

Math 1502 E and J  
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Here are several suggestions for effective studying. I hope you'll find them helpful.

1. Attend class. Even the ones on Fridays and the ones right after tests. Woody Allen was right, "Ninety percent of success is just showing up."
2. Prepare **before** each class. I've posted a day by day syllabus and homework assignments on the course web pages. They list the sections to be covered in each lecture, and the problems that are assigned for each of the recitation sessions. You'll get much more out of classes if you read the assigned sections **before** the lecture, and do the assigned problems **before** the recitation. Do extra problems too.
3. Take notes in lecture and recitation, and recopy them neatly after class. This will help you review the class and make sure you understand the material.
4. Ask questions. Ask questions during lectures and recitations. My TAs and I hold office hours so you can come and ask us questions. So when you have questions, please come and ask us. If our office hours aren't convenient, schedule an appointment with us by phone or email. Use the Math Lab, GT PLUS, and the tutoring opportunities offered at Georgia Tech.
5. There will be proofs. Even Leibniz initially thought the product rule was  $(uv)' = u'v'$ , but that version is *impossible* to prove. It's much easier to prove the correct version,  $(uv)' = u'v + uv'$ , and after you've seen the proof you know the formula's right. We'll do plenty of numerical examples and applications, but it's important to learn the *why* as well as the *how*, and it's by knowing the *why* as well as the *how* that leads to real understanding. In the 60's when I was a student the mantra was "never trust anyone over thirty," so you should be *demanding* proofs from me.
6. Study with your classmates. Don't be shy. You can learn a lot from your friends, but don't just watch and nod your head. Be sure you really understand the material and really can work the problems independently. You must work independently on the homework problems that are collected for grading and of course you will work independently on tests and quizzes.
7. Do the sample tests I've posted on the web. These aren't just samples, they're the actual tests I've used this century.
8. Learn from your mistakes. Pick up your graded quizzes and tests the day they're returned to the class, and review them carefully so you won't make the same mistakes twice.