You've probably heard of the ACT and SAT, but how different are these two tests really? In this extensive ACT vs. SAT analysis, **we look at the top 11 differences between the ACT and SAT** and explain what these differences mean for you.

ACT vs. SAT: How Different Are They?

At a glance, **the two tests aren't that different.** Both the ACT and SAT are nationally recognized standardized tests and common admission requirements for US schools. Catering primarily to high school juniors and seniors, each test measures students' proficiency in various critical skill areas — such as problem solving and reading comprehension — that are necessary for college success.

Additionally, because **all US colleges and universities accept scores from either the ACT or SAT,** there's no advantage in taking one test over the other. This means you can apply to the same schools, regardless of which test you decide to take!

But what about the actual content of the two tests? Though not identical, the ACT and SAT are more closely related than ever before as a result of the SAT's massive redesign in 2016. Now, both exams:

- Contain similar sections (Reading, Math, etc.) in a **predetermined order,** with each section appearing just once
- Offer an **optional essay section** whose score does *not* count toward your total score
- Use **rights-only scoring,** meaning you will not be penalized for incorrect answers
- Contain entirely **passage-based Reading and English/Writing questions** (called "English" on the ACT and "Writing and Language," or "Writing," on the SAT)

Despite all of these similarities, **there are still many ways in which the ACT and SAT differ from each other.** For one, the SAT is overall slightly longer than the ACT. What's more, the number of questions and time limits are different for corresponding sections.

Here is a brief overview of the basic structural and logistical differences between the ACT and SAT:

	ACT	SAT
Total Time	2 hrs 55 mins without Writing 3 hrs 35 mins with Writing	3 hrs without Essay 3 hrs 50 mins with Essay
Order of Sections	1. English 2. Math 3. Reading 4. Science 5. Writing (optional)	1. Reading 2. Writing and Language 3. Math No Calculator 4. Math Calculator 5. Essay (optional)
Time Per Section	**English:** 45 mins **Math:** 60 mins **Reading:** 35 mins **Science:** 35 mins **Writing (optional):** 40 mins	**Reading:** 65 mins **Writing and Language:** 35 mins **Math No Calculator:** 25 mins **Math Calculator:** 55 mins **Essay (optional):** 50 mins
# of Questions	**English:** 75 questions **Math:** 60 questions **Reading:** 40 questions **Science:** 40 questions **Writing (optional):** 1 essay	**Reading:** 52 questions **Writing and Language:** 44 questions **Math No Calculator:** 20 questions **Math Calculator:** 38 questions **Essay (optional):** 1 essay

	Total score range: 1-36	Total score range: 400-1600
Scoring	Each section uses a scale of **1-36.** Your total score is the **average** of your four section scores. The optional Writing section uses a scale of 2-12 and does not count toward your final score.	The Evidence-Based Reading and Writing (EBRW) and Math sections each use a scale of **200-800** and are combined for a total score. The optional Essay uses three separate scales of 1-8 and does not count toward your final score.
Cost	$46.00 without Writing $62.50 with Writing	$47.50 without Essay $64.50 with Essay
Who Accepts Scores?	Accepted by all colleges and universities in the US	Accepted by all colleges and universities in the US

So are these the only ways in which the ACT and SAT differ? Not at all! In fact, **the two tests differ quite significantly in 11 key ways.** Read on to see what these differences are and what they ultimately mean for you.

SAT vs. ACT: 11 Key Differences

Now, let's begin our ACT vs. SAT comparison. Although both tests share several similarities, here are the most important differences for you to consider before deciding whether to take the SAT or ACT.

#1: Time Per Question

Loathe time crunches? Then you might prefer the SAT over the ACT. This is because **the SAT gives you more time per question than the ACT does.**

This chart illustrates the differences in time per question (if you were to spend the same amount of time on each question in a given section):

	ACT	SAT
Reading	53 sec/question	75 sec/question
ACT English/SAT Writing	36 sec/question	48 sec/question
Math	60 sec/question	No Calculator: 75 sec/question Calculator: 87 sec/question
Science	53 sec/question	N/A

As you can see, **the SAT offers more time per question on *all* sections of the exam.** You'll have some of the biggest increases in time per question on the SAT Math and Reading sections, with the Math Calculator subsection allotting you nearly 30 seconds more per question than the ACT Math section!

