

Math2210 Midterm 1 Review Problems  
Kelly MacArthur

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, 30-38 all, 43, 44

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

You can bring a 8.5x11 inch sheet of paper notes (on both sides, if you want) to use as a reference.

**Topics:**

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