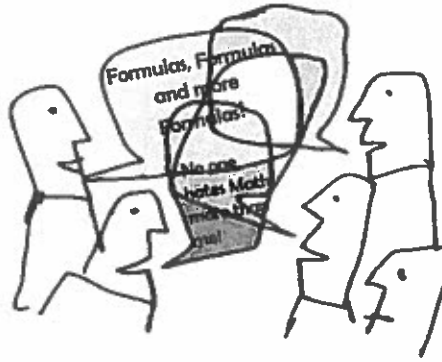




# HOW COMPREHENSIVE IS YOUR MATH ?



## ACT Math Section:

The ACT tests a wider range of math topics and devotes more questions to complicated mathematical concepts such as logarithms, as well as trigonometric graphs and matrices. This sounds intimidating. Some perfectly brilliant students are simply not this advanced in math.

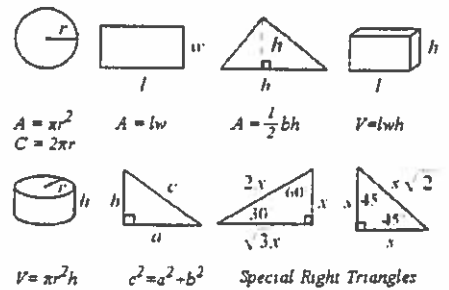
## SAT Math Section:

On the new SAT, a greater proportion of math questions are devoted to straightforward, albeit challenging algebraic concepts.

There are also other topics found in the SAT math section, like "data analysis" and "modeling," which are not purely mathematical, despite the category they are found under. They are tricky and designed to test pure reasoning skills. Do not get too worried, higher reasoning skills are indeed attainable although not necessarily taught in schools. Practice makes perfect.

## FORMULAS:

Further, the SAT will provide you with all the math formulas you will need. Some students feel that having these formulas provide the sense of having a secure road map. On the other hand, the ACT does NOT provide you with any formulas - you are simply expected to know them and you WILL need them. The below is meant only as an example of what one must be familiar with, but do not let these formulas intimidate you!



The number of degrees of arc in a circle is 360  
 The measure in degrees of a straight angle is 180  
 The sum of the measures in degree of the angles of a triangle is 180

If you are going to take the ACT, you will need a little more preparation to commit the formulas to memory. Keep in mind that the fewer formulas supplied, the better a determined and well-prepared individual can perform in relation to their peers. Thus, if you are well prepared, the ACT will give you the opportunity to truly shine.

### **THE TAKEAWAY:**

If you are more comfortable with algebra than geometry and trigonometry, then the SAT Math section will get you a better Math score. This is particularly true if you prefer the formulas to be spelled out for you.

### **HOW CONFIDENT ARE YOU WITHOUT A CALCULATOR?**



The new SAT Math section has two parts: the first must be completed without the aid of a calculator while the latter portion allows calculator use. By disallowing the use of a calculator, the SAT is trying to test for pure higher reasoning skills in problem solving rather than pure number crunching. The ACT remains unchanged of course, and allows you to use a calculator for all math questions.

It is important not to get too troubled by this new “no calculator” rule. Every question on this part of the SAT Math section is indeed solvable even if they require calculations either written or “in your head.” Some students are naturally comfortable with doing calculations by hand, which can be a great advantage. If you absolutely must have a calculator at your finger tips, then the SAT is not for you.

### **THE TAKEAWAY:**

Some students simply prefer having a calculator to help them solve math problems. If this is you, you may find the ACT Math easier even if it does contain geometry and trigonometry.

## HOW COMFORTABLE ARE YOU WITH SCIENTIFIC TERMINOLOGY?

Lots of people make a big deal about the ACT's Science section. It is not actually as much about science as one would think. Contrary to popular thinking, the Science section does not inherently test for scientific knowledge. It does, however, use a lot of scientific jargon which tends to be intimidating to those who THINK they are bad in science.



For example, the ACT's science section may throw the term "absolute zero" at you, even though you are really only being asked to interpret data that is given to you through the use of charts and graphs. For this reason, students with strong science backgrounds tend to be most comfortable with this section since they will be less likely to be

thrown off by the terminology. There is a list of useful scientific terms that a student may memorize as a shortcut to being an actual science nerd. (Put "science terms on the ACT" in your search bar for access to possible shortcuts.)

