

Reading Math Textbooks

1. Slow down! The flow of a math book is not like the flow of a novel. If you are reading a novel and are somewhat distracted, you can still get the idea of the story. When you are not concentrating on math, you will get very little out of it, and it will seem more difficult than it really is.
2. Every word counts. Math books are usually not repetitive, so there is little chance of picking up missed information from reading on. Writers of math texts believe that extra words and repeats get in the way of clarity. Never start in the middle of the book, chapter or page. Each page assumes you have mastered the previous pages.
3. Understand each sentence before you go on. Reread as many times as necessary for you to master an idea. Mastery can take minutes, hours or days.
4. Do not skim diagrams and other kinds of illustrative material.
5. Words and symbols of math have very specific meanings. If you are uncertain about the meaning of a term, look it up or ask someone to explain it.
6. Write as you read.
 - A. Work out proofs, derivations, and sample problems. After reading an example, cover it up and try to work it out yourself.
 - B. Make notes to yourself right in the text. Underline main points.
 - C. Write key recall words in the margins.
 - D. Mark formulas, definitions, cautionary notes (with an asterisk, highlighter, etc.)
 - E. Note questions on concepts you need to have clarified.
7. Record key points on a separate sheet.
8. Make 3 X 5 review cards with formulas, properties and facts.
9. Keep testing yourself on a separate sheet of paper.
10. Without looking back, write out and say aloud the important points.
11. Create tasks for yourself as you read the text. After reading an example and working it out for yourself, try to think of other examples that would fit the idea being discussed. Think of other relevant problems and try to solve them. You can find additional problems in other math texts.
12. Use more than one math book. Use these other math books as reference texts to clarify or better explain a topic you are studying. Pick books that appeal to you. If you are very verbal, a book with long explanations is likely to be most helpful. If you are very visual, you might choose a book with more illustrations.
13. Read the chapter before, and again, after class. You will get the most out of class if you have read the material before the instructor presents it. Even if you felt you understood the material in class, read the chapter soon after class. This second reading will help you store the information you've learned in long term memory.