So if you're worried about time management — particularly on math questions — the SAT offers much more workable and far less stress-inducing time constraints than the ACT does.

#2: Science Section

Another major difference has to do with science. **While the ACT contains a section entirely devoted to science, the SAT does not.**

Looking above at our chart of differences, we see that the ACT Science section contains 40 questions and lasts 35 minutes. Like the other three ACT sections, Science constitutes one-fourth of your total ACT score. So if you're a science whiz who loves the idea of having an entire section focused on scientific data, graphs, and hypotheses, the ACT may be a better fit for you.

That being said, **the SAT *does* test scientific concepts — just not through a separate Science section.** On the SAT, you'll occasionally come across questions dealing with scientific passages, data, and charts on the Reading, Writing, and Math sections. Here's an example of a science-based SAT Reading passage you could see on test day:

Questions 22-31 are based on the following passage and supplementary material.

This passage is adapted from J. D. Watson and F. H. C. Crick, "Genetical Implications of the Structure of Deoxyribonucleic Acid." ©1953 by Nature Publishing Group. Watson and Crick deduced the structure of DNA using evidence from Rosalind Franklin and R. G. Gosling's X-ray crystallography diagrams of DNA and from Erwin Chargaff's data on the base composition of DNA.

The chemical formula of deoxyribonucleic acid (DNA) is now well established. The molecule is a very long chain, the backbone of which consists of a regular alternation of sugar and phosphate groups. To each sugar is attached a nitrogenous base, which can be of four different types. Two of the possible bases—adenine and guanine—are purines, and the other two—thymine and cytosine—are pyrimidines. So far as is known, the sequence of bases along the chain is irregular. The monomer unit, consisting of phosphate, sugar and base, is known as a nucleotide.

The first feature of our structure which is of biological interest is that it consists not of one chain, but of two. These two chains are both coiled around a common fiber axis. It has often been assumed that since there was only one chain in the chemical formula there would only be one in the structural unit. However, the density, taken with the X-ray evidence, suggests very strongly that there are two.

The other biologically important feature is the manner in which the two chains are held together. This is done by hydrogen bonds between the bases. The bases are joined together in pairs, a single base from one chain being hydrogen-bonded to a single base from the other. The important point is that only certain pairs of bases will fit into the structure. One member of a pair must be a purine and the other a pyrimidine in order to bridge between the two chains. If a pair consisted of two purines, for example, there would not be room for it.

We believe that the bases will be present almost entirely in their most probable forms. If this is true, the conditions for forming hydrogen bonds are more restrictive, and the only pairs of bases possible are: adenine with thymine, and guanine with cytosine. Adenine, for example, can occur on either chain; but when it does, its partner on the other chain must always be thymine.

The phosphate-sugar backbone of our model is completely regular, but any sequence of the pairs of bases can fit into the structure. It follows that in a long molecule many different permutations are possible, and it therefore seems likely that the precise sequence of bases is the code which carries the genetical information. If the actual order of the bases on one of the pair of chains were given, one could write down the exact order of the bases on the other one, because of the specific pairing. Thus one chain is, as it were, the complement of the other, and it is this feature which suggests how the deoxyribonucleic acid molecule might duplicate itself.

The table shows, for various organisms, the percentage of each of the four types of nitrogenous bases in that organism's DNA.

Base Composition of DNA

Organism	Percentage of base in organism's DNA			
	adenine (%)	guanine (%)	cytosine (%)	thymine (%)
Maize	26.8	22.8	23.2	27.2
Octopus	33.2	17.6	17.6	31.6
Chicken	28.0	22.0	21.6	28.4
Rat	28.6	21.4	20.5	28.4
Human	29.3	20.7	20.0	30.0
Grasshopper	29.3	20.5	20.7	29.3
Sea urchin	32.8	17.7	17.3	32.1
Wheat	27.3	22.7	22.8	27.1
Yeast	31.3	18.7	17.1	32.9
E. coli	24.7	26.0	25.7	23.6

Adapted from Manju Bansal, "DNA Structure: Revisiting the Watson-Crick Double Helix." ©2003 by Current Science Association, Bangalore.

