

MATH, SCIENCE, & TECHNOLOGY RESOURCE CENTER

Successful Math Studying Habits

I. Enroll in the correct course

- A- Take a math placement test if you are not sure which class to enroll in.
- B- If you are returning to school after a long absence, you should consider repeating the last one, or even the last two math courses you previously completed.
- C- Be patient with you academic goals; mathematics is a language, which you are constantly building upon, so avoid skipping over crucial fundamental courses.

II. Read the syllabus and take note of all information, such as:

- A- Instructor's office location and hours
- B- Attendance and grading procedures
- C- Number of sections covered each class meeting

III. Plan and set a weekly schedule for study time every day for each of your classes.

- A- Make a weekly calendar of all your courses, including lab and office hours.
- B- Set blocks of study time for each course, and commit to them.

IV. Read the textbook sections outlined on the syllabus prior to each lecture.

Many students skip over the reading and proceed directly to their homework problems seeking out examples similar to their homework in order to mimic steps, creating many setbacks for comprehension of future chapters and math courses.

- A- Read slowly, successful math textbook reading involves comprehension.
- B- Replace words with symbols, and figure out how to put symbols into words.
- C- Place question marks where you are confused and do not understand steps.
- D- Unless instructed to, do not skip over any sections.

V. Write notes and work out examples for each section *prior* to each lecture.

- A- Work out examples, identify specific concepts and write them down after each step.
- B- Attempt some homework problems.

VI. Attend all of your classes.

- A- Class attendance and participation are vital components to your success. Attend class, even if you are familiar with the material, because a review will only strengthen your understanding; plus, your instructor could give important information regarding examinations, homework, lab work, extra credit, etc.
- B- If for some reason you are absent from class, come to the MSTRC to watch the lecture videos of the sections you have missed, prior to the next class. Do not skip class; even if you are behind, your notes are still very valuable.

VII. Listen to lecture and add on to already existing notes for each section.

- A- For the most part, everything your instructor is writing on the board may be found in your text, which you should have already taken notes on.
- B- Texts tend to skip steps, your instructor should fill in the blanks with lecture, so listen carefully and add to your existing notes versus trying to copy and keep up with everything the instructor is writing on the board.

VIII. Ask questions in lecture.

Another important aspect to succeeding in your math course is asking questions. What typically happens if you are seeing something for the first time in lecture is that you will not even know what you ask, again, this stresses the importance of preparing for class. If you have prepared for lecture and already identified questions within your notes prior to class, you are then able to stop and question your instructor on concepts and steps you did not fully understand while it is being lectured.

IX. Attend office hours.

This is a good time to address questions that are not answered in class or questions that require further explanation. During office hours your instructor may offer information that could lead to potential test questions, which might not otherwise be discussed in class. Let your instructor know that you are working hard to prepare for your class. Your participation and success in the course may lead to a letter of recommendation in the near future.

X. Focus on understanding concepts.

Many students have been taught to memorize steps and procedures, which can cause numerous problems because the concepts are not completely understood and steps could be easily forgotten. Your focus should first be to start understanding the concepts before you jump to your homework exercises.

XI. Complete all of your homework, or at least attempt each problem.

Once you understand a concept you must practice applying it to numerous problems, attempt all examples, homework problems, and additional problems for more difficult sections. A good way of remembering important theorems or concepts is by writing the theorem or equation in general form every time it is used in a problem, such as "rate × time = distance" for rate problems.

XII. Start a study group.

Get to know other students in your class and start a study group, because collaborate learning is extremely beneficial. A study group is also an excellent resource for notes and information you may have missed due to a class absence. Take full advantage of all resources available, especially the free ones, such as the Mathematics Learning Center and encourage your group to attend the center regularly, as you should.

XIII. Make flash (note) cards with all definitions, theorems, and formulas.

- A- Place definition, theorem, or formula in your own words on front of the flash card, including the section and page number from your text.
- B- With a line, split the back of the note card vertically down the middle. Place a simple example using only the specific concept on one half, then place a difficult example using multiple concepts on the other half.

XIV. Study ahead of time for exams.

Study and review for exams ahead of time, please pick up the Math Test–Taking Strategies handout in the MSTRC for specifics on exam preparation.

XV. Stay positive because math is not only fun, but it is essential for all majors!

A large contributor to math and test anxiety is poor study skills, so start developing successful study habits to create a positive learning environment for yourself. Everyone is capable of learning and understanding mathematics, but just like many other skills you must continually practice in order to master the material. Success comes with consistency, so stay motivated and focused on your academic goals. Most importantly keep a positive attitude and enjoy your schooling!