Math 20550-02, Spring 2012

Tips for Studying for Exam 1

The exam is Thursday, February 16, 8-9:15 a.m. in DBRT 102. There will be a review session at 7 p.m. Wednesday, February 15, in DBRT 136. You may bring a handwritten summary (one side of an $8\frac{1}{2}'' \times 11''$ sheet of paper) to the exam. The exam covers sections 12.1–14.1, 15.8 through Example 2 and 15.8 through Example 2 in Stewart and MATLAB Assignments 0–3.

Since you are allowed to bring in notes, I am not testing your ability to memorize formulas, algorithms, rules, etc. As you know by now, it is possible to get a computer to do many of the kinds of computations you have learned in the course. That means that the ability to do computations by hand is much less important. An understanding of the ideas, an ability to tell whether computer output is reasonable, and the ability to use and interpret the output are very important.

You can use the Review for Exam 1 as an outline for reviewing and studying for the exam. Here are some questions to ask yourself. Can you fill in details? Could you explain the ideas to a friend? Do you know how to use them to solve problems? As part of your review, think about which concepts, formulas and theorems are most important. That will increase your understanding of the material and tell you what to put on your page of notes. You might find the Concept Check and True–False Quiz in the Review at the end of the chapters of Stewart useful. After you have studied and made your summary, attempt the practice exam.

What should you expect the exam to look like? It will have four problems, some with several parts, each problem worth 15-35 points.

How can I test your ability to interpret the computer output? There will be a question in which you are shown a MATLAB session, which has the MATLAB input and output but no comments. The session will have some relationship to one or several of the MATLAB homework problems. You can get an idea of the kind of thing I mean by looking at the practice exam.

If you want more practice problems, I suggest p. 860 #4a-d,i,j,15,17,19,25,33, p. 898 #5,8,11,15, p. 992 #5,8.

On the exam, be sure to read every question very carefully, then reread before you start answering it. As you go along, make sure you don’t miscopy anything. Read the question again after you have finished it to make sure you answered the question you were asked. Be sure to show all your work and explain what you are doing.