As you probably know, there's no Science score on the SAT like there is on the ACT, but there *is* an **Analysis in Science cross-test score,** which is one of the many subscores given on the SAT. That said, most schools won't pay much (if any) attention to your SAT subscores, whereas they*will* take into consideration your ACT Science score.

#3: No Calculator Math Subsection

Unlike the ACT for which you may use a calculator on all Math questions, **the SAT contains a Math No Calculator subsection for which you may *not* use a calculator.** Consisting of 20 questions, the No Calculator subsection is a mere 25 minutes long, making it the shortest section on the SAT. (By contrast, the Math Calculator subsection is 55 minutes long and consists of 38 questions.)

As a result, if you struggle with solving math quickly or without a calculator, you'd probably fare better on ACT Math than you would on SAT Math. On the other hand, if you're confident in your math skills and can work fast without a calculator, the SAT is a solid option.

Know this, though: **on both the ACT and SAT, you can technically solve all math questions without a calculator.** So, really, the No Calculator questions aren't all that different from Calculator questions. That said, the No Calculator questions are meant to be easier to solve without a calculator and are thus generally more reasoning based than arithmetic heavy.

#4: Types and Balance of Math Concepts

In regard to math content, the ACT and SAT both have a big emphasis on **algebra.** But the ACT also tests a couple of concepts that the SAT doesn't focus on as much.

To start, the ACT has a much larger focus on **geometry,** which makes up about 35-45 percent of ACT Math. By contrast, geometry accounts for less than 10 percent of SAT Math questions. In addition, trigonometry accounts for about 7 percent of the ACT but less than 5 percent of the SAT, so there's a slightly larger emphasis of trig on the ACT than there is on the SAT.

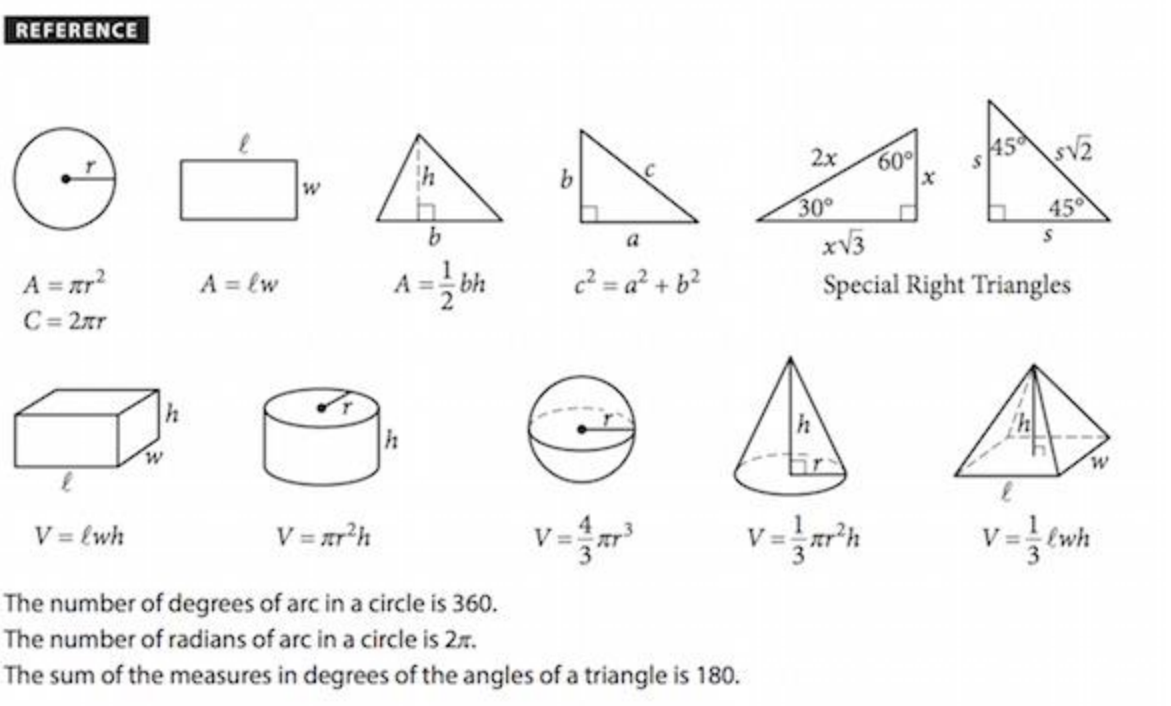
The ACT also tests a few concepts that the SAT doesn't test at all. These include things such as matrices, graphs of trig functions, and logarithms.

