

# ZINC

EDUCATIONAL SERVICES

## THE ZINC GUIDE TO COLLEGE ENTRANCE EXAMS



[WWW.ZINC.NYC](http://WWW.ZINC.NYC)

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# Introduction:

## STANDARDIZED TESTING AND COLLEGE ADMISSIONS



Applying to college marks a major life transition for parents and students alike.

Complicating matters further, there are almost 3,000 accredited, four-year colleges and universities in the United States. That's a lot of choices.

At the same time, you're the one applying, so they get to decide whether or not to choose you.

Standardized testing is only one of many criteria schools use to evaluate prospective students. Some schools rely heavily on test scores from applicants who submit them. Other schools don't require test scores, and some won't even look at them.

Most colleges use a combination of three elements in assessing applicants:

- High school performance: Which classes did you take and how well did you do in them?
- Standardized test scores
- Everything else: Recommendations, extracurricular activities, written or creative work (including application essays), etc.

At every level of selectivity, from the most competitive universities to those with minimal admissions requirements, you will find yourself in a large pool of applicants with acceptable high school GPAs and standardized test scores. Getting in will almost never depend on scoring even higher. Harvard rejects about 80% of applicants with perfect scores every year.

Do your best and keep in mind that good test scores are an asset but not sufficient on their own.

With so many choices, any meaningful effort you make will help you get into a great school. The secret of college admissions is that, after all the drama, everyone who tries ends up, for the most part, very, very happy.

At worst, standardized testing becomes an obsessive, self-esteem destroying distraction for students and a money pit for parents. At best, tests either confirm academic abilities and accomplishments or provide feedback for needed improvements.



What is required?

## A SNAPSHOT OF COLLEGE ADMISSIONS TESTS

### The Pre-Tests

The PSAT and the PreACT act as predictors for how a student may do on the SAT or ACT without further preparation. They can serve as useful tools in creating a test prep plan. They're also good practice, getting students accustomed to taking standardized tests and the format of the SAT and ACT.

Colleges will never see your PSAT or PreACT scores during the admissions process.

THE TEST	THE PSAT <sup>1</sup>		THE PreACT
<b>Who makes it?</b>	The College Board		ACT (American College Testing)
<b>What is it?</b>	A slightly easier version of the SAT designed to predict your performance on the SAT		A shorter version of the ACT designed to predict your performance on the ACT
<b>What's on it?</b>	<b>2 Sections with 2 Modules Each:</b> <ul style="list-style-type: none"> <li>● Reading and Writing</li> <li>● Math</li> </ul>	<b>AND /OR</b>	<b>4 sections:</b> <ul style="list-style-type: none"> <li>● Reading</li> <li>● English</li> <li>● Math</li> <li>● Science</li> </ul>
<b>How long is it?</b>	2 hours and 14 minutes		2 hours and 10 minutes
<b>Frequency</b>	Once a year, administered by your high school		Once a year, administered by your high school in 10th grade
<b>Max score</b>	1440-1520 <sup>1</sup>		36
<b>Anything else I should know?</b>	Only the PSAT/NMSQT serves as a qualifier for National Merit Scholarships. <sup>2</sup>		The PreACT debuted in the fall of 2016.

<sup>1</sup> There are actually three versions of the PSAT: the PSAT 8/9, the PSAT 10, and the PSAT/NMSQT. All three tests are designed to align with Common Core standards, as is the SAT, and they test skills and content that get progressively harder with each grade level. All three tests are built on the same scale as the SAT, testing more difficult content as students learn more. This is why the highest possible score on the PSAT 8/9 is lower (1440) than on the PSAT/NMSQT (1520) and the SAT (1600)—the PSAT 8/9 isn't testing the highest levels of material that appear on the SAT.

<sup>2</sup> Students are automatically entered into the competition for National Merit Scholarships by taking the PSAT/NMSQT. Students designated as Semifinalists (based on their scores) will be invited to participate in a full application process. Ultimately, about 7,400 winners are selected for a variety of scholarships. See [www.nationalmerit.org](http://www.nationalmerit.org) for more information.



## THE MAIN TESTS

Strong SAT or ACT scores will be an asset in applying to most competitive colleges. There are a growing number of “test optional” and “test flexible” schools. For information on those schools, turn to page 12.

THE TEST	THE SAT (For more on the SAT see page 19)	THE ACT (For more on the ACT see page 19)
Who makes it?	The College Board	ACT (American College Testing)
What is it?	Designed to align with Common Core standards and test how well students have learned the expected high school curriculum.	Designed to measure how well students know the expected high school curriculum.
What's on it?	<b>2 Sections:</b> 1 Reading and Writing Section with 2 modules 1 Math section with 2 modules Calculators are now permitted in all modules of the math test. There is no essay on the SAT.	4 multiple choice sections: Reading, English, Math, and Science + a 5th (optional) essay section
How long is it?	2 hours and 14 minutes	3 hours and 40 minutes (including the essay)
How long has it been around?	The SAT was originally created in 1926. The digital SAT was launched for international students in 2023 and U.S. students in 2024.	The ACT was originally created in 1959, and it has been evolving ever since.
Frequency	7 times a year	6 times a year
Max score	1600	36

OR



## OTHER TESTS

If your school offers AP courses, taking advantage of them is one way to show colleges that you've chosen a rigorous curriculum. Scoring well on an AP test indicates that you've achieved high-level understanding of a topic. It may also earn you course credits to use in college.

THE TEST	AP (ADVANCED PLACEMENT) <i>(For more on AP Exams, see page 31)</i>
<b>Who makes it?</b>	The College Board
<b>What is it?</b>	AP Exams are designed to measure your mastery of a specific subject at the <b>college</b> level. There are 37 different AP Exams in various subjects. Some universities award college credit for strong scores on AP Exams (hence the name, Advanced Placement).
<b>What's on it?</b>	The subject matter varies from test to test, but these exams usually consist of a mix of multiple choice and free-response sections. Some language exams have listening portions.
<b>How long is it?</b>	3 hours
<b>Frequency</b>	Once a year
<b>Max score</b>	5

College admissions officers have comprehensive information about the curriculum and offerings of individual high schools. They will know which AP courses, if any, your school offers and will take this into account when assessing the rigor of your schedule and testing choices.

If your school does not offer an AP course that you are interested in taking, you can look into taking an online class, enrolling in a class at a local college, or studying for the test on your own (though this will take significant effort). Turn to page 27 for details.

However, there are other ways to demonstrate interest in and show mastery of a particular subject. If your school is offering other advanced courses or you've made an effort to explore the subject at a high level in another way (for example through an internship, a college course, or a summer activity), focusing on those pursuits may be a more rewarding use of your time than taking an AP your school does not offer.



