HOW TO STUDY MATH

The Learning Success Center
Belz Building (formerly Furst Hall), Room 412
learningsuccesscenter@yu.edu

“Pure mathematics is, in its way, the poetry of logical ideas." - Albert Einstein

WHAT TO DO BEFORE CLASS?

- Read the assigned textbook chapter.
- Write down examples or definitions and list any questions you don’t understand.
- Even if you don’t grasp everything you read, you will undoubtedly gain valuable insights and be able to participate more actively in class. You’ll also find that you can handle more complex material.
- Create formula sheets to help review key concepts.

Reading before class gives you the opportunity, ahead of time, to know your questions or areas of confusion ahead of time. Then you can ask your instructor during class.

WHAT TO DO IN CLASS?

- Many students believe they can solve math problems simply by paying attention during class. However, when students actively engage in class, they are more likely to remember the material that was taught.
- •Engage actively in class by:
  - taking notes, summarizing key points that the professor says and using symbols and diagrams where applicable.
  - copying problems and detailing the steps taken to reach the solution.
  - asking or answering questions.
  - engaging in class discussions.
  - collaborating with peers.

WHAT TO DO AFTER CLASS?

- Commit to regular practice.
- Review past issues to identify areas for improvement.
- Review past homework, lecture examples and previous tests.
- Practice to improve skills because mathematics builds upon earlier concepts.
- Your brain is like a muscle–the more you use it, the stronger it gets. And by practicing, you build what we call “muscle memory.”
    - When you practice, you :
        - improve your skills in understanding the steps required to reach a solution. Become familiar with the intricacies of each question.
        - are more confident in your abilities.

WHY IS PRACTICE SO IMPORTANT?

- The more you practice, the better you will get.
- Each math problem has its own unique characteristics and requires a specific problem-solving method.
- The more you explore various ways to solve problems, the better you will perform on exams.
- There are no shortcuts to solving math problems; you need consistent practice to improve.
- If you make mistakes while solving a problem, review your errors to understand how to correct them in the future.

ADDITIONAL TIPS

- Memorize formulas and key terms but prioritize understanding the underlying concepts.
- Solve various problems to strengthen your understanding and improve your problem-solving abilities.
- Don't hesitate to ask for help if you're stuck. Whether you ask a teacher, tutor or classmate, getting clarification can make a big difference.
- Use textbooks, online tutorials and math apps to enhance your learning. Websites such as Khan Academy and Wolfram Alpha can be very helpful.
- Organize your notes, assignments and study materials effectively. This will facilitate easier review and studying for exams. Identify the challenging topics and spend extra time working on them. Practice problems specifically related to these areas.
- Maintain a positive attitude toward mathematics. Confidence can greatly impact your performance, so trust in your ability to succeed.
- Studying with peers offers various perspectives that enhance learning.
- Teaching each other reinforces your understanding. Remember to take breaks while studying to prevent burnout, as short breaks can help you maintain focus and retain information more effectively.

IF YOU WOULD LIKE TO LEARN MORE ABOUT HOW TO STUDY MATH

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