So what does all of this mean for you? If you're good at algebra and data analysis, you'll likely do well on the SAT. But if you're a fan of trig functions and geometry, the ACT is a better choice.

#5: Math Formulas Reference Guide

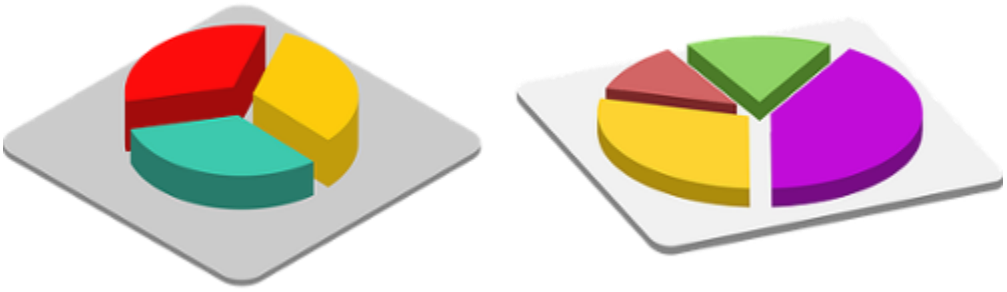
Here's another math-related difference: **the SAT provides you with a diagram of math formulas, whereas the ACT does not.**

Before the two SAT Math subsections, you'll be given a diagram containing 12 geometry formulas and three laws:



Although all of these formulas and laws pertain to geometry — which, as you now know, doesn't make up a huge part of the SAT — having this diagram handy means **you won't need to spend a ton of time memorizing formulas beforehand** (though you should take care to memorize some important formulas not included in the diagram).

Unlike the SAT, **the ACT doesn't give you any formulas on test day,** meaning you absolutely *must* memorize all potential formulas before taking the test. So in short, if you're concerned you may forget certain formulas, the SAT offers a little more of a crutch than the ACT does.



#6: Importance of Math in Final Score

How big of a role will Math play in your final score? The answer to this question depends on whether you're taking the ACT or SAT. On the ACT, Math accounts for **one-fourth of your total score** (your Math section score is averaged with your other three section scores). On the SAT, however, Math accounts for **half of your total score, making it twice as important on the SAT!**

So if math isn’t your strong suit, consider opting for the ACT. With the ACT, a lower Math score won’t negatively affect your total score as much as it will on the SAT.

To illustrate this more clearly, let's look at an example. If I were to score in similar percentiles on the ACT and SAT — with significantly lower Math section scores — you may think my total percentiles on both exams would be about the same. But as you can see below, this isn't the case.

ACT percentiles:

- English: 32 (95th percentile)
- Math: 16 (28th percentile)
- Reading: 32 (94th percentile)
- Science: 30 (94th percentile)
- **Composite: 28 (89th percentile)**

SAT percentiles:

- EBRW: 700 (94th percentile)
- Math: 480 (27th percentile)
- **Composite: 1180 (69th percentile)**

As this example indicates, even if I were to score in similar percentiles on every section of the ACT and SAT (with lower Math section scores on each test), **my composite score percentiles would differ dramatically.** In this case, my final ACT percentile is 20 percent higher than my final SAT percentile.