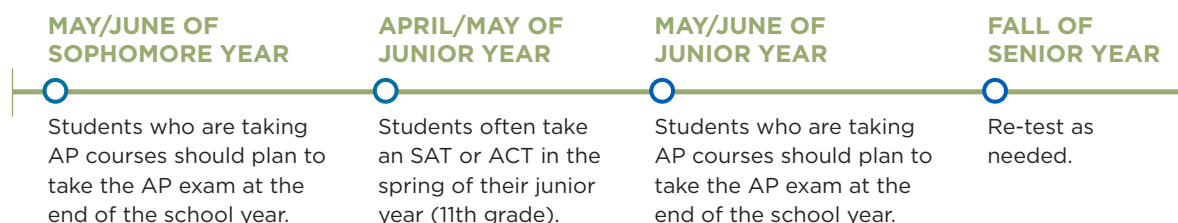


# Testing and the College Admissions Timeline

## When should I take the test?

There is no set calendar for taking standardized tests. Students need to assess their own strengths and weaknesses, in-school and extracurricular commitments, and capacity for standardized testing in order to establish a timeline that works for them.

### A typical timeline



### Timing of AP exams

AP courses are designed for students to take the exam at the end of the school year. Students who wish to take advantage of AP courses at their school should plan to take AP exams in May or June in their sophomore, junior, and/or senior years. For more information on AP exams, turn to page 27.

## TESTING AND EARLY ADMISSIONS

While early admissions applications are due in November, most colleges will accept scores from late October ACTs and early November SATs. To submit scores from these later test dates, you must note the school you want to send your scores to when you register for the test. The school will automatically get the scores. You will not have the chance to screen your scores before the colleges you selected see them.

Some schools are stricter with deadlines than others. The following schools are some that require that students submit test scores before November 1:

- Princeton
- Stanford
- Vanderbilt
- Williams

To make sure your scores will be submitted on time, always check the website of the college you're applying to. If you feel uncertain, you should call a college's admissions office to clarify its policy.



# Testing Policies and Fees

## TESTING FEES

	ACT	SAT	AP EXAMS
<b>Registration</b>	\$66 (with essay \$91)	\$52	\$97, or \$35 for students who qualify for financial assistance. Note that schools may charge different fees to cover the cost of proctoring the exams.
<b>Late registration fee</b>	\$36	\$30	\$40 for exams ordered between November 16 and March 15
<b>Change test date</b>	\$42	Must cancel and register for a new test	n/a
<b>Change test center</b>	\$42	\$25	n/a
<b>Standby/wait list</b>	\$66 (refunded if you are not admitted to the test)	Not available at time of printing. Check <a href="http://www.collegeboard.org">www.collegeboard.org</a> for updates.	n/a
<b>Fee for a copy of the test (when available)</b>	\$32-40	\$16	\$10
<b>Additional score reports</b>	First 4 are free, \$18 for each after the fourth	First 4 are free, \$12 for each after the fourth	1 free, \$15 for additional (\$25 for rush processing)

## TESTING POLICIES

	ACT	SAT	AP EXAMS
<b>Scores released</b>	Within 2 weeks	Within 2 weeks	Early July (within 2 months)
<b>Score reports included</b>	4	4	1
<b>Cancel scores</b>	By Thursday after the test	By Wednesday after the test	By mid-June
<b>Calculators</b>	No Algebra functions, TI-89 not permitted	Algebra functions OK, TI-89 Permitted. The digital SAT testing app comes with a built-in graphing calculator. Students may bring their own if they prefer.	Permitted for all math and science tests
<b>Sunday testing for religious reasons</b>	Available	Available	n/a



## SCORE CHOICE

The College Board offers Score Choice for the SAT. If you take a College Board test multiple times, you get to choose which scores to send to colleges. If you choose to send a college a score, however, they will see the entire score from that test date; you can't send or withhold particular sections.

The ACT also offers Score Choice, allowing you to take the ACT as many times as you like and only submit the scores you want colleges to see. However, as with College Board tests, if you choose to send a college a score, they will see the entire score from that test date. You can't choose which sections to send and withhold.

Be aware that not all colleges participate in Score Choice. Some schools may ask to see your scores from each time you took the test. Check the admissions website of each school to find out the specific score reporting policy.

## SUPERSCORE

To give you the opportunity to present yourself in the best possible light, many colleges will superscore your SAT or ACT results from multiple test sittings. They will combine your best scores for each section of the test, across all test dates, to demonstrate your highest composite score.

The tables below are examples of how superscoring works when a student takes the SAT or ACT twice.

SAT	EVIDENCE-BASED READING & WRITING	MATH	COMPOSITE
Test 1, May of junior year	720	620	1340
Test 2, October of senior year	670	690	1360
<b>SUPERSCORE</b>	720	690	1410

ACT	ENGLISH	MATH	READING	SCIENCE	COMPOSITE
Test 1, May of junior year	28	30	30	25	28
Test 2, October of senior year	33	27	35	29	31
<b>SUPERSCORE</b>	33	30	35	29	32



## REPEAT TESTING

### So how many times should I take the test?

We encourage students to avoid taking a real test more than three times, unless they have a convincing reason to believe another try will result in a significantly higher score.<sup>1</sup>

### Should I take both the SAT and the ACT?

Probably not. The tests are so similar that you may feel equally prepared for both. You may find that, after focusing on one test, switching to the other feels good, but most students will identify a preference and want to stick with it.<sup>2</sup>



<sup>1</sup> See page 8 for information about testing and application deadlines

<sup>2</sup> See page 34, “Which test should I take?” for more details.



## TEST OPTIONAL, TEST FLEXIBLE, AND TEST BLIND SCHOOLS

Many schools do not require students to submit standardized test scores for admission. These schools are often labeled test optional schools and many of them have not required standardized tests for years.

In response to the COVID-19 pandemic, most schools and universities implemented test optional policies for the 2020-21 admissions cycle. A substantial number have announced they will keep test optional policies in place for the next 1-2 years while they evaluate the results and determine how effective these policies are in selecting college-ready entering classes. Fair Test ([www.fairtest.org](http://www.fairtest.org)) maintains a list of schools “that do not use SAT/ACT scores to admit substantial numbers of bachelor-degree applicants.”

## TEST FLEXIBLE

Some schools have test flexible policies. These schools allow students to submit their choice of scores from an array of standardized tests; for example, they may allow students to submit IB (international baccalaureate) or AP (advanced placement) scores instead of the SAT or ACT.

## TEST BLIND

A few schools do not use standardized test scores at all when making admissions decisions. Notable, and new, among this short list are the University of California (UC) colleges. Be sure to consult the requirements of each individual school.

