

# Math Test Study Skills

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## Create A Study Plan

Studying for a math test takes time and effort.

Some students feel studying for a math test consists of looking at their formula sheet and turning the pages in the math text book when they are told they have to study. This technique has a few flaws. One of these flaws has to do with not cementing the concepts into the student's head before the test. A student has very little chance of doing well on a test without knowing the concepts very well. The real question is: **How do you cement the concepts into your mind?**

**Actually doing math problems with pencil and paper or on a white board or on a chalk board or in the dirt or whatever surface you can find will help.** Checking your answer after doing the problem will also help. If you don't check your answer, then how will you know if you are doing it correctly? How will you find your mistakes? Some people can tell they have made a mistake and know how to look for finger fumbles or misread numbers or a dropped negative sign along the way. If you are not one of these fortunate soles, then I beg of you to check your answers. Most math textbooks have many answers in the back of the book. Some math books have companion books with step by step processes for many homework problems. These are good things and should be embraced as tools and not used as crutches to just copy down to get the homework assignments done.

**What are the risks of just copying someone else's homework or copying it out of an answer book?** Well, the tests in the class and the final exam are going to be VERY difficult if you didn't learn how to do the problems on your own. Some students think that if their teacher allows notes or an open book test that there is no reason to study for the test. This is faulty logic. If notes are allowed then the test material is very challenging. If it is an open book test, then the instructor feels no guilt in giving difficult problems on the test. In other words, if notes or an open book are allowed on a test, you better study even harder for the test.

By now you can probably tell I have experience being a math instructor and a math tutor. I have witnessed students studying for math tests and I have graded tests and quizzes from both prepared and non prepared students. The difference is clear. You might even say that studying for a test is one way to reduce stress and anxiety while taking the test. I have seen a world of difference between a stressed out student who didn't prepare and that same student being much calmer after studying for the following test.

**There are many ways to study for a math test.** First decide if there is any vocabulary that needs to be learned. One clue to this is if the instructor is saying words you don't understand. These would be words to study by using flash cards which can be made out of 3 x 5 cards. Another thing to decide is if there are formulas or formulae to study. These should be on flash cards. Put the part before the equals sign on one side and the part after the equals sign on the other side. Another method for this is to put the word description of the formula on one side and the actual formula on the other side. Over the years of math classes, you will find a use for both methods. By all means hold onto these flash cards to use for studying for the final.

**How important are flash cards for a math class?** I have seen students raise their overall grades in a math class by one or two grade levels, just by using flash cards. It can take some time for the idea of using flash cards to sink in with some students. Eventually after they try them for a while, they learn how helpful they are and how much easier the tests are and how their grades go up... Give it time, it works.

**Math students cannot live on flash cards alone...** They must also have practice in completing problems in the text book. Many students mistakenly feel that the homework problems they rush through so that they are turned in on time are good enough to say they have finished practicing. This is a rather foolish way to approach a math test. Take the time to write down one of the example problems in the text or from your notes. (Oops. Did I forget to mention that it is a good idea to take really good notes in a math class?) Once you have written down the problem on a separate piece of paper (or other substance), put the notes or book away and try to do the problem on your own. The advantage to doing part of your practice this way is that the steps to completing the problem are at your fingertips and can be looked at for reference if you get stuck. Once this important step has been completed, continue on to problems in the section which have answers in the back of the book. These are usually the odd numbered problems.

**How much time does it take to study for a math test?** That answer depends on how well the material has been cemented into your brain. If it is hard, then take more time to study for the upcoming test. This does not in any way mean to have a marathon study time the night before or the day of the test. This means back up the time frame and start studying days in advance. Do a few problems from each section on the test each day. You should spend about a half hour on these problems each day on top of doing your regular homework. Why so much time you say? Because if you don't review the older material while you are learning the newer material, then you risk the chance of forgetting small, but key points which can make all the difference in your grade for the test as well as your overall knowledge of the sections covered.

**What time of day is the best time of day for flash card review?** It has been said that reviewing your flash cards right before going to sleep at night will allow your brain to review them while you sleep and over time this will help the material to seep into long term memory, making the test taking much easier. Remember that the flash card review is in addition to doing the problems, so it is in addition to that half hour you are already spending on review problems and checking your answers. Some students also find it helpful to write out problems and their steps to complete them on flash cards as well. Use the techniques that work best for you on the use of flash cards. 3 x 5 cards are cheap and invaluable in many classes which require memorization. Try color coding your flash cards if that helps you. Definitions could be in one color, and formulas could be in a different color, and so forth.

In short, making and using flash cards, doing extra problems on top of your homework assignments, and asking for help when you don't understand what is happening in class or at home will all combine to make a stronger math student. These techniques may prove to be so helpful that you might want to start using them in other classes as well.

Happy studying!! Don't forget... Math is FUN! Think of it as a game...