



HOW TO STUDY MATH

Math has less to do with smarts and a lot to do with practice.

Do the homework, even if you don't have to turn it in.

Doing assignments before lectures instead of after is the secret to math.

You will know exactly where you are having trouble and what you need to learn.

Read your math book very carefully.
Don't try speed reading or skimming.

When being introduced to a new concept or formula, write it down. Think about it and try to relate it to other concepts and formulas you just learned. Review your notes every day.

Pay strict attention to what the instructor writes on the board. It will probably be on the test.

Make up your own practice tests from your notes. Time yourself as you go.

If you get lost, don't wait. Immediately ask your instructor for help or ask for a TUTOR!

Problem Solving

Solving problems is usually the most important aspect of math or science courses. You must, therefore, spend much of your study time either working or studying problems.

Be a maniac about math homework. Do all the problems.

When working a problem, follow these steps:

- Read through the problem to get an overview of it, and then re-read it carefully to find out what you are being asked to do. Be able to state it in your own words.
- If appropriate, draw a diagram and label the givens.
- Read each part of the problem and write down (symbolically or otherwise) all information that is given.

- Devise a tentative plan to solve the problem.
- Once you have a plan, carry it out. If it doesn't work, try another plan.
- Check your solution.
- Check to see if the answer is in proper form by inserting it into the problem.
- During the problem-solving phase, it is often helpful to say out loud the things you are thinking. By verbalizing, you may hasten the solution.

Test Preparation

If you have followed the study approach presented here, your preparation for a test should not be too difficult. Consider these strategies:

- Quickly review your notes to determine what topics/ problems have been emphasized.
- Look over your notes and text. Make a list of major concepts and formulas that are covered.
- Review and rework homework problems.
- Note similarities and differences among problems. Do this for problems within the same chapter and for problems in different chapters.
- Locate additional problems and use them to take a practice test. Test yourself under conditions that are as realistic as possible (e.g. no notes, time restriction, random sequence of problems, etc.) Also, try to predict test questions. Make up your own and practice working them.

Test Taking

- Before working out any problems, write down on the test itself the formulas that you find confusing or difficult to remember. Doing this could prevent further confusion and a possible mental block.
- Glance over the whole exam quickly, assessing questions as to their level of difficulty and point value. Also, get a sense of how much time to spend on each question. Leave time at the end to check your work.
- Start with the easier problems, but give priority to those worth the most points.
- Maximize partial credit possibilities by showing all your work.
- If you have a lapse of memory on a problem, skip it and return to it later.

Final Thoughts on Math

- Do not go on to the next math level if you barely got through the first one. Repeat the course if necessary.