## THE BOTTOM LINE

While there are certainly some students who can and should take advantage of test optional policies, our sense is that admissions officers still make use of test scores from students who submit them, and admissions data suggests that a significant number of admitted students at top-tier schools continue to submit scores. While it's tempting to believe that test-optional schools don't care about scores at all, if a student submits low scores to a test optional school, admissions officers will notice. Students should be careful to only submit scores that will support their candidacy.

Along with strong grades and rigorous curricula, high scores confirm college preparedness and are an asset to students who submit them. If students can submit strong scores, we highly recommend doing so. In addition to providing valuable data for admissions officers, the test prep experience can and should be an opportunity for meaningful growth that will benefit students far beyond the test itself.





## TESTING ACCOMMODATIONS

Both the College Board and ACT provide testing accommodations for students with disabilities. The most common accommodation is extended time, but students may also be provided with readers, scribes, computers on which to write the essay, and more. By law, score reports *cannot* reveal that a student has taken a test with accommodations.

Each company has a different process for granting accommodations. Over the past year, both ACT and the College Board have made efforts to simplify the accommodations requesting process. Still, families should leave plenty of time for this process, as it can take longer than expected and sometimes involves appealing to ACT or the College Board to reconsider a decision. Generally, families report that getting approval for accommodations from ACT is harder than getting it from the College Board.

THE TEST	SAT	ACT
<b>What's the best way to request accommodations?</b>	Through your school's SSD (Services for Students with Disabilities) Coordinator	
<b>What kinds of accommodations are available?</b>	<p>There are too many to list. Some of the most common are:</p> <ul style="list-style-type: none"> <li>● Extended Time (1.5 time)</li> <li>● Extended Time (Double Time)</li> <li>● Scribe</li> <li>● Computer for the essay (ACT)</li> <li>● Reader</li> </ul>	
<b>How does extended time work?</b>	<p>Students will get the extended amount of time on each section, so if a student has time-and-a-half, they will have 96 minutes to complete the 64-minute Reading and Writing Section</p> <p>Students approved for double time will take the test over the course of two days, and will take the test at their school, not at a testing center.</p>	<p>Students will get the extended amount of time for each section, so if a student has time-and-a-half, he or she will have 90 minutes to complete the 60-minute math section.</p> <p>If a student has double time, or other special accommodations, he or she may take the test over two or more days. This is usually done at the student's school, rather than at a testing center.</p>
<b>How far in advance should I start this process?</b>	<p>Officially, it can take seven weeks for documentation to be approved.</p> <p>Acquiring the necessary documentation can be a long and arduous process, so parents should start no less than two months in advance. <b>In fact, we recommend that parents start the process at least six months in advance.</b></p>	
<b>What else do I need to know?</b>	<p>Once approved, a student will receive an SSD number. Students must use this number when registering for a test. The College Board will apply the approval to any other College Board tests a student takes, so once they are approved for accommodations on the PSAT, a student may use their SSD number to register for the SAT and AP exams.</p>	<p>To qualify for accommodations on the ACT, students must first be registered for a specific test date and location. Parents must also request the specific accommodations they are applying for:</p> <ol style="list-style-type: none"> <li>1. National Extended Time</li> <li>2. National Standard Time with Accommodations</li> <li>3. Special Testing</li> </ol> <p>There is very specific information about what each kind of accommodation covers at <a href="http://www.act.org">www.act.org</a>.</p>



## BY THE NUMBERS

**NOTE:** If your high school uses Naviance or a similar service, you may be able to log on and see the scores of accepted and rejected applicants from your high school.

In the 2020-21 admissions cycle, most universities instituted test optional policies in response to the COVID-19 pandemic. Many students took advantage of those policies by applying without submitting scores, meaning certain schools saw huge surges in application rates and corresponding declines in admit rates. Average test score data for this year's entering classes is likely to reflect these circumstances.

The average SAT/ACT scores shown here reflect data from the **2022-23** admissions cycle.

SCHOOL	ACCEPTANCE RATE	YIELD	SAT MIDDLE 50%	ACT MIDDLE 50%
Amherst College	7%	42%	1440-1540	32-35
Bard College	60%	15%	1296-1468	28-33
Barnard College	9%	66%	1430-1550	32-24
Bates College	14%	46%	1360-1450	33-34
Boston College	17%	35%	1430-1510	33-34
Boston University	14%	32%	1390-1490	31-34
Bowdoin College	9%	59%	1330-1510	31-34
Brandeis University	39%	25%	1390-1500	31-34
Brown University	5%	67%	1500-1560	34-36
Bryn Mawr College	39%	32%	1290-1460	30-33
Bucknell University	32.60%	27.5%	1310-1500	29-33
California Institute of Technology	3.90%	52.90%	*	*
Carleton College	17.50%	40%	1440-1530	31-35
Carnegie Mellon University	11%	45%	1480-1560	33-35
Case Western Reserve University	30%	16%	1420-1520	32-35
Claremont McKenna College	10.30%	57%	1440-1500	32-35
Clark University	48%	13%	1220-1380	27-30
Clemson University	43%	20%	1240-1400	29-30
Colby College	7%	54%	1430-1540	32-34
Colgate University	12%	32%	1460-1540	32-35
College of the Holy Cross	43%	29%	1240-1420	28-32
College of William and Mary	33%	28%	1380-1520	32-34



## BY THE NUMBERS

SCHOOL	ACCEPTANCE RATE	YIELD	SAT MIDDLE 50%	ACT MIDDLE 50%
Columbia University	3.73%	66%	1490-1560	34-35
Cornell University	8.7%	64%	1450-1540	33-35
Dartmouth College	6.4%	62%	1440-1560	32-35
Davidson College	16.9%	49.5%	1350-1500	31-33
Duke University	6.3%	55.6%	1510-1570	34-36
Emory University	11%	38%	1470-1560	33-35
Franklin and Marshall College	35%	15%	1260-1410	29-32
George Washington University	49.70%	19%	1320-1460	30-34
Georgetown University	12.20%	49%	1410-1540	32-35
Georgia Institute of Technology	17.10%	42%	1370-1530	31-35
Gettysburg College	56%	19.80%	1350-1440	28-32
Grinnell College	9.20%	41%	1390-1510	30-34
Hamilton College	11.80%	41%	1440-1520	33-34
Harvard College	3.20%	83%	1480-1580	33-36
Harvey Mudd College	13%	40%	1480-1560	34-36
Haverford College	14.20%	45.10%	1430-1540	33-35
Hobart and William Smith Colleges	67.50%	14%	1170-1380	28-32
Johns Hopkins University	7.50%	48%	1520-1560	34-35
Kenyon College	34%	19%	1380-1490	31-34
Lafayette College	33.60%	22%	1330-1480	30-33
Lehigh University	37%	27%	1400-1510	31-34
Macalester College	28%	23%	1350-1490	30-34
Massachusetts Institute of Technology	3.96%	85%	1420-1580	35-36
Michigan State University	83%	22%	1130-1350	23-29
Middlebury College	15%	39%	1490-1530	34-35
Mount Holyoke College	40%	28%	1370-1500	30-34
New York University	13%	49%	1350-1530	31-35
Northeastern University	6.80%	40.69%	1450-1535	33-35
Oberlin College	35%	23%	1390-1550	32-34



