

Math 19620/20 Homework 4

Due: Thursday, November 1, 2018, at **5:00pm** in my mailbox in the basement of Eckhart (You can also give it to me in class on Thursday if you prefer.)

Please present your solutions clearly and in an organized way. Think of it this way: if you show it to another student in this class, he/she should be able to understand it without needing to ask you questions.

October 25

Goals:

- Practice finding image and kernel of some matrices

Exercises 3.1:

- 1, 3, 9, 13
- 14, 15, 16
- 17, 19, 22
- 30, 33

These should all be doable by hand, without taking too much time.

Note: We didn't have time to discuss kernels very much in class, but you should already know enough to do these problems. Most of the ideas are from Chapter 1. (So these problems are good for midterm review!)

This is all for Homework 4. No more problems will be added on Tuesday.