

SQ6R for Math and Problem-Based Science Texts

Many people skip reading math textbooks and look at them only to complete assigned problems. Math textbooks are just as important to read as any other text. In fact, you may have to read more slowly and re-read your math text! If you are having problems in your math classes and you find yourself zooming through the text, try the steps outlined below. You may also benefit from Math Anxiety groups and the “Tips for Taking Math Tests” handout.

Survey the section. Look for introductions, summaries and bolded concepts. Look through the questions at the end of each section. Try surveying your entire textbook at the beginning of the quarter to get an idea of what you will be learning. You can also try reading each section before the lecture. This can make the lecture more interesting and meaningful.

Question. Ask yourself what the main concepts are before you read. Ask yourself how this assignment relates to other assignments or to what you have learned in class. If there is terminology you don’t understand, use a dictionary or ask your professor or TA.

Read the assignment straight through without stopping. Get a general idea of what it is about. Try to focus on the concepts being discussed rather than the individual examples listed. Look carefully at all pictures and diagrams as well as examples.

Respond. Can you answer the questions you originally asked yourself. Can you answer the assigned questions?

Re-Read. This time, go through with a pencil and notebook. Make sketches and diagrams of the concepts. Work through the examples on paper, making sure you understand how the problems relate to the concepts. If you have difficulty understanding a concept or problem, try to walk through the steps out loud. Mark where you are having difficulties and ask your instructor, classmates or a tutor for help.

Record. Take notes on the reading on a separate piece of paper, just like you would for lectures. Write notes in the margins of the text. Highlight important concepts and terms. You can even make flashcards of key terms.

Recite what you have just learned. Repeat important ideas in your own words. If you really understand the concepts you should be able to list examples that illustrate them.

Review. Work through the assigned problems as if it were a review session. Think about what concepts the problems are “testing” you on. Try working on additional problems from old math books – you can borrow these from the Tutorial Center and Wilson Library. Regularly practice problems from previous assignments to keep them fresh in your mind.

Adapted from *Reading the Content Areas: Mathematics*, Spargo & Harris