



# TOP TEN MATH STUDY SKILLS FOR COLLEGE STUDENTS

---

For some students, the prospect of entering Calculus I (or any other college math course) is daunting - so many new rules and formulas to memorize, and at such a fast pace! In high school, you get the advantage of being in class every day and having homework every night, but college students are expected to take more of the learning process into their own hands. But fear not - there IS a way to conquer those derivatives and integrals before they consume you.

1. Go to class: Yeah, this is a given for any subject, but class is absolutely vital. It's what you're paying to go to college for in the first place, and unless you're absolutely raring to decipher the gobbledegook that more than likely fills your textbook front to back, class is where you're going to be introduced to concepts in a (hopefully) more straightforward manner.
2. If you're offered a recitation or tutorial session, don't skip that either: It might seem redundant at first, but working with a small group of people is a lot easier than trying to solve each and every bump of confusion you might hit during a large lecture. These small sessions are invaluable, and they're offered for a reason - so don't pass them up!
3. If you don't understand something, clear it up right away: Math tends to build upon itself, and a simple concept will more often than not blossom into something mind-numbingly complicated if you don't take the time follow each step it takes to get there. Prevention is key - take the time to learn it now, so you won't be floundering about later.
4. Take the time to do the problem sets: This doesn't mean take the time to copy the answers to the problem sets from your friends without understanding them - it means go through them, step-by-step, and get the methods ingrained in your head. Think of it this way - you don't need to know the answer, just how to get it. And the more problems you do, the more confident you'll feel in your ability to use a certain method.
5. Don't do the problem sets all at once: Well, duh! People often speak of "sleeping" on problems, and looking over your problem set and keeping it in the back of your mind may lead you to a solution you might not have thought of while sitting at your desk, tapping your pencil, trying not to refresh Facebook again. It doesn't take much effort to consider it while you're in the shower or standing in line at the dining hall - and remember, insight is a product of your mind working on a problem in the background while it's supposedly distracted in the foreground.

6. Lecture out loud: It sounds corny, but if you can explain to yourself what a derivative is and describe the general formula for finding it without reading it out of a textbook or your notes, it's a good sign that you have the concept down pat. It's a good idea to find an isolated place for this one, but explaining things to yourself out loud gives you a pretty good idea of what you do and don't know.

7. Study what you don't know: Don't waste your time on doing simple problems you already know how to solve, because they're nothing but a false confidence booster. Instead, identify what you don't know, pull those problems out of your notes, and do them from scratch. That way, you'll be doing problems you already have the answers to - as well as a step-by-step explanation for them.

8. Office hours also exist for a reason: Your professor is a resource too! But don't just wander their office waving your problem set impetuously, complaining that you "don't get it," because that's just obnoxious. Show that you've made an effort to gain some headway on the problems, though, and your professor should be perfectly willing to help.

9. Flash cards and mnemonics: There are lots of formulas, and you need some way to remember them. Good old flash cards, tedious as they might seem, aren't a bad tool when it comes to rote memorization. If you can come up with mnemonics for what you need to know - such as SOH-CAH-TOA for remembering the values of trig functions in a right triangle - even better.

10. Don't give up. If you find that you're simply stuck, take a break rather than wallowing in your frustration and go back to tip 5 - let it stew on the back burner until you're ready to give it another go. Know your limits (ooh, a calculus pun!) and don't push past them, because resentment against math will only add another obstacle to a difficult course. Don't forget that tutoring is available in the Academic Success Center which is located in Room 281 of the Hanley Library.

<http://www.helium.com/items/1161873-top-10-math-study-skills-for-college-students>