Tips for Studying for Math 126 Exam I

The exam is Tuesday, September 28, 8:00-9:15 a.m. It is designed to be done in an hour. Make sure you know what room your exam is in.

There will be two review sessions on Monday, September 27, one 4:00-5:00 p.m. in HAYE 129 and another 7:00-9:00 p.m. in HAYE 127.

The exam will cover sections 7.1, 7.2*-7.4*, 7.5-7.7, 8.1-8.5 and 8.7. Calculators will be allowed. However, you must show all your work and all important steps on each problem. You will get no credit for just writing down an answer you find on your calculator. We have chosen the exam problems carefully to test your knowledge and understanding of the topics we have studied, not to test your ability to press buttons on a calculator.

What do you need to know about trigonometric and hyperbolic functions? You need to know the values of trig functions at standard angles. There are certain trig identities which come up often: the double and half angle formulas for sin and cos and $\sin^2 x + \cos^2 x = 1$ (and the equivalent formula $\tan^2 x + 1 = \sec^2 x$). You need to know $\sin^{-1}$, $\cos^{-1}$, $\tan^{-1}$ and their derivatives. You need to know what sinh, cosh and tanh are.

The "Concept Check" and "True-False Quiz" in the review at the end of each chapter of Stewart do an excellent job of giving you a review of what the basic concepts are. For chapter 7 this starts on page 504. For chapter 8, it is on page 576. Questions 1-5 in the "Concept Check" and 1-5,8,9 in the "True-False Quiz" go with sections 8.1-8.5 and 8.7.

A good strategy for practicing computation is to go back through the homework problems and work problems similar to those assigned. At the end of each chapter in Stewart there are "Exercises." For chapter 7 these begin on page 505. Begin by studying the material, to make sure you have everything at your finger tips. Then work an assortment of the problems. You might at least try to look at #11,13,15,21,23,31,38,43,63,69,73,78,90,99. For chapter 8, the "Exercises" begin on page 577. You might at least try to look at #5,7,9,13,15,21,25,31.

Don't wait until the last minute to study. Take advantage of a chance to ask questions during class Monday if there's time, and during office hours and at the review sessions.

We have covered lots of topics. On an exam designed to take an hour, we cannot possibly ask you a question about each topic.