Math2210 Midterm 2 Review Problems Kelly MacArthur

The exam covers sections 12.3-12.9, and 13.1-13.3. You will NOT need a calculator for this exam. You can bring one 8.5x11 inch sheet of paper of notes (on both sides, if you want) to use as a reference. No electronics of any sort allowed on the exam.

Topics

- Functions of 2 (or more) variables
 - \circ Continuity
 - o Limits
 - Partial Derivatives
 - \circ Gradient
 - Directional Derivatives
 - Tangent Planes
 - Chain Rules
 - o Differentials
 - \circ $\,$ Maxima and minima $\,$
 - Lagrange Multipliers
- Double integrals
 - o over rectangular regions

Review Questions to do for practice:

Chapter 12 Review (pg 672-673) Concepts Test Problems #2, 4, 6, 7, 8, 9, 12, 13, 14, 15 Sample Test Problems #3-21 all, 23, 25, 26, 27, 28

Chapter 13 Review (pg 728-729) Concepts Test Problems #1, 3, 4, 5, 7

13.1 (pg 679) #5, 19, 20 13.2 (pg 683) #9, 12, 20