## BY THE NUMBERS

SCHOOL	ACCEPTANCE RATE	YIELD	SAT MIDDLE 50%	ACT MIDDLE 50%
Occidental College	39%	21%	1380-1490	31-34
Ohio State University	57%	25%	1260-1420	26-32
Pennsylvania State University	58%	19%	"1270-1450	28-32
Pitzer College	15.90%	53%	1350-1480	30-33
Pomona College	7%	55%	1480-1540	33-35
Princeton University	5.70%	69%	1490-1580	33-35
Purdue University	53%	26%	1190-1410	26-33
Rice University	9%	44%	1500-1560	34-36
Sarah Lawrence College	55%	19%	1230-1390	27-32
Scripps College	28%	30%	1410-1510	32-34
Skidmore College	26%	23%	1320-1373	30-31
Smith College	23%	37%	1390-1500	31-34
Southern Methodist University	52%	19%	1370-1500	31-34
Spelman College	28%	15%	1100-1290	22-27
Stanford University	3.68%	84%	1500-1570	33-35
Swarthmore College	6.90%	42%	1455-1540	32-35
Syracuse University	52%	19%	1260-1410	28-32
Texas A&M University	64%	44%	1160-1370	25-31
Tufts University	9.70%	50%	1470-1560	33-35
Tulane University	8.40%	48%	1410-1500	31-34
United States Air Force Academy	12.30%	78%	1400-1510	31-35
United States Military Academy	9.60%	81%	1210-1430	28-33
United States Naval Academy	8.40%	86%	1230-1430	26-32
University of California - Berkeley	11.40%	46%	N/A	N/A
University of California - Davis	37.50%	18%	N/A	N/A
University of California - Los Angeles	9%	50%	N/A	N/A
University of California - Santa Barbara	25.90%	17%	N/A	N/A
University of Chicago	5.40%	85%	1510-1560	34-35
University of Florida	31%	42%	1350-1490	30-34



## BY THE NUMBERS

SCHOOL	ACCEPTANCE RATE	YIELD	SAT MIDDLE 50%	ACT MIDDLE 50%
University of Georgia	42%	37%	1340-1480	31-34
University of Illinois - Urbana-Champaign	44.80%	28.10%	1330-1510	29-34
University of Maryland - College Park	34.30%	24.40%	1380-1520	31-34
University of Massachusetts - Amherst	64%	19%	1280-1450	29-33
University of Miami	19%	44%	1390-1500	31-34
University of Michigan - Ann Arbor	17.70%	47%	1350-1530	31-34
University of North Carolina - Chapel Hill	16.80%	46%	1350-1510	28-33
University of Notre Dame	12.90%	60%	1460-1540	33-35
University of Pennsylvania	5.90%	73%	1510-1560	34-36
University of Pittsburgh	49%	16.90%	1270-1450	28-33
University of Richmond	24%	24%	1440-1530	33-35
University of Rochester	39%	20%	1390-1540	31-34
University of Southern California	12%	41%	1330-1520	30-34
University of Texas - Austin	31%	49%	1220-1450	26-33
University of Virginia	18.70%	43%	1400-1540	32-35
University of Washington	47.50%	29.70%	1320-1500	29-34
University of Wisconsin - Madison	69%	29.20%	1370-1500	28-33
Vanderbilt University	6.70%	52%	1520-1540	34-36
Vassar College	18.70%	33%	1475	33
Wake Forest University	20%	38%	1380-1480	30-33
Washington & Lee University	17%	39%	1430-1510	32-34
Washington University in St. Louis	11%	49%	1500-1570	33-35
Wellesley College	13%	51%	1430-1550	33-35
Wesleyan University	14.4%	36%	1460-1560	34-35
Wheaton College (IL)	87%	31%	1260-1420	28-32
Whitman College	47.8%	12.8%	1335	29
Williams College	8.5%	44%	1490-1550	34-35
Yale University	4.6%	67.7%	1470-1560	33-35





What are these tests?

# The Main Tests: The SAT and the ACT

## WHAT ARE THESE TESTS AND WHY DO THEY EXIST?

The SAT was created in the 1920s, in an attempt by a group of elite universities to identify talented students who had not gone to good high schools. They wanted a test that a bright student would succeed on even without the benefits of an elite prep school education. The original SAT drew on ideas about IQ testing that were prevalent at the time.

Soon, however, the SAT took on a different purpose as a national, standardized exam that all colleges could use to compare students from any high school, anywhere in the world.

In the late 1950s, the ACT was created as a response to the SAT. The idea was that a college admissions test should assess not abstract intellectual qualities but, rather, competence with the high school curriculum.

For many years, the ACT was popular in the middle of the United States, while the SAT dominated on the coasts and was generally more widely used. That changed in the 2000s with more students taking both tests, and the ACT growing and eventually passing the SAT as the more popular entrance exam.

In 2016, the College Board, makers of the SAT, rolled out a radically new version of the test based on the same principles as the ACT: that a college admissions exam should measure how well you know what you've learned in high school. College Board has recently launched a revamped, digital version of the test, which is significantly shorter than the previous version. The digital SAT launches for international students in 2023 and for U.S. students in 2024.

**NOTE:** *In 2016, ACT quietly made changes, increasing the difficulty of the math and science sections. While ACT has barely announced these changes, students have reported seeing more obscure math topics (such as advanced probability, permutations using factorial notation, and advanced sequences), more multi-step math problems at the ends of sections, and more content-knowledge requirements in the science section. ACT also introduced a new essay scoring system.*



## SAT/ACT DETAILS

TEST	SAT				ACT			
How it's scored	<b>Total score range:</b> 400–1600				<b>Composite score range:</b> 1–36 (average of following 4 test scores)			
	<b>Reading and Writing</b> 200–800		<b>Math</b> 200–800		<b>English:</b> 1–36	<b>Math:</b> 1–36	<b>Reading:</b> 1–36	<b>Science:</b> 1–36
	Module 1	Module 2	Module 1	Module 2	<b>Optional Essay score:</b> 2–12 (see details below)			
What's a "good" score?	<b>National average:</b> about 500 on each section <b>Competitive colleges:</b> 600+ on each section <b>Elite colleges:</b> 700+ on each section				<b>National average:</b> about 20 or 21 composite score <b>Competitive colleges:</b> 26+ composite score <b>Elite colleges:</b> 32+ composite score			

 See a list of universities and the scores of the middle 50% of the accepted students on pages 14–17.

