

# Homework 3

MATH 5051  
October 27, 2021

---

Please submit this assignment on Nov. 1st.

## 1 Problem 1

Do the following exercises in Dummit and Forte's book:

- Section 8.3 exercise 8
- Section 9.6 exercise 1,3.

## 2 Problem 2

Show that the ring  $\mathbb{Z}[\frac{1+\sqrt{-19}}{2}]$  is not Euclidean domain with respect to the norm which was introduced in the class.