MATH 282 MIDTERM 1 STUDY GUIDE

The exam covers Chapter 15, Sections 15.1-15.8.

**How to prepare for this exam:**
1. Redo the quizzes. Even if you did them perfectly, redoing will remind you about the different types of problems.
2. Read over your notes. There are many subtleties that are important to understand. Once you understand these then you understand the material much better.
3. Look over the Review section at the end of chapter 15.

You will not be able to use your notes, or book on the exam. You can use one note card $3 \times 5$ inches with any formulas you wish.

**Review questions:**
- True-False quiz. Page 1101: #1-7,9;
- Page 1102-1103: 3, 5, 7, 9, 10, 11, 13, 15, 17, 18, 19, 20, 21, 23, 24, 25, 29, 30, 33, 35, 37, 39, 40, 42, 44, 45, 47, 48.
- Assigned homework exercises

**Vocabulary:**
- area and volume
- double and triple Riemann sums, midpoint rule.
- double and triple integrals
- iterated integrals, Fubini’s theorem
- rectangular coordinates, polar coordinates
- moments, center of mass
- cylindrical coordinates
- spherical coordinates