How to Read a Math Text

Survey the assigned portions of the text. Pay particular attention to the boldface type, formulas, rules, graphs, diagrams, and problems. Determine the kind of information that is given and where the important information is located.

Question ideas based on the survey of the material itself. Question the meaning of terms, the reasons for doing things, formulas, equations, and the kind of information that is important.

Read the text very slowly for such things as symbols, explanations, and illustrations. Reread as necessary for complete comprehension. Then read it again more rapidly to answer question previously raised. Pause as needed to try to understand or discover relationships among the data involved.

Recite by asking yourself, “what have I just read?”

“Rite” word explanations in numbers and symbols. Example:

To multiply powers of the same base, add the exponents and let this sum be the power of the base:

\[ X^2 \cdot X^3 = X^{2+3} = X^5 \]
\[ X^m \cdot X^n = X^{m+n} \]

Prepare a study sheet by writing down the ideas of the lesson in your own words, in outline form. Make lists of important words and their meanings. State warnings about errors to avoid. Outline the steps you plan to take to solve the problems. Work out the details of the examples to be sure you understand the concepts being illustrated. Be sure you understand the how and why of each step and idea. Never pass an equation without writing it down and deriving it immediately.

Review and be sure you understand symbols, formulas, graphs, diagrams, and equations. Make flash cards for typical problems and solutions. Write out step by step procedures for handling various types of problems, equations, or formulas.