

How Do I Study Math?!

- **Focus during the lesson.**
 - No multi-tasking. Put everything away and listen—this will give you the best first chance at understanding.
 - Challenge yourself to ask the teacher a clarifying question.
 - When a teacher is showing the steps of the problem—Ask yourself: What's the goal in those steps? What are we trying to get to?
- **Take lots of notes during lecture.**
 - Use arrows, draw diagrams, take notes freely and take notes in a way that makes sense to you. That will make it stick in your brain.
 - Ask your teacher if you can take a photo of their notes on the board.
- **Use class time well.**
 - Most teachers allow you to start your homework in class—Use this time to get into the work and practice what you've just learned.
 - For your homework—While you're in class, do one or two problems at the beginning of the set, then do some in the middle, and especially try a couple of problems at the end of the set. Practice the harder problems while you're still in the classroom so you can ask the teacher questions if needed.
 - As you're doing homework, check your answers in the back. Try to see how to get to that answer. Circle problems you don't understand.
- **Use your resources.**
 - Access any online notes or websites that the teacher recommends.
 - You can find Youtube channels where people walk you through how to figure out the problem. Find an online teacher that you like! (*PatrickJMT for Pre-Calc and Calc*)
 - Call a friend and ask them to explain how to do the problem.
 - Look at the examples in the book. Try to follow the steps. (Good practice for college!)
- **Get help.**
 - If you need some re-teaching, ask your teacher if you can meet at Brunch, Lunch, or afterschool.
 - When you get your test back, write down the problems you missed and see what you did wrong. Turn in test corrections if your teacher allows it.

- **Review.**

- Review every day. After you complete your current homework, go back and do 2 problems from the previous lesson. Every day do 2 problems from an old lesson, so you are continually keeping your mind engaged with previous material. Spiraling back to old material will help you not to feel too overwhelmed when it's time to review for a big unit test or a final exam.
- If you had a hard problem on the homework the night before—go back and try to do it the next day. Then see if you can explain how to do it to someone else.
- Ask questions in class during the test review time. As you're working through the review, have your notebook, textbook, and a highlighter. Circle or flag concepts you don't understand. (Those will probably be on the test!)
- Always seek to understand the underlying goal / concept of what the problem is asking. Make sure you understand the vocabulary in the directions and the end goal of the problem. (*Does the problem ask you to simplify or find the product, or find the sum?*)
- Cramming for a math test doesn't work! Start studying 3 days before a test to lock the steps and the knowledge into your long-term memory.

- **Take the test!**

- Answer the easiest questions first, and then go back to the harder ones. This will help you get through the test and lower your anxiety.
- Breathe. Tell yourself you can do this!

HOW TO STUDY FOR A MATH TEST

Step One: Summarize each lesson. Make a **1-page summary** of concepts, formulas, and vocabulary from the chapter using your class notes.

Do the review assignment

Do not look at the answers as you complete the assignment. Using the key, grade it as if it were a test.

Take note of those problems that you got wrong or needed help with. Find problems like these to practice (using homework, notes, or the textbook), until you can complete them correctly on your own.

Compare the review assignment with your note sheet.
Is there anything missing from the review?

If so, find a way to practice these missing concepts (using homework, notes, or the textbook).

Ask to see your chapter quiz to identify points of confusion from the beginning of the chapter. Make sure you understand them now. If not, find practice problems. (Hint: Quiz review assignment)

For chapters heavy with definitions & formulas, **try memorization strategies**. (Ex: flashcards, write them in your own words, use diagrams to help visualize, etc.)

Struggling with Theorems/Postulates? This is not just memorization, so flashcards aren't the best strategy. Instead, draw diagrams yourself and identify everything you know about a figure.

Form a productive **study group**. Explain the steps to each problem out loud to one another.

See your teacher for **extra help** during office hours – don't wait until the last minute!

Other helpful hints:

During Office Hours or a meeting with a teacher: to review tests/quizzes., write down your mistakes -- get specific and write down exactly what you did incorrectly. Ask to re-do the test (not for credit or a new score) but to find each specific error.

Do two or more problems each day of each specific type to realize your specific mistakes. This way you can get help exactly where you need it!

Some students need to do the review sheets - often more than once- to really get and remember the information. Take the review as a practice test to check your knowledge.

If you are currently taking notes on binder paper, consider printing any blank notes from the locker; then fill in the missing material during class. This might allow you to watch the processes more, rather than have to write down everything. Look in the locker for each chapter for the in-class notes. Read over the completed notes: try a few problems with your friends or family.

