Write down any equations, formulas, diagrams, charts, graphs, and definitions that the instructor puts on the board or screen.

Quote the instructor’s words as precisely as possible. Technical terms often have exact meanings and cannot be paraphrased.

Use standard symbols, abbreviations, and scientific notation.

Write down all worked problems and examples, step by step. They often provide the template for exam questions. Actively engage in solving the problem yourself as it is being solved at the front of the class. Be sure that you can follow the logic and understand the sequence of steps. If you have questions you cannot ask during lecture, write them down in your notes so that you can ask them in discussion, in the lab, or during the instructor’s office hours.

Consider taking notes in pencil or erasable pen. You will probably need to use an eraser or make changes in your notes when copying long questions while also trying to pay attention to the instructor or when you copy problems that other students are solving at the board. You want to keep your notes as neat as possible. Later, you can use colored ink to add other details.

Listen carefully to other students’ questions and the instructor’s answers. Take notes on the discussion and during question-and-answer periods.

Use asterisks, exclamation points, question marks, symbols of your own to highlight important points in your notes or questions that you need to come back to when you review.

Refer back to the textbook after class; the text might contain more accurate diagrams and other visual representations that you can draw while taking notes in class. If they are not provided in handouts or on the instructor’s website, you might even want to scan or photocopy diagrams from the text and include them with your notes in your binder.

Keep your binders for math and science courses until you graduate (or even longer if there is any chance that you will attend graduate school at some point in the future). They will serve as beneficial review materials for later classes in math or science and for preparing for standardized tests such as the Graduate Record Exam (GRE) or Medical College Admission Test (MCAT). In some cases, these notes can also prove helpful in the workplace.