Studying Effectively for Math Tests – Math 10

High school math gets more challenging each year. Students must do their math assignments daily and **must start to study effectively to be prepared for tests**.

Just how do you study for a math test? Many students have minimal experience studying for math until high school. Then, during high school, one has to learn very quickly some effective study techniques.

The Study Plans that you must AVOID!!

1) Not studying at all!
2) Read over my notes and it all seems familiar, so I'm ready for my test.
3) Read over my notes and try a few practice questions, so I'm ready for my test.

Why don't these work?

On a test you have to DO math, not read math. Also, during a test, you have a question in front of you, but no hint on how to get it started, and you can't peek at your notes to help you through.

Studying by simply reading your notes is called the 'familiarity' problem. You look over your notes and recognize everything, so you feel prepared. You get the test back and are shocked at the bad grade...you think 'but I knew it all'.... however, you may have been familiar with the math, but can you APPLY the math (ie. Do you really understand the math) to a series of questions that are placed in front of you with no hints or references (an actual TEST), just a blank page to get the answer.

What does work?

Studying needs to be ORGANIZED.

1) Make a study plan with actual days and times. Pencil in what you will study in each time slot. For a chapter test, you should study for three days with NO CRAMMING.
2) Start by making sure all of your notes are complete and organized. Look over each section of notes and jot down any helping hints for yourself. This gets you to interact with your notes and gives you an idea of everything that is fair game on the test.
3) Go back to the first section in your notes and read them over. Cover the examples in the notes and do them over. If you struggle with one or more of them, find a similar question in that assignment and try one or two more until you're confident about how to approach and do that type of question. Do this for each section.
4) If you do step 3 over the course of two days, do a brief review (10 minutes) of what you studied on Day 1 before moving on to the sections you will study on day 2. On day 3, spend 15-20 minutes reviewing what you studied on days 1 & 2.
5) On the last day, start by making a 'CHEAT SHEET', a sheet that would be useful to you if you could take it into your test (you can't though☹). Go through each section and write down all the important points (try to do it without looking at the notes). For example, if you are learning about solving equations, write down all the steps in order from memory. Then look over your notes to see if you missed something, or if you forgot something. Then make up an example and complete it for your cheat sheet. Do this for every type of example question from your notes. Making up the example is valuable because it helps you to realize what each type of question you could see on your test

will look like. Doing the example is obviously helpful as that's what you'll be doing to be successful on the real test. You'll be surprised at how good an exercise this is to solidify your learning. You'll know everything on your cheat sheet and wouldn't even need it anyway!

6) Do a practice test after making your 'cheat sheet'. Pick questions from throughout the review assignment to make your practice test. Pay attention to the instructions of the questions to get used to the vocabulary (it will be similar vocabulary on the test questions). Try to recognize what section it is from to give it a context. Check the answers to see if you did it correctly. If so, great! If not, then go through it closely, possibly with the applicable notes available, and try to figure out your mistake(s) so you avoid them the day of the test. Then try to find another question like that one so you can try again (probably from the applicable assignment).

The six steps above are a good guide on how to study for math. Students may not do exactly what is suggested above, but it should be similar. What components are essential to doing well?

<u>What does your studying need?</u>

A) An organizational system that ensures you've studied THOROUGHLY, ie did you address everything that could possibly be on the test.

B) You need to DO math to study, not simply READ or look over the math.

C) Your studying should definitely include a test simulation...a practice test that complete the evening before to see if you're really prepared.

D) Extra work on concepts/questions that are troublesome.

E) More than one day. Cramming does not work for most people, as all the math runs together in your brain. If you find you need extra help, you have the time to get it.

F) When you get your test back, if you did well, continue your study system for the next test. If you didn't do too well, think about how you can adjust your study plan in order to do better next time.

Another Helpful Tip

Listen closely to what your teachers says leading up to a chapter test. There is usually one or more hints about what will be on the test. Write these down and pay attention to them while studying.

What are your goals?

FOM 10 is a huge building block to future success in high school math. So the more you know from FOM 10, the more success you can have in math 11 and 12. Don't sell yourself short! Aim high with your goals in math and if you are responsible about doing your math each day, and studying effectively for tests (this will take some practice and reflection), you may be surprised at how well you can learn the concepts. If you're going to do something, then do it right, and prove to yourself how well you can do when you put your mind to something.