

Notetaking: Math and Math-Related Courses

In math and science courses that involve numerical problems and formulas, the indenting and numerical letter outlining formulas are insufficient note-taking techniques. The instructor often presents solutions to problems on the board, writing each step in the sequence. In taking notes on these kinds of problems, you cannot separate main ideas from the major detail. Every step is a main idea. Study the following hints for taking notes in a math and science course:

1. Listen carefully when your instructor presents laws, axioms, theorems, or properties. Write these statements down word for word. Identify the statement as law, axiom, theorem, or property in the margin. This will emphasize the importance of the statement.

Look at the following example:

Associative Property

$$a + b = b + a \quad 5 + 3 = 3 + 5$$

(8) (8)

$$a * b = b * a \quad 5 * 3 = 3 * 5$$

(15) (15)

Sometimes numbers may be added or multiplied in any sequence and you will still be able to come up with the same answer

2. When an instructor solves a problem on the board, copy it step-by-step. Problems written on the board are important. These examples will likely help you solve your homework or exam problems. Number each step and make comments after steps needing clarification. These comments will prove invaluable when you review your notes and follow the solution to the problem step-by-step. Put question marks next to steps that you cannot follow. Have these questions answered during or after class.

Look at the following example:

1. Do operation in parentheses first

2. Combine like terms

3. $+ 2x$ balances both sides of the equation

Problem #3

$$2(5x + 5) + 4x = 80 - 2x$$

for x

1. $10x + 10 + 4x = 80 - 2x$
2. $14x + 10 = 80 - 2x$
3. $+ 2x \quad \quad \quad + 2x$
 $16x = 80$

4. Isolate x by dividing by the coefficient

4. $x = 5$