## Math 126A Calculus II: Tips for Studying for the Final Exam

Date: Thursday, December 16 Time: 1:45–3:45 p.m. Room: OSHA 204

The final exam will be approximately one and a half times the length of the previous exams.

There will be a review session on the evening of Wednesday, December 16, in GALV 283 at 7:00 p.m. This is your chance to get last minute questions answered.

The exam will cover the entire course. The specific sections covered are Chapter 6, except for Section 6.12, Chapter 7, except for Section 7.5, Chapter 8, and Chapter 9 except for Sections 9.2 and 9.8.

In regards to the inverse trig functions, you are only responsible for the inverses of  $\sin(x)$ ,  $\cos(x)$  and  $\tan(x)$ . For the hyperbolic functions, you are only responsible for  $\sinh(x)$ ,  $\cosh(x)$ ,  $\tanh(x)$  and their inverses. Picard's method (a topic in section 8.2) and power series solutions of differential equations (a topic in section 8.11) will not be included. More weight will be given to material we have covered since the last exam (Sections 8.10 and 8.11 and Chapter 9) than to material which was covered on the first two exams.

Calculators will be allowed. However, you must show all your work and all important steps on each problem. You may receive no credit for simply writing down an answer you find on your calculator.

The "Questions to Guide Your Review" at the end of each chapter of Thomas and Finney do an excellent job of giving you a review of what the basic concepts are.

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 Thomas and Finney, there are "Practice Exercises" and "Additional Exercises–Theory, Examples." Unlike the problems in the sections, these problems come with fewer clues as to how to proceed. Begin by studying the material, to make sure you have everything at your finger tips. Then work an assortment of the odd-numbered problems.

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