

## Math 4220: Homework 10

This is the tenth and final homework assignment for Math 4220. I have broken the homework assignment into two parts. Part I has exercises that you should do (and I expect you to do) but you need not turn in. The exercises in the second part of the homework are exercises you should write up and submit via Gradescope. Your solutions should be consistent with the directions in the syllabus. If you get stuck on any part of the homework, please come and see me or Max. More importantly, have fun!

**Part I** (Do not write up)

*Exercise 1.* Read Sections 6.1, 6.2, 6.3 and 8.2 of the course textbook.

*Exercise 2.* Do Exercises 1, 3 and 5 in Section 6.1 of the textbook.

*Exercise 3.* Do Exercises 1, 3, 5, and 9 in Section 6.2 of the textbook.

*Exercise 4.* Do Exercises 1, 3, 5 and 11 in Section 6.3 of the textbook.

*Exercise 5.* Do Exercise 1, 3, 5, and 7 in Section 8.2.

**Part II** (Write up and Submit via Gradescope)

*Exercise 1.* In Section 6.1, please do the following exercises:

1. Exercise 2
2. Exercise 4

*Exercise 2.* In Section 6.2, please do the following exercises:

1. Exercise 2
2. Exercise 6

*Exercise 3.* In Section 6.3, please do the following exercises:

1. Exercise 2
2. Exercise 4

*Exercise 4.* Please do Exercise 10 in Section 6.3.

*Exercise 5.* Please do Exercise 4 in Section 8.2.

*Exercise 6.* Please do Exercise 8 in Section 8.2.