

4570 Final Exam Study Guide

The final is cumulative. It covers test 1 material, test 2 material, and Topic 5.

Computations:

- Test 1 computations (see the test 1 study guide)
- Test 2 computations (see the test 2 study guide)
- HW 5 problem 1. In this problem you find all the eigenvalues of T , find a basis for each eigenspace, find the multiplicities of the eigenvalues, and see if T is diagonalizable.

Proofs:

- Test 1 and Test 2 type proofs
- Proofs on eigenvectors and eigenvalues

In particular, at least one of the following proofs will be on the final exam:

- HW 5 – # 6
- HW 4 – # 2, 3(a), 4
- HW 3 – # 1(a), 5, 6, 7
- HW 2 – # 1, 2, 5, 6, 7(a)
- HW 1 – # 2, 3, 4, 6, 7