Things to know for the fourth Math 320 Exam

This exam covers Sections 14.8 and 15.1-15.6 in the text and includes the following topics:

How to determine maximum and minimum values for multivariable functions using Lagrange multipliers

Double Integrals over rectangles and general regions

Double Integrals in Polar Coordinates

Applications of Double Integrals: Center of Mass, Probabilities and Expected Values associated with pdfs in two variables, Surface Area, Volume

You will may have to integrate some integrals. However, I will mainly be concentrating on whether or not you can set up the appropriate double integral(s).