Section type	READING PASSAGES	
Content Area	READING AND WRITING	READING TEST
What is it?	You read passages taken from diverse fiction and nonfiction sources. Then you answer multiple choice questions designed to show how well you understood what you read.	
The details	<p>The new digital SAT Reading and Writing Section features many short passages (25–150 words each) with just one question per passage.</p> <p>Topics include literature, including poetry, history/social studies, the humanities, and science. U.S. founding documents are no longer included.</p>	<b>Sections</b> <i>consisting of one long, two short, or one paired</i>
		<b>Possible Topics</b>
		<b>Literary narrative (10 questions)</b> Excerpts from short stories, novels, memoirs, and personal essays
		<b>Social studies (10 questions)</b> Economics, history political science, archaeology, and psychology
		<b>Humanities (10 questions)</b> Dance, art, film, literary criticism, music, philosophy, and other arts
Timing	2 modules with 27 questions each. Each module is 32 minutes (71 seconds per question)	<b>Natural sciences (10 questions)</b> Technology, biology, ecology, astronomy, and physics
		35 minutes; 3 single passages + 1 paired passage; 40 multiple choice questions (52.5 seconds per question)
Subscores (Note: your score report includes subscores for your benefit. Colleges look at your overall scores—NOT at subscores.)	The digital SAT does not report subscores.	
Similarities	<ul style="list-style-type: none"> <li>Passages have similar content and difficulty levels.</li> <li>Both tests often include excerpts from 19th-century literature that many students find challenging.</li> <li>Most of the difficulty lies in comprehending the passages, as the questions are mainly straightforward.</li> </ul>	
Key differences	<ul style="list-style-type: none"> <li>The SAT contains many short passages with just one question each. The ACT contains longer passages with multiple questions per passage.</li> <li>The SAT typically has a few more challenging inference and critical thinking questions, while the ACT has more very specific recall questions: “Which of the following was NOT mentioned as a factor in the experiment?”</li> <li><b>Timing:</b> the SAT gives almost 50% more time per passage.</li> <li>Some SAT passages include graphs, tables, or charts with accompanying data literacy questions.</li> </ul>	
Bottom line	<p>Similar question types. Similar passage topics/difficulty, but different passage lengths. The SAT has shorter passages with just one question each, but there are a lot of them so you need to stay focused. The ACT asks fewer difficult questions, but you have to go really, really fast.</p> <p>Also, on the SAT you'll see two modules with reading and writing questions mixed together. On the ACT, you'll see one reading section and one writing section. The adaptive testing format means SAT students need to be sure to do well on module 1 in order to achieve the highest scores.</p>	



TEST	SAT	ACT						
Content Area	GRAMMAR/Writing/ENGLISH USAGE							
Section name	READING AND WRITING	ENGLISH TEST						
What is it?	You read short, nonfiction passages and correct errors or make improvements to usage, mechanics, syntax, or structure.							
The details	On both the SAT Reading and Writing Section and the ACT English Test, you'll read texts and answer two types of questions: <ul style="list-style-type: none"><li>You'll see words, phrases, sentences, or transitions between sentences underlined. You'll be asked to correct errors in grammar, punctuation, diction, usage, and syntax (or, on some questions, choose "no error").</li><li>Other questions will ask you to "help improve" sentences and paragraphs more broadly, often by deciding what information should be left out or added, how sentences or paragraphs should be rearranged, and what errors in logic or transition need fixing.</li></ul>							
Timing	2 modules with 27 questions each. Each module is 32 minutes (71 seconds per question)	45 minutes; 5 passages; 75 multiple-choice questions (36 seconds per question)						
Subscores <i>(Note: your score reports include subscores for your benefit. Colleges look at your overall scores—NOT at subscores.)</i>	The digital SAT does not provide subscores.	The ACT gives English Test subscores for Usage/Mechanics and Rhetorical Skills: <table><tr><td>Production of Writing</td><td>Questions about the focus and purpose of a piece of writing, and how the text is organized.</td></tr><tr><td>Knowledge of Language</td><td>Questions about precise word usage and being consistent in style and tone.</td></tr><tr><td>Conventions of Standard English</td><td>Questions about sentence structure, punctuation, and word usage. May ask students to catch problems and suggest revisions.</td></tr></table>	Production of Writing	Questions about the focus and purpose of a piece of writing, and how the text is organized.	Knowledge of Language	Questions about precise word usage and being consistent in style and tone.	Conventions of Standard English	Questions about sentence structure, punctuation, and word usage. May ask students to catch problems and suggest revisions.
Production of Writing		Questions about the focus and purpose of a piece of writing, and how the text is organized.						
Knowledge of Language		Questions about precise word usage and being consistent in style and tone.						
Conventions of Standard English		Questions about sentence structure, punctuation, and word usage. May ask students to catch problems and suggest revisions.						
Similarities	As you can see above, the content, passages, and question types on the ACT English and SAT Writing and Language Tests are extremely similar.							
Key differences	<ul style="list-style-type: none"><li><b>Timing:</b> the SAT gives twice as much time per question.</li><li>Passage length: the SAT includes many short passages with 1 question each, while the ACT has fewer longer passages with multiple questions per passage.</li><li>Both modules of the SAT Reading and Writing Section include passages with graphs, tables, or charts. You're asked to interpret the data in order to improve or correct the text of the passage.</li></ul>							
Bottom line	Pretty similar question topics and styles. The biggest differences are that the SAT gives you much more time and contains many fewer questions. Also, the SAT mixes reading and writing questions together. On the ACT, the writing section is separate.							