### THE TAKEAWAY:

Comfort with scientific terminology and experience in drawing inferences from scientific data contained in charts and graphs may give you an advantage on the ACT.

### CAN YOU REMEMBER THE LOCATIONS OF DETAILS?

Both the ACT and SAT include straightforward "fact finding" questions about specific details from long and tedious reading passages. The SAT will usually reference what specific line or paragraph they refer to in the question, while the ACT frequently does not. This is often an overlooked aspect of the two exams which warrants attention.

The SAT reading section simply gives the student more information to work with regarding where to find a particular answer. Everyone finds this helpful.



Some students are naturally good at remembering where different pieces of information are physically located with a particular text. Believe it or not, the ease with which you find the detail to answer a question can make a measurable difference between your reading score on the ACT and the SAT. Searching for a specific detail in a long passage can eat up precious time and cause panic for a particular personality type. Practice does help tremendously, however.

Please keep in mind that the SAT Reading questions nearly always proceed in linear order, meaning that the answers to the first question after a passage pertains to the beginning of the passage and so on — so you have the general idea of where the key information you are searching for is located.

The ACT gives you fewer hints where to find the answer you seek, and the questions do not proceed in any linear order. Here, annotations come in handy! Be careful, you could spend precious moments searching for the section you are being asked to answer a question for. Some people can naturally find the relevant sections much better than others, but you can learn the tricks to finding things easily.



### THE TAKEAWAY:

The ability to locate details in a reading passage without a prompt will give you a greater advantage against your peers on the ACT.

### HOW EASILY CAN YOU CITE EVIDENCE FOR YOUR ANSWERS?



One of the changes to the SAT is an entirely new question type found in the Reading section known as an “evidence support question.” These are two-part questions. The first question is a standard reading comprehension question and the following



## THE TAKEAWAY:

If you have a solid knowledge of grammar and sentence structure, you may prefer the ACT English. If you prefer questions which cover writing style, vocabulary, and test for language subtleties, the SAT Language and Writing section may better highlight your skills.

## ARE YOU ABLE TO LET GO? (The SAT simply allows more time!)

This one seems like a no brainer, but you would be surprised! Both exams present intentionally-challenging questions designed to separate the good from the extremely excellent. The SAT simply allows more time on average per question than the ACT does. This can be meaningful over the course of the exam if wisely handled.



Both exams have their pitfalls. It is natural for students to get wrapped up in trying to “figure out” the answer to a challenging question. Learn to recognize this when you see yourself falling into this trap, otherwise, you can end up spending 4 or 5 minutes answering one difficult question only to run out of time to answer the remaining easier ones. The best advice is “Don’t be a bulldog. Let go!”

However, when you generally have more time to answer each question, taking up time to answer an intentionally-challenging question is less detrimental to your overall remaining time. After all, correctly answering those few challenging, more time consuming questions — and they do exist and you WILL encounter them — can and will lead to a top score! It takes practice to recognize them and to take them on constructively, however.



## THE TAKEAWAY:

The ability to move on from a difficult question is a skill. It comes naturally to some students, while others acquire it with practice. Being able to do so will give you a greater advantage on these ACT.

# WHAT'S THE BEST WAY TO KNOW WHETHER TO FOCUS ON THE ACT OR SAT?

My goal is to guide your thinking and familiarize you with each exam. I hope the above general principles are helpful and serve to demystify the two exams.



In the end, the best gauge of which test fits you better is to take each and compare your scores — if your practice score for one test is consistently higher than the other, then focus your efforts on mastering that exam. I recommend that students take both exams multiple times, which nowadays, colleges expect anyway.

I have helped hundreds of students from dozens of local high schools develop their higher reasoning skills to excel on these exams for more than 20 years. My SAT/ACT training is designed to quickly diagnose and correct issues affecting students' performance. Regardless of which exam you decide is better, with a little effort, you can and will build your skill set and attain the highest score you are capable of. There is much to gain and little to lose.



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