MATH 114-003 FALL 2013 MIDTERM 2 GUIDE

Basics

One double-sided sheet of notes will be allowed. No other resources, such as a calculator or book, are allowed. The length of the midterm will be 80 minutes. The midterm will be given from 1:30 pm - 3:00 pm in DRL A1.

Form

Math 114-003 Midterm 1 will consist of 6 multiple-choice questions (5 points each), 3 exercises (10 points each), and 3 True/False questions. Multiple-choice and True/False problems will be graded purely for correctness. Exercises will be graded on the basis of work shown and the answer given. Problems with correct solutions but incorrect justifications or derivations will be marked off, just as problems with incorrect answers but some correct steps may be given partial credit.

Content

Multiple-choice and True/False problems will test you on your conceptual knowledge of the constructions as well as your ability to solve concrete homework-like problems. The exercises will test you more in-depth on homework-like problems. The website

`http://hans.math.upenn.edu/ugrad/calc/m114/oldexams.html`

contains old finals; problems in the style of such final exams and assigned homework give a good idea about the types of problems you will be asked to solve in the midterm.

Chapters. The midterm is technically cumulative, but will emphasize Chapters 15.7-15.8 and Chapter 16.1-16.6.

Prerequisites. Students are also expected to have mastered any prequisite material for this course. For example, students should know the values of the trigonometric functions on $\pi/3+n\pi, \pi/6+n\pi, n\pi/2, \pi/4+n\pi$ for $n = 0, 1, \ldots$, should know how to calculate derivatives, and should know basic techniques of integration (u, v substitution, antiderivatives for polynomials and $\sin, \cos, e^x$), and be familiar with conic sections (11.6).