Math2210 Midterm 1 Review Problems Rebecca Noonan Heale

Chapter 10 Review (pg 553) Sample Test Problems #25-32 all

Chapter 11 Review (pg 613-615)

Concepts Test Problems #1-9 all, 12-16 all, 20-24 all, 26, 27, 28, 40, 51

Sample Test Problems #1-19 all, 21, 25-27 all, 30-41 all, 43, 44

The exam covers sections 10.4, 11.1-11.6, 11.8, 11.9, 12.1. You will NOT need a calculator for this exam, nor will one be allowed.

You can bring an 8.5 x 5.5 inch paper (this is an 8.5x11 sheet of paper cut in half; you can write on both sides, if you want) to use as a reference.

Topics:

- Parametric Equations of Curves
- Vectors
 - o arithmetic of vectors
 - Dot product
 - o projection of one vector onto another vector
 - o cross product
- Planes in 3-d
 - o distance from point to plane
 - o equations of planes
- Vector-valued functions
- Lines and tangent lines in 3-d
- Quadric Surfaces
- Convert to/from Cartesian/Cylindrical/Spherical coordinates