## Math2210 Midterm 2 Review Problems Summer, 2009 Kelly MacArthur

Chapter 11 Review (pg 614-615) Sample Test Problems #30-41 all

Chapter 12 Review (pg 672-673) Concepts Test Problems #1, 2, 4, 5, 7, 8, 14, 15 Sample Test Problems #1-21 all, 23

The exam covers sections 11.8, 11.9 and 12.1-12.7. You will NOT need a calculator for this exam.

You can bring one  $4 \times 6$  inch note card of notes (on both sides, if you want) to use as a reference.

## <u>Topics</u>

- Quadric Surfaces
- Convert to/from Cartesian/Cylindrical/Spherical coordinates
- Functions of 2 (or more) variables
  - o Level curves
  - Evaluating
  - o **Domain**
  - o Continuity
  - o Limits
  - Partial Derivatives
  - o Gradient
  - Directional Derivatives
  - Tangent Planes
  - Chain Rule
  - o Differentials