## **Study Guide for Final Exam**

Use study guides for exams 1 and 2, in addition to:

14.7: Know what partial derivatives of second order are. Know that mixed partial derivatives commute. Know how to compute the quadratic Taylor approximation for function of two variables.

15.1: Know what local minimum and maximum are. Know what is a saddle. Be able to find critical points and be able to use the second derivative test to classify critical points.