TEST	SAT	ACT	
Section type	MATH		
Section name	MATH TEST	MATH TEST	
What is it?	Math questions based on elementary through basic high school (Algebra 2 with trig) math curricula.		
<b>The details</b> (Note: for even more details on math topics covered, see table below.)	<ul style="list-style-type: none"><li>Two modules—calculators permitted on both (The digital test comes with a built-in graphing calculator, or you can bring your own)</li><li>Each section contains a mix of multiple choice (4 answer choices) questions and “grid-in” questions, where students write in a numerical answer</li></ul>	<ul style="list-style-type: none"><li>Calculators permitted for the entire test, though some graphing calculators, like the TI-89, are not allowed (see <a href="http://www.act.org">www.act.org</a> for details)</li><li>One long section of multiple choice (5 answer choices) questions that get progressively harder</li></ul>	
Even more detail (topics covered)	MATH TOPICS	ON THE SAT	ON THE ACT
	Linear Equations	✓	✓
	Proportional Relationships	✓	✓
	Percentages	✓	✓
	Data Set Analysis	✓	✓
	Exponential Functions	✓	✓
	Exponents and Roots	✓	✓
	Quadratic Equations	✓	✓
	Nonlinear Equations	✓	✓
	Absolute Value	✓	✓
	Graphing Nonlinear Functions	✓	✓
	Circles	✓	✓
	Triangle Basics	✓	✓
	Parallel Lines	✓	✓
	Trigonometry	✓	✓
	Equation of a Circle	✓	✓
	Unit Circle	✓	✓
	Complex Numbers	✓	✓
	Interpretation of Meaning of an Equation	✓	
	Probability (based on tables)	✓	✓
	Data Modeling	✓	
	Sequences		✓
	Matrices		✓
	Midpoint of Line	✓	✓
	Distance Between Points	✓	✓
	Ellipses and Hyperbolas		✓
	Perpendicular Slopes	✓	✓
	Graphing Inequalities	✓	✓
	Graphing Trigonometric Functions		✓
	Trigonometric Identities (simple ones only)		✓
	Logarithms		✓
	Odd and Even Functions		✓
	Formal Logic		✓
Polar Coordinates		✓	
Scientific Notation	✓	✓	
Permutations and Combinations		✓	
Theoretical Probability		✓	
Timing	2 modules with 22 questions each. Each module is 35 minutes (95 seconds per question).	60 minutes; 60 questions (60 seconds per question)	





TEST	SAT	ACT
Section type	MATH	
What is it?	MATH SECTION	MATH TEST
<b>Subscores</b> <i>(Note: your score reports include subscores for your benefit. Colleges look at your overall scores —NOT at subscores.)</i>	Subscores and cross-test scores are no longer reported for the digital SAT	<b>Number and Quantity</b> (7–10%) Questions about real and complex number systems, integer and rational exponents, and vectors and matrices.  <b>Algebra</b> (12–15%) Questions that ask students to solve, graph, and model different types of expressions. Equations include linear, polynomial, radical, and exponential relationships. <b>Functions</b> (12–15%) Questions focus on function definition, notation, representation, and application. May include linear, radical, piecewise, polynomial, and logarithmic functions. <b>Geometry</b> (12–15%) Questions about composition of shapes and solids, such as congruence and volume measurements.
		<b>Preparing for Higher Math</b> (57–60%)
		<b>Integrating Essential Skills</b> (40–43%)  Students will use basic math concepts, such as rates and percentages, surface area and volume, and averages, and apply these concepts to increasingly complex problems.
		<b>Modeling</b> (>25%)  This category includes all questions from any of the above categories that ask students to produce, interpret, evaluate, or improve models.
<b>Similarities</b>	<ul style="list-style-type: none"> <li>Most questions cover similar content.</li> <li>Most questions have similarly (easy) difficulty levels.</li> <li>A good number of “real life application” questions contain scenarios you might encounter in life or on the job.</li> </ul>	
<b>Key differences</b>	<ul style="list-style-type: none"> <li>The ACT covers a few more advanced math topics, such as logarithms, polar coordinates, and conic sections.</li> <li>The SAT goes into more depth on algebra and has a bit less geometry and trigonometry.</li> <li><b>Timing:</b> The SAT allows significantly more time per question.</li> </ul>	
<b>Bottom line</b>	The ACT touches on more topics but goes into less depth. The more comfortable pacing will make the SAT feel easier to students who understand algebra, but the adaptive testing format means SAT students need to be sure to do well on module 1 in order to achieve the highest scores.	



TEST	SAT	ACT			
Section type	SCIENCE				
Section name	Not applicable—the SAT has no science section		Science Test		
What is it?	Not applicable		Multiple choice questions about graphs, charts, and data tables.		
The details	The SAT scatters data, graphs, and tables throughout the reading, writing, and math sections.		The ACT Science Test is primarily testing your comfort level with <i>scientific information</i> . While you don't need to be proficient in any particular scientific field, the ACT has recently added some content knowledge requirements to the Science Test, so you'll need to be familiar with some basic concepts from your high school science curriculum, but you <i>won't</i> need to memorize a lot of details. A question might require you to know the difference between mitosis and meiosis, but you won't be asked to name their phases.		
			The secret to this section is that it's a reading test, though most of the important text in this section comes in the form of charts, graphs, tables, and diagrams. These present information from obscure experiments (e.g., the spread of ash particles from a volcano, or relative heat absorption by different ceramic tiles) that no high school student has any business knowing. The point is to test your ability to comprehend and interpret the data.		
			Passage Type	% Of section	You will be asked to...
			Data Representation	30–40	Interpret and analyze data from charts, tables and diagrams.
			Research Summaries	45–55	Understand and analyze the design and results of one or more related experiments. The information about the experiments is usually organized into tables or graphs.
		Conflicting Viewpoints	15–20	Compare and analyze prose passages describing conflicting hypotheses or theories on a scientific phenomenon.	
Timing	Not applicable		35 minutes; 7 passages; 40 multiple choice questions (52.5 seconds per question)		
Subscores	Not applicable		None		
Bottom line	The blistering pace, strangeness of the material, and merciless curve make the Science Test the most difficult part of the ACT for many students.				

TEST	SAT	ACT
<b>Section type</b>	<b>ESSAY (OPTIONAL)</b>	
<b>What is it?</b>	<p>In January 2021, College Board removed the optional essay section from the SAT, stating that while writing skills are important for college readiness, the SAT would measure them through the multiple choice sections of the test. According to College Board, “the SAT Reading and Writing and Language sections are among the most effective and predictive parts of the SAT.”</p> <p>As of the time of printing, the ACT still includes an optional essay section. The ACT essay gets read and scored by two readers for an additional score that is not factored into your main ACT score.</p>	
<b>The details</b>	Not applicable	In fall 2016, the ACT radically changed the style of its optional essay. The new ACT essay includes a topic question, which can address anything from artificial intelligence to organic farming methods to the legal driving age. It asks the student to consider three perspectives on that topic, then write an essay giving the student's response to <b>all three perspectives</b> , as well as the student's own perspective.
<b>Scoring</b>	Not applicable	Two readers score each essay from 1 to 6 in each of the four categories: Ideas and Analysis, Development and Support, Organization, and Language Use and Conventions. The essay receives a subscore of 2–12 in each category. These four subscores will be averaged for a <b>final score between 2–12</b> .
<b>Placement on test</b>	Not applicable	Optional 5th section
<b>Timing</b>	Not applicable	40 minutes



