



Pforzheimer
Learning
& Teaching
Center

How to Study Mathematics

Mathematics can be a challenging subject at times. Because the knowledge and skills for success in math are cumulative, studying math needs to be ongoing and consistent. Otherwise it is too easy to fall behind in your understanding. The way you approach studying for your math class can have a great impact on your learning experience. Here are some tips:

Before Class:

- *Skim the Section in the Book.* Read the headings and look at the example problems. This will help you follow along much better during the lecture.

During Class:

- *Go to Class.* Going to class is the easiest way to get an introduction to the material. Reading someone else's notes won't be as clear.
- *Take Good Notes.* Having good notes is very useful when working on the problem set. Make sure you write down definitions and take down the example problems.
- *Be Active in Class.* Raise your hand and ask a question if you don't understand what the professor is saying. Most likely the material will build on itself, so better to ask sooner! If you would rather not ask aloud, write your question down and ask later in office hours or by email.

After Class:

- *Review Your Notes.* Look over your notes to refresh your memory of what you've learned. Identify areas that are confusing or unclear.
- *Start the Problem Set.* Starting the problem set after class (when the material is fresh on your mind) will help you move through the problem set faster and more efficiently than if you wait a day or two where you will have a harder time remembering a relevant class example. Do the problems you can and skim the problems for the material you haven't covered yet.

- *Treat p-sets like a test.* Try to look at the problems and take a stab at solving them before looking back at your notes or book. You'll remember the problems much better if you struggle a little bit to solve them.
- *Attend faculty office hours, help room, SI, and other forms of tutoring.* Don't wait until the last minute to get help.

Preparing for the Test:

- *Create a 7-Day Study Plan.* On Day 1 and Day 2, start with the most recent material. Review your notes, and do lots of practice problems. On day 3 go over old homework or quizzes and work on problem areas. On Day 4 and 5, do the same for the more recent material. Since math is cumulative, you will have somewhat reviewed this information already. On Day 6, work on your trouble spots. On Day 7, do a quick review of anything you are uncertain of and then relax! Don't try to cram or get in too much last minute studying, as this will only serve to make you nervous and unsure.
- *Explain it to someone else:* You can really tell you understand something if you are able to clearly explain it to someone else. Meet up with a classmate and review concepts together.
- *The night before the exam.* Get plenty of sleep the night before your exam. Go easy on caffeine, sugar and carbs and be sure to eat a well-balanced meal before the exam.

Overall, **be active** in your studying. Math is best learned when you struggle with it and then have the "A-Ha Moment!"