MATH STUDY STRATEGIES

Learning the Material

- **Think about how you would answer a question**
  When listening to a lecture or reading the book, any time a question is asked think about how you would answer it. This moves you from passively listening to actively reviewing the material.
- **Pay attention to when you're taking notes in during a lecture**
  While it's important to take notes on information being covered, you want to make sure you're not missing key points your instructor is making. Write notes quickly, use abbreviations, and capture main points so you can focus on the words your instructor is saying.
- **Complete all example problems in the chapter you're studying**
  Work to complete examples in the book on your own until you get the correct answer without going back to see how the author reached the correct answer. The math book should be closed until you can get to the right answer on your own.
- **Help a classmate with their work**
  One of the best ways to learn a topic is by explaining it to someone else. Try explaining a problem to another person to help the information stick in your mind.

Homework Tips

- **Before starting assignments review important formulas, ideas, and vocabulary for the chapter**
  Review the main points of the chapter before attempting to do the work. This will help you recall the main concepts and make attempting the homework easier.
- **Analyze word problems**
  First, read the problem closely and completely. Highlight or underline important terms or phrases. Before you answer the question, you need to know what is being asked of you.
- **If you get it wrong, do not immediately refer back to the book**
  Do NOT, after getting it wrong once, go back to the chapter to determine how the author obtained the correct answer. First, try some of these strategies to develop critical thinking skills necessary for completing math problems and enhance memory of math processes:
  - Analyze your work to see if you can identify what you did wrong.
  - Work through the math problem a few times to try to get the correct answer without consulting the text or other sources.
  - If you find your error, make note of it. Understanding where you're making an error helps you avoid it and makes you pay closer attention to it in the future.
  - If you can't find your error, ask your professor, tutor, or classmate for help.
  - Start a notebook page called "Errors to Avoid." On this page, write a description of the correct way to do the problem or what you need to focus on. Be sure to provide as much detail as needed. Writing down information helps you remember it!
- **If you get stuck, don't give up**
  Review notes and readings to see if you can find another way to approach the problem. Try starting the problem on a new piece of paper; sometimes just having a fresh start helps. If you're still stuck, ask your professor, tutor, or a classmate for hints on how to go about tackling the problem.
- **Check your work**
  Always check your arithmetic to make sure you have done your calculations correctly.

Preparing for Exams

- **Start preparing early**
  Spend time reviewing your materials far enough in advance so you have time to do a careful and thorough review without needing to stay up late the night before the exam.
- **Review all materials**
  Review all of your notes and examples and the end of chapter questions/highlights. Go over problems or examples that were previously assigned to you. Review your homework to be sure you understand the procedure you used in each section. If something doesn't make sense, review notes, readings and examples related to that topic.
- **Memorize formulas and what they mean**
  Make a list of the formulas you need to know. Identify when they should be used and what they mean. Practice writing them out and saying them out loud to help retain the information.
- **Create your own questions and answer them**
  If you were the professor, what questions would you ask on the test? Write down some questions and prepare how you would answer them.

Taking the Exam

- **Check your attitude**
  Spend time reviewing the material and preparing for the exam. It's common (and healthy!) to be serious and concerned about taking a test, but don't stress to the point of creating heavy anxiety. Try to do the best you can and be proud of the work you've done. Have confidence in your own ability.
- **Do you have what you need?**
  Double check that you have all of the necessary items for the exam (pencil, calculator, etc.).
- **Follow directions**
  Read the directions carefully before answering questions. Listen carefully for any special instructions, such as where answers are to be written, any changes or corrections, etc.
- **Review the exam before you begin**
  Look over the whole test quickly at the start and, unless you are required to do the questions in the order given, do the ones you are sure of first.
- **Start with what you know**
  If you are unable to answer a question, leave it and go on to another, coming back to the more challenging ones later. Often, with a fresh start and exposure to other questions, you will suddenly have an idea of what you need to do.
- **Review your work**
  Check back as you go along for accuracy. Careless errors can make a great deal of difference in your score.

For more information and support, contact:

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Tutorial Services: 262-472-1230, Mary Poppe Success Center, TutorCtr@uww.edu

Adapted from https://math.osu.edu/undergrad/non-majors/resources/study-math-college