

Learning Assistance Study Tips

Math Strategies & Study Tips

HOW TO STUDY IN A MATH CLASS:

- Before starting a new course, review the math from your previous one.
- Do not fall behind.
 - If the class seems easy, remember math classes start with a review then move into high gear.
- Think of math as time-consuming rather than difficult.
 - This will give you a sense of control over your performance in the course.
- Read or scan the chapter before your lecture and read again afterward.
 - Read your book as a reference book to help you understand the math problems.
- As you read your text, do the computations along with the book.
- During a lecture, write down everything the professor writes down.
 - If he/she uses different colors of ink, do likewise.
 - Write down each step. You may find yourself confused later on and need those notes.
- Memorize math symbols and definitions
 - Understand the underlying processes and concepts.
 - What is the purpose for each step?
- Still need help? Consult a different book, a tutor, or the instructor.

HOMEWORK:

- Do your homework right after class if possible while the concepts are still fresh.
 - Do not procrastinate! The weekend might be a great time to write an essay, but during the week keep up with your math.
- Begin by reviewing your lecture notes.
 - Work the example problems on your own.
 - Check your answers with the ones in your notes.
- Try sitting down with a classmate to do your homework
 - Use the Learning Resource Center.
 - Work individually consulting each other only as needed.
- Check your first answers in a given section before doing a whole set of problems.
 - If you make mistakes, check the steps. Make mental notes to avoid similar errors again.
 - If you are stuck, consult with another student or a tutor.
- When working on homework, try to do *all* of the assigned problems.
 - If you need help, talk to your instructor or a tutor
- Read each problem slowly and carefully.
- Summarize word problems

- Draw a diagram or set up the information in a table.
- Sort out the problem into *given, find, need*.
- For difficult word problems or if you forget a formula, substitute simpler numbers.
- At the end of a homework session, mentally review the most important concepts.

STUDYING FOR MATH TESTS:

- Your first test will be the easiest. DO NOT get overconfident.
- That A on the first test may offset lower grades later in the semester.
- Doing well on homework and/or quizzes is no guarantee of doing well on an exam.
 - Tests can be more challenging than a sequence of quizzes
 - a test is harder to finish in time
 - The problems are presented in a random order.
 - You must be able to *quickly* decide the nature of a problem and the best approach.
- Write up a summary sheet of key formulas and definitions.
- Attend review sessions and take plenty of notes.
- Review all of your quizzes and rework the problems.
- Study by working mixed sets of problems.
 - Use chapter reviews, old tests, and/or review books.
 - You should have worked on so many problems that the material is now *easy* for you.
- Do some timed practice tests or sets of problems.
 - Find some application problems with difficult or confusing wording.
 - Mimic the testing situation as closely as you can while you work on practice exams.
- After doing several *full* practice tests, you might want to expose yourself to the greatest possible variety of word problems by doing only the first step of additional problems.
- During your practice, check all results.
 - Use some of the following methods:
 - Plug your answer back into the problem
 - Estimate the answer to make sure you are in the right ballpark.
 - Double check units and positive and negative signs.

TAKING MATH TESTS:

- Get plenty of sleep the night before the test.
 - Sleep is essential for higher order thinking.
- When you get the test, write down formulas you might forget.
 - Look at the points given for each problem
 - How to get the most points in the quickest amount of time?
 - Begin work on the easiest problems or the ones worth most points.
- Expect a few extremely difficult problems.
 - Skip and return to them at the end of the test; you may have gained new insights.
- Clearly write out each step; even if you miss the answer you may earn partial credit.

AFTER THE TEST:

- Rework any problems you missed
 - Find out what went wrong
 - Use this to help you study for future tests