TEST	SAT	ACT												
Section type														
Subscores	Not applicable	<table> <tr> <td><b>Ideas and Analysis</b></td><td>Scores in this domain reflect the ability to generate productive ideas and engage critically with multiple perspectives on the given issue. Competent writers understand the issue they are invited to address, the purpose for writing, and the audience.</td><td>Reader 1 (1-6) Reader 2 (1-6)</td></tr> <tr> <td><b>Development and Support</b></td><td>Scores in this domain reflect the ability to discuss ideas, offer rationales, and bolster an argument. Competent writers explain and explore their ideas, discuss implications, and illustrate through examples.</td><td>Reader 1 (1-6) Reader 2 (1-6)</td></tr> <tr> <td><b>Organization</b></td><td>Scores in this domain reflect the ability to organize ideas with clarity and purpose. Competent writers arrange their essay in a way that clearly shows the relationship between ideas.</td><td>Reader 1 (1-6) Reader 2 (1-6)</td></tr> <tr> <td><b>Language Use and Conventions</b></td><td>Scores in this domain reflect the ability to use written language to convey arguments with clarity. Competent writers make use of the conventions of grammar, syntax, word usage, and mechanics.</td><td>Reader 1 (1-6) Reader 2 (1-6)</td></tr> </table>	<b>Ideas and Analysis</b>	Scores in this domain reflect the ability to generate productive ideas and engage critically with multiple perspectives on the given issue. Competent writers understand the issue they are invited to address, the purpose for writing, and the audience.	Reader 1 (1-6) Reader 2 (1-6)	<b>Development and Support</b>	Scores in this domain reflect the ability to discuss ideas, offer rationales, and bolster an argument. Competent writers explain and explore their ideas, discuss implications, and illustrate through examples.	Reader 1 (1-6) Reader 2 (1-6)	<b>Organization</b>	Scores in this domain reflect the ability to organize ideas with clarity and purpose. Competent writers arrange their essay in a way that clearly shows the relationship between ideas.	Reader 1 (1-6) Reader 2 (1-6)	<b>Language Use and Conventions</b>	Scores in this domain reflect the ability to use written language to convey arguments with clarity. Competent writers make use of the conventions of grammar, syntax, word usage, and mechanics.	Reader 1 (1-6) Reader 2 (1-6)
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Bottom line	<p>As of January 2021, College Board discontinued the SAT essay.</p> <p>The ACT still contains an optional essay that requires you to respond thoughtfully and critically to someone else's ideas.</p>													

## WHY IS THE ACT ESSAY OPTIONAL?

The ACT essay has been optional for a long time. ACT says its essay is optional because “postsecondary institutions have varying needs” and students should not be “required to take a test that they do not need to take.”

## WHO SHOULD WRITE THE ESSAY?

The more good information a student can provide to a college, the better the student's case is in the hands of admissions officers. There is also speculation that the essay can serve as an additional writing sample to college admissions officers. Because your proctored, hand-written essay is scanned and made available to admissions officers, at least in theory, they could use the essay as a point of comparison for your application essays (though they won't expect a timed first draft to be as polished as your application).

## ACT VS. SAT—THE BOTTOM LINE

The two tests now have more similarities than differences, so preparing for one goes a long way toward preparing for the other. The differences, however, are not insignificant:

- The SAT has some harder reading questions and some more in-depth math.
- The ACT has a “science” section (see above) and tests several more advanced math concepts.
- The SAT is an overall shorter test and gives more time per question. The ACT requires you to go much, much faster while maintaining accuracy.
- The SAT is digital and features adaptive testing. To achieve the highest score, you have to do well on module 1 so you're given the hardest set of questions in module 2.

Overall, most students find ACT questions a little easier, but ACT timing a *lot* harder.



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# AP Exams

AP (Advanced Placement) Exams are designed to test students' knowledge of a subject at a college level. Typically, students take AP Exams after they have participated in an AP level class, which should prepare them for these rigorous exams.

AP Exams are an opportunity to demonstrate your breadth and depth of knowledge, nuanced understanding, and advanced writing and reading skills. Obtaining 4s and 5s on AP Exams shows college admissions officers that you can thrive in a challenging class and perform on a challenging test.

Some colleges give you course credit, or allow you to skip introductory level classes, if you obtain certain scores on AP Exams. You can find a college's credit policy on the College Board's website at:

<https://apstudent.collegeboard.org/creditandplacement/search-credit-policies>.

## IF MY SCHOOL DOES NOT OFFER AP CLASSES, SHOULD I TAKE AP EXAMS?

College admissions officers make an effort to know the policies and standards of individual high schools. They'll know which AP classes, if any, your school offers, and they'll take this information into account when assessing the rigor of your schedule and testing choices.

If your school does not offer an AP class you are interested in taking, you can look into enrolling in an online course (the College Board has a list of approved online courses), enrolling in a class at a local college, or studying for the test on your own. It will require significant self-motivation to take an AP Exam without participating in the class, but students do it. Preparing for and successfully taking AP Exams in subjects that interest you can help demonstrate your abilities to colleges.

To register for AP Exams when you're not registered for the corresponding AP class, contact AP Services via the College Board (888-225-5427) to find a local AP Coordinator who has agreed to test outside students. Students should call AP Services no later than March 1 of the year they want to take the test to get this process started. (We recommend calling much sooner, if possible.)





Where do I stand?

## Where do I stand?

Many schools give PSATs or PreACT tests. Your scores on these tests offer the most reliable insights about how you're likely to do on the SAT or ACT respectively.

If your school does not offer a PSAT or PreACT, or if they don't offer the one you want, the surest way to gauge your prospects on the SAT, ACT, or any other standardized test, is to take and score a real practice test. (You can download a free real SAT from [www.khanacademy.org](http://www.khanacademy.org).) If you do this on your own, make sure you strictly follow the timing guidelines. Zinc also offers practice tests most weekends, online and in New York City. Email [testprep@zinc.nyc](mailto:testprep@zinc.nyc) for more details.

## WHAT DO MY SAT/ACT SCORES REVEAL ABOUT ME?

There are no false positives on the SAT or ACT. If you have a very high score—great! That means you've got a confident grasp of the basics of the high school math curriculum, and you're ready for college-level reading. You're comfortable reading and interpreting charts, graphs, and tables, and familiar with the conventions of English writing and usage. Finally, it means you accomplish all these tasks with efficiency and accuracy.

If your scores disappoint you, however, don't despair!

If you're determined to improve, you can, and doing so can have benefits well beyond your test scores.

### Start by asking yourself the following questions:

- How many of my mistakes were caused by gaps in my knowledge and how many were so-called “careless” errors?
- How confident do I feel about the arithmetic and algebra that underlie the math questions?
- Did I understand the charts, tables, and graphs the test presented?
- How well did I comprehend what I read on the test?

Be honest. You have nothing to lose. If you found yourself having to guess a lot, you may need to raise your reading level, or improve your facility with arithmetic and algebra. If taking the test made you anxious, think about why. Tests make us all nervous. If family members are worried about you and your performance, that's distracting. If your friends are all freaking out, you can't help but absorb some of that stress. But when we're alone in front of that test booklet, nothing causes more anxiety than feeling uncertain of our own abilities.

