## Homework 1

MATH 231

Due Wednesday, September 10, 2025

**Instructions.** We will also have a quiz in class on the due date based on the content from the assignment. See the back of the textbook for solutions and hints for odd-numbered problems.

Exercise 1. Complete the following exercises from Section 1.1 in the course textbook:

# 3, 8, 9, 10, 11, 13, 36, 39, 40, 41

In problem 3 below, you will need to know that a *pivot position* in a matrix is an entry of the matrix that is a leading one in the reduced row echelon form of the matrix and a *pivot column* is a column containing a pivot position.

**Exercise 2.** Complete the following exercises from Section 1.2 in the course textbook:

# 1, 3, 4, 5, 6