Math2210 Midterm 2 Review Problems Summer, 2008 Dylan Zwick

Chapter 11 Review (pg 614-615) Sample Test Problems #30-37 all, 39-41 all

Chapter 12 Review (pg 672-673) Concepts Test Problems #1, 2, 4, 5, 7, 8, 14 Sample Test Problems #1-21 all, 23, 25, 26, 27

The exam covers sections 11.8, 11.9 and 12.1-12.8. You will NOT need a calculator for this exam.

You can bring one 8.5×11 inch piece of paper 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
 - o Tangent Planes
 - Chain Rule
 - o Differentials
 - Max/Min/Saddle points