

Exam Review #3

Math 264

Exam date 12/1/2000

Topics Covered: Sections 13.1-13.6, 14.1-14.4

- **Double integrals**
 - Cartesian coordinates.
 - Polar coordinates.
 - Areas.
- **Triple integrals**
 - Cartesian coordinates.
 - Cylindrical coordinates.
 - Spherical coordinates.
 - Volumes
- **Applications**
 - Averages.
 - Moments, center of mass and centroids.
- **Line integrals**
 - Vector fields.
 - Work, flow, circulation and flux.
 - Conservative fields.
- **Green's Theorem**
 - Divergence and curl.

Study Problems

Chapter 13

- p. 1056-1058: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 25, 27, 29, 31a, 35, 37, 39, 41, 43, 45, 49 (practice problems).
- p. 1058-1060: 1, 3, 5, 9, 11, 25 (additional problems).

Chapter 14

- p. 1134-1137: 1, 3, 7, 9, 29, 31, 33, 35, 37, 39, 40, 43, 51, 52, 53 (practice problems).
- p.1137-1139: 1, 3, 9 (additional problems).