

Tips on Preparing for Tests and Quizzes in Mathematics

Preparation for a test should not just occur the day before the test, so...

During Class:

Do you have questions that go unanswered?

If you have 2 or 3 problems that you didn't get right on the homework that we didn't go over in class or couldn't understand an idea in class, don't let that lack of understanding linger - it won't resolve itself and may come up on a test later...

Do Something:

ask about the problem in class...or...

ask me about the problem after class...or...

ask someone else in the class about the problem...or...

find me for extra help during free time...

Take Notes: If I'm writing it on the board, it's probably important. If we're going over a challenging problem on the board, it's one thing to watch the process and nod your head, it's another to write out the steps and have a record of the correct solution of the problem in your notes.

Making the Most of Homework: Somehow mark the problems you get wrong on the homework so they stand out - even if you later figure out the answer, when you are preparing for a test you are going to want to remember that you did have difficulty with that problem at one time.

Studying:

Organizing: It might be worth your time taking 15 minutes to write down a list of all the skills and concepts that have been covered during the chapter. You don't want to be in a situation of not having studied one topic *at all* (i.e. finding plane intercepts in a chapter on systems) and then finding it is worth 10 points on the test.

Doing Problems: Should you focus your attention on problems that you've gotten correct on past homework and quizzes? Of course not - you want to focus on problems that have given you difficulty in the past. Go to the marked problems on your homework and to problems that you lost points on in past quizzes and redo them, **from scratch, without looking up the answer**. If you get them right - celebrate! The issue you had back then has been resolved.

How to Approach the Test Itself:

“Scanning”: Take 30 seconds to quickly look over the test. You want to know how long it is and where the difficult problems are going to be. If the last problem seems easy to you, you might want to start with it instead of waiting to the end and maybe not getting to it at all. *Working through the test with no idea of what lies ahead can lead to mismanagement of time.*

Reminders: If there are formulas that you needed to memorize, you might want to start by jotting them down at the top of the first page, so you won't have to think about them later. You might also want to write down any other reminders to yourself at that time (like “don't forget to distribute the negative” or “simplify all radicals”).

Are You Stuck? If you've spent several minutes on a problem and then realize you need to start over, circle the number of that problem and come back to it later with a fresh start. You don't want one problem to use up all your time on a test.

Partial Credit! Write down as much as you can in an organized way for any problem, even if you're not sure of how to get the final answer. If some of it is correct and is a first step towards the solution, it will count for partial credit.

Problem Taking Too Long? If it seems like you are doing a huge amount of work on a problem, think about if there might be a more efficient solution or approach that you haven't thought of. **When your teacher introduces and explains a more efficient way to do problems in class, make sure you pay attention to those - they are there to help you.**

The Simple Things: Don't lose points for not rounding or simplifying. Pay attention to the instructions.

The Car's Going Too Fast! If you're solving a word problem, check your answers for reasonableness (i.e. Zeke couldn't have been biking at 3,400 mph, so don't write that down as your answer). This may not tell you how to arrive at the correct solution, but it tells you how likely it is that your answer is correct or incorrect.

You Say You're Done...When you've gotten through the last problem on the test you can:

- a) go back to problems you got stuck on
- b) check you answers by plugging them into original equations or by rechecking for mistakes in operations - you can also do something like checking all the negative signs in your work to be sure they didn't get lost
- c) twiddle your thumbs meaninglessly
- d) turn your test in and play a game on your calculator while *your teacher* find your mistakes and take off points for them

What Else? Your worst enemy is the *little* mathematical mistakes - thorough checking can cut down on these. The more you prepare, the higher your confidence level, the more relaxed you will be, the better you will do. Good luck!