In other words, if math isn't one of your strengths, you’ll have a better shot at hitting the total percentile you want on the ACT than you will on the SAT.

#7: Number of Answer Choices on Math

The two tests also differ in the number of answer choices they give you on Math. Both the SAT and ACT Math sections are predominantly multiple choice. But **while ACT Math gives you five possible answer choices (A-E or F-K) for each question, SAT Math only gives you four (A-D).**

As a reminder, both tests use rights-only scoring, meaning you’ll never lose a point for an incorrect answer. So if you were to guess on an SAT Math question, you’d have a **25 percent chance** of getting the question right. But if you were to guess on an ACT Math question, you’d have only a **20 percent chance** of getting it right.

Therefore, if you think you may need to guess on Math, know that the SAT offers a very slight advantage over the ACT, with **a 5 percent higher probability of getting a question correct.**

#8: Grid-In Math Questions

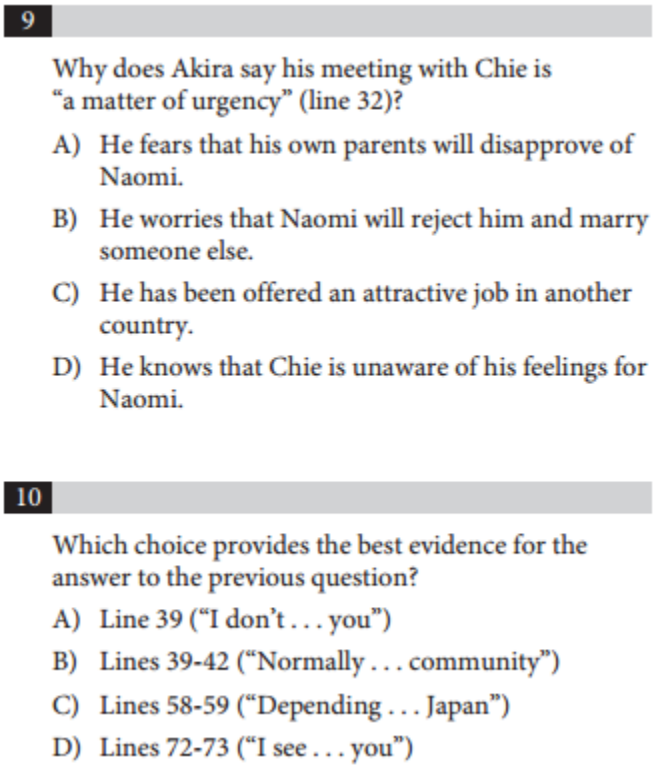
If you love multiple choice, especially when it comes to math questions, you may want to stick with the ACT. The SAT, though mostly multiple choice, contains student-produced response questions, or **grid-ins,** which are **math questions for which you must fill in your own answer.** In other words, you'll have no answer choices from which to choose on these questions!

Grid-ins account for 22 percent of SAT Math, or 13 total questions across the No Calculator (five grid-ins) and Calculator (eight grid-ins) subsections. By contrast, **ACT Math only has multiple-choice questions.** So if you're not a fan of math questions that don't offer you any answer choices, the ACT is the superior choice.

#9: Evidence-Support Reading Questions

Are you good at pinpointing areas in texts to support your answers to questions? If so, the SAT may be a better fit for you. **Evidence-support questions are a big part of SAT Reading but are entirely absent on ACT Reading.** These questions build off of the questions that come before them and ask you to cite specific lines or paragraphs as evidence for your answer to a previous question.

Here's an example of an evidence-support question (with the question to which it's referring):



9

Why does Akira say his meeting with Chie is "a matter of urgency" (line 32)?

A) He fears that his own parents will disapprove of Naomi.

B) He worries that Naomi will reject him and marry someone else.

C) He has been offered an attractive job in another country.

D) He knows that Chie is unaware of his feelings for Naomi.

10

Which choice provides the best evidence for the answer to the previous question?

