headings for the topics we covered:

- The matrix of a linear map, matrix multiplication.
- Linear equations and their solutions
- Gaussian elimination
- Determinants and rules for calculating them

## Structure

The exam will be similar to the first one:

- Problems 1,2 will be about mastery of the basics.
- The first problem will ask you to state a definition from this part of the course, and make a simple verification using this definition.
- The second problem will be computational.
- Further problems may be computational and proof-based.

For practice problems use the course textbook, other textbooks, and the problem sets.

## **Practicalities**

The exam will take place during class on Friday, March 11.