

MA280 Exam 3 Topics

- 1) Iterated Integrals
 - a. Take a double integral and draw the region of integration
 - b. Switch the order of integration of a double integral.
 - c. Set up an iterated integral over a general region in both two and three dimensions (both double and triple integrals)
- 2) Surface area
 - a. Compute the surface area of a parametric surface
 - b. Computer the surface area of a graph
- 3) Applications
 - a. Compute the center of mass of a given region in 2 dimensions.
- 4) Other coordinate systems
 - a. Translate integrals between rectangular and polar/cylindrical coordinates
 - b. Translate integrals between rectangular and spherical coordinates
 - c. Choose an appropriate coordinate system for performing an iterated integral