

Math 19620/20 Homework 7

Due: **Wednesday! Wednesday! Wednesday!**, November 21, 2018, at **5:00pm** in my mailbox in the basement of Eckhart (You can also give it to me in class on Tuesday 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.

## **November 15**

Goals:

- Do Gram-Schmidt by hand a few times, understand what is happening.
- Use orthonormal bases to find projection matrices.
- Find least-squares solutions to systems.

### **Exercises 5.2:**

- 1, 7, 9 (please do by hand)
- 33

### **Exercises 5.3:**

- 40, 41

### **Exercises 5.4:**

- 21, 23

**This is all for Homework 7. Next Tuesday, I will assign problems for Homework 8.**