A) Line 39 ("I don't . . . you")

B) Lines 39-42 ("Normally . . . community")

C) Lines 58-59 ("Depending . . . Japan")

D) Lines 72-73 ("I see . . . you")

Our guide discusses in more detail the different types of evidence questions you'll encounter on SAT Reading. Evidence questions can be somewhat tricky, especially if you're not sure where you found your answer in the passage. So if you're not into the idea of interconnected questions, try the ACT instead (whose Reading questions are *always* separate from one another).

#10: Chronological Reading Questions

On SAT Reading, *all* questions given to you follow a **chronological order** — that is, in the order of the passage to which they refer. But on ACT Reading, **questions can flow randomly** and do not routinely follow the order of the content in the passages.

Here's an example of two SAT questions, which you can see progress in the order of the passage (as indicated by the line numbers in both questions):

11

The authors most likely use the examples in lines 1-9 of the passage ("Every . . . showers") to highlight the

A) regularity with which people shop for gifts.

B) recent increase in the amount of money spent on gifts.

C) anxiety gift shopping causes for consumers.

D) number of special occasions involving gift-giving.

12

In line 10, the word "ambivalent" most nearly means

A) unrealistic.

B) conflicted.

C) apprehensive.

D) supportive.

By contrast, here is an example of two ACT questions, which do *not* progress in the order of the passage (as indicated by the line number and mention of "last paragraph"):

36. One main purpose of the last paragraph is to suggest that unlike their bouncer-defense jump, the trap-jaw ants' escape jump may have arisen through:

F. the ants' trying and failing to bite intruders.
G. a change in the structure of the mandibles of several lineages of ants.
H. an accidental behavior of the ants.
J. the ants' experiencing a positive outcome when they would attack in a large group.

37. As it is used in line 31, the word *domain* most nearly means:

A. living space.
B. area of expertise.
C. taxonomic category.
D. local jurisdiction.

As a result, **SAT Reading questions are generally easier to follow and thus easier to answer than ACT Reading questions.** Chronologically ordered questions can also save you time on the SAT, as you won't need to search the entire passage for the area to which a question is referring.

#11: Essay Content

The last major difference between the two tests deals with **essay content.** On both the ACT and SAT, the essay component is optional; however, what you must write about differs depending on whether you're taking the SAT or ACT.

On the SAT, you'll be given a passage, which you must read and then analyze. Your essay will **dissect the author's argument using evidence and reasoning.** In other words, you will *not* be giving your own opinion.

Here's an example of an SAT Essay prompt:

> Write an essay in which you explain how Jimmy Carter builds an argument to persuade his audience that the Arctic National Wildlife Refuge should not be developed for industry. In your essay, analyze how Carter uses one or more of the features listed in the box above (or features of your own choice) to strengthen the logic and persuasiveness of his argument. Be sure that your analysis focuses on the most relevant features of the passage.
>
> Your essay should not explain whether you agree with Carter's claims, but rather explain how Carter builds an argument to persuade his audience.

On the ACT Writing section, however, your task is different. For this essay, you'll read a short passage about an issue and then analyze the different perspectives on this issue. But unlike the SAT Essay, **you'll also give your own opinion on the issue here.**

Here's an example of an ACT Writing prompt:

> **Essay Task**
>
> Write a unified, coherent essay in which you evaluate multiple perspectives on the conflict between public health and individual freedom. In your essay, be sure to:
>
> - analyze and evaluate the perspectives given
> - state and develop your own perspective on the issue
> - explain the relationship between your perspective and those given
>
> Your perspective may be in full agreement with any of the others, in partial agreement, or wholly different. Whatever the case, support your ideas with logical reasoning and detailed, persuasive examples.

Which essay type is easier for you depends on what you're better at and more comfortable with writing. With the SAT, you'll need to have **good reading comprehension skills** in order to fully realize the strengths and weaknesses of the author's argument.

On the other hand, with the ACT, you need to be able to effectively **compare and contrast different perspectives** on an issue as well as give ample evidence to support your opinion