

# Math2210 Midterm 3 Review Problems

## Kelly MacArthur

### Chapter 13 Review (pg 728-729)

Concepts Test Problems #1-5 all, 11, 13, 14, 16, 17

Sample Test Problems #1-12 all, 15, 16, 20, 21

### Chapter 14 Review (pg 773-774)

Concepts Test Problems #2

Sample Test Problems #1-5 all

The exam covers sections 13.3-13.4, 13.6-13.8, 14.1 and 14.2. You will NOT need a calculator for this exam.

You can bring one 8.5 x 11 inch piece of paper of notes (on both sides, if you want) to use as a reference.

### Topics

- Double Integrals
  - Cartesian coordinates
  - Polar coordinates
  - Area
- Triple Integrals
  - Cartesian coordinates
  - Cylindrical coordinates
  - Spherical coordinates
  - change of variables
- Volume
- Surface Area
- Vector fields
  - divergence
  - curl
- Line Integrals