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, 55, 57  
Sample Test Problems #1-19 all, 21, 25-27 all, 30-44 all

The exam covers sections 10.4, 11.1-11.6, 11.8 and 11.9. 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  
● Cylindrical/Spherical Coordinates and conversions