

## Studying and Test Taking Tips

1. It is wrong to say you cannot improve your score by studying since much of the test is based upon knowledge rather than intelligence, but it may be impossible to make much of an impact in five weeks trying to study both verbal and working full-time. You may have to make a serious commitment to relearn or perhaps learn for the first time fundamental math principles. The good news is that these skills will pay off in your future studies as well as in life.
2. The issue on the test is time. It is **very hard** to complete the questions in the average of two minutes per question. As they say in the legal profession, “**time is of the essence.**”
3. The three most important words are SPEED – SPEED – SPEED. And SPEED comes from **PRACTICE – PRACTICE – PRACTICE**. Even the easy questions usually take a minute. For every question you spend four minutes on you must do two at one minute. The pressure is crushing!!!
4. If you are stuck, meaning you have spent 3-4 minutes, you must “**guess and go.**” Cut your losses and move on. You will be crushed if you do not complete most of the test. What that number is I cannot say, but you can assume it around 90% or 33 out of 37 of the questions.
5. Once you answer a question, it is gone, you can not go back. The past is history. What counts is tomorrow.
6. You can not look ahead and do the easy questions. They will feed you questions that track your skill profile on previously answered questions.
7. The test is adaptive to your skill level, so it is a very bad idea to spend a long time to get a hard problem correct. You must move forward. Careless mistakes on easy problems hurt. They peg you for a **looser**, just as answering difficult problems correctly peg you for an Einstein.
8. You cannot skip an answer. The test will not let you proceed until you answer the question. You must “**guess and go.**” The only questions that will go unanswered are the ones at the end when the time limit is exceeded.
9. You will not be given numbers to the problems so you must keep track of how many you have answered so you can pace yourself.
10. Almost all the problems involve a **trick**. In fact, you can safely assume there is a trick to everything, which means that the straight forward approach is almost always too long. If you don't see any shortcuts, you are almost guaranteed to be taking too long. Of course, anything over two minutes is too long. This all goes back to speed and practice. Practice on hard problems; generalize the tricks; and practice some more.
11. Use a stopwatch and time each question when you practice. Record the time in your book. Unfortunately, stop watches are **not allowed** in the test. After several days have elapsed, redo all problems that took you more than four minutes, multiple times if necessary. Attempt to internalize the essence of the problem or determine that this type of problem is too difficult for you and plan to immediately **guess and go** when you encounter it.
12. Never use a calculator when studying for the test. They are not allowed in the test. Look for “**speed gifts.**” They are simple relationships between the numbers which allow you do the arithmetic in you head or at least very fast. It is usually faster to work with fractions rather than decimals. E.g. rather than multiplying by .125 divide

- by 8. Having said that, multiplication is easier/faster than division. When adding, look for numbers that add to ten. Don't confine your addition to the specific order the numbers are listed. For example,  $1+4+3+6+9$ . You should immediately see  $4+6$  and  $1+9$  and know the answer is 23. This is a bit like reading in groups of words rather than one word at a time. When doing **approximations**, round to numbers which are convenient multiples for division. For example  $5.9/15.8$ . The natural tendency is to round to  $6/16$ , but  $5/15$  simplifies more and may be accurate enough. In the first case you have  $3/8 = .375$  and in the second you have  $1/3 = .333$ .
13. If the answer has to end or begin in a certain digit and there is only one such answer, **mark and go**. Do not bother to do the full computation. Remember speed. Same or an answer being positive/negative, within a certain range, odd/even, etc. When doing **CANNOT** problems and "**must be true**" problems, once you have found an acceptable choice, mark and go.
  14. Practice on hard problems. Get to the essence of them. The more hard problems you can solve, the easier and faster the medium and easy problems will be.
  15. Scan the answers to get an idea for range of values and warning signs. Multiple answers that differ by the number of decimal places indicate that there are **sucker choices** for careless test takers. Numbers close together usually indicate that the answer is in that range. Problems with numerical values are candidates for back solving.
  16. **Categorize problems** and have a general **method of attack** for each problem type. A powerful method of organizing the data is create a solution table: p not p, A not not A, tiered compensation, motion, work, consecutive integers, odd/even, etc.
  17. Watch the "**edge/boundary conditions**" and the associated key words.  $<$  verses  $\leq$ , between, inclusive, the last term, the first term, etc.
  18. Look for **danger words**: CANNOT, must be true, between, inclusive,  $<$ ,  $\leq$ , least, smallest, greatest, largest, odd/even, positive/negative, consecutive, increasing/decreasing, etc.
  19. Working with negative numbers is fraught with errors. Always be on the watch for things like  $x/y < 1$ .
  20. **Back solving** can work in certain numerical situations where the answers are ranked from lowest to highest. When you do back solve, be sure to start in the middle, which is called a **binary search**, and will limit your number of tests to two. This method is called a binary search, because with each test you eliminate one-half the possibilities. It is always the most efficient search method. If the middle choice is not correct, you only need to test one of the remaining two to determine the correct answer. If the answers are in increasing order, you will never have to do more than two tests. If the answers are algebraic, back solving is very inefficient, because there is not convenient search strategy. A good thing about back solving is that the second test is always faster than the first.
  21. **Testing with numbers** is the process of substituting numbers in place of the variables and determining which must be true. Inequalities, odd/even, integer multiples, sequences, and age are good candidates for testing. Problems of the form with I, II, III statements which ask "which of the three choices **MUST** be true" are usually excellent candidates for numeric testing.
  22. Based on a review of all books, the **Official GMAT Review** is best

23. Buy used algebra and geometry books at McKay used books or get them from the library and **plow through the problems**. Remember the three most important words in preparation are PRACTICE, PRACTICE, and PRACTICE.
24. Study all problems within a type to develop **general solution methodologies**. Avoid seeing each problem as a unique situation.
25. If you are really weak in math, you might need to think in terms of spending **three to six months** in hard study to properly prepare for the test. Tackle each area separately. See the following table for a possible study plan. It is most assuredly much longer than you want, but it may be the price you have to pay for a descent grade. Even then, it may only get you to the 500+ level compared to the more mathematically inclined test takers.
26. The **best scorers** will already be good in math and will still spend 50+ hours preparing. Just think what you will have to do if you are **weak in math!** You will be competing against them. I say this not to make you give up, but to make you **face reality**. You will simply have to **work harder than you expected**. Don't give up, **get to work**, and start studying.