2550 Final Exam Study Guide

The final exam is cumulative and covers: Test 1 material, Test 2 material, HW 7, HW 8.

Here is a breakdown:

- Test 1 material (see the test 1 study guide and test 1)

- Test 2 material (see the test 2 study guide and test 2)

- Homework 7 – Part 1

    o Determine if a set of vectors is a basis for a vector space.
      See problems 6, 7, 8, 9(a), 10(a), 12.
    o Find the coordinates of a vector in terms of an ordered basis.
      See problems 9(b,c), 10(b,c), 11.

- Homework 7 – Part 2

    o HW 7 part 2 will not be on the final.

- Homework 8

    o For a matrix A, find the eigenvalues of A, a basis for each eigenspace, and the
      algebraic and geometric multiplicity of each eigenvalue.
      See Problem 1(a,b,c,d,e).