No one is “just bad at testing.” When we struggle on tests, we do so for a mix of reasons. Almost everyone cares and makes their best effort. For some of us, our brains work too fast to pick up all the details. Instead of trying to slow down, we need to learn how to give ourselves more than one shot at the questions. Two of the biggest obstacles that most students face, however, are advanced reading comprehension and comfort with math.



# On Reading

Unless you're already reading proficiently at the college level, raising your reading level is essential to raising your score on either the SAT or ACT. You won't just be asked to read and understand passages, which are written on a college level; the entire test will require you to carefully read math problems, directions, graphs, and more.

Even if you're a successful student at a good school, your current reading level may be holding you back. What do you read for fun? If the answer is "nothing," your ACT or SAT results are a wake-up call. If you loved reading *Harry Potter*, *The Hunger Games*, or *The Fault in Our Stars*, but go online to get a summary instead of reading the books they assign in school, you have some work to do.

While almost everyone knows how to read, only a small minority of students reads and comprehends on a college level. There's a big difference. On both the SAT and the ACT, you'll be expected to comfortably read college-level texts. Here's an example:

*Einstein's theories of relativity teach us that the speed of light puts an absolute limit on not only travel but also experience. Since nothing can go faster than 186,282 miles per second, everything we experience, from the view out the window to our own thoughts, cannot reach us any faster. In fact, our minds act as time sponges, soaking up sensory inputs, all of them arriving from the past. The light we see from the sun has taken anywhere from four to seven minutes to get to us. When we look at the night sky, we're seeing light beams that have been traveling across space for thousands of years. When a star on the other side of our Milky Way Galaxy fused two hydrogen nuclei to produce light energy we perceive on Earth today, our ancestors had yet to invent tools. During the time that light has been traveling, human civilizations rose, thrived and disintegrated in Egypt, Mesopotamia and the Indus Valley. Everything we think of as history happened while that light that will hit our eyes tonight was on its way. But even experiences nearer at hand come at us from the past. The laughter of a friend happened a tiny split second before our brains perceived it, and even our own breath occurred just before our minds could register it.*

If that text strikes you as boring, you're probably not understanding what it means. (It's not boring.)

Students often get by with lower reading comprehension levels by compensating: memorization and excessive studying allow dedicated students to succeed without becoming confident readers. However, the design of the SAT and ACT—the strict timing and focus on reasoning and critical thinking—does not reward memorization and excessive studying. It rewards high reading comprehension levels.

How do you know if you're a good reader? You probably have a good idea. If you struggle with texts written a long time ago, or in a more poetic style, you need to work on your reading. If you don't like reading, you need to work on your reading. If you like reading, but stick to page-turners like vampire novels, mysteries, and the like, you need to work on your reading. There's nothing wrong with graphic novels, mysteries, and fantasy—but these books are often written at lower reading levels to engage a wider audience. If you're already reading college-level texts with ease and regularity, you will enjoy enormous advantages on the tests and in life. Almost everyone else should work on their reading.

You shouldn't just focus on reading because it helps with test taking, but, rather, because it is the single most essential skill a student needs to prepare for the world beyond high school.



# On Math

An unsatisfactory math score could indicate difficulties with reading. Many ACT and SAT math questions require an even higher level of reading accuracy than the reading sections. Failure to notice or process one word can cause you to get the question wrong. If you make these types of mistakes, do you have a learning disability? Maybe—if you make them all the time. But these errors are more the norm than the exception. Everyone makes them. We are not barcode scanners. To manage the level of accuracy these tests demand, most students will need to get accustomed to going back and catching mistakes.

On the other hand, you may find the math difficult because you need to get more comfortable with its conceptual underpinnings.

Let's start with the basics: Do you know your addition facts and times tables? Do you feel comfortable with fractions, decimals, percentages, exponents, and roots? Can you multiply simple two-digit numbers, like 39 times 24 in your head?

*{ “Why would I do that?” you may ask.  
“I can just use my calculator.” }*

That's true, and a calculator may be a better choice during the test, but many students suffer from a debilitating calculator dependency. Multiplying those numbers in your head (it's not that hard—see explanation below<sup>1</sup>) gives you a handle on the behavior of numbers that makes you faster and more accurate on the test.

Too many students have learned math by memorizing rules without gaining a handle on what they mean. Especially on the ACT, which touches on a broader range of topics, you may need a refresher on specific math concepts, but you may also need to deepen your facility with the basics.

**A typical SAT or ACT math question of medium difficulty might ask:**

Which of the following points lies on a line with slope  $\frac{1}{11}$  that passes through the point (3, 0)?

- A. (4, 11)
- B. (11, 3)
- C. (0, 22)
- D. (14, 1)

<sup>1</sup>To solve 39 times 24, multiply 40 times 20 (which is 800) plus 40 times 4 (which is 160). Add those together to get 960 and then take away 24, since you're only asked for 39 of them. The answer is 936.



A good student might solve this question by using any one of a handful of algorithms to derive the equation for this line. The easiest one would probably be to use the slope and the given point to solve for the y intercept. Once you have the equation, you'd have to try out the answer choices to find an ordered pair that fits.

A student who understands what slope means and feels confident about numbers, however, would picture the line rising one from (3, 0) to (3, 1) and then going across 11 to (14, 1). They would save precious seconds and very quickly choose D.

**Assess your math level as follows:**

- **Level 1:** Not at all confident with math. Needs to learn or relearn many concepts, like fractions, percentages, exponents, slope, functions, and basic geometry.
- **Level 2:** Knows math rules but learns them by rote memorization. Lacks a comfortable facility with what the concepts mean.
- **Level 3:** Knows and understands the rules. Feels confident applying them in new situations.



What should I do?



# The SAT vs. the ACT

## Which test should I take?

We find that the SAT is the easier test for most students in rigorous high school programs. The tests cover similar content, but the ACT requires students to work much faster while maintaining accuracy. Also, the SAT replaces the ACT's most difficult section—Science—with more manageable data interpretation and science passages throughout the test's other sections.

To help decide between tests, students should take a practice ACT and a practice SAT. Students should also consider the math skills required for each test<sup>1</sup>. Some students will naturally gravitate toward one or the other test, as one fits their thinking and working style better than the other.

## THE KEY DIFFERENCES:

THE TEST	THE ACT	THE SAT
<b>Format and scoring</b>	As of the time of printing, the ACT is still administered on paper.  The scoring is straightforward—the more questions you get right, the higher your score.	The new digital SAT launched in 2023 for international students and will launch in spring 2024 for U.S. students.  The digital SAT features “adaptive testing,” meaning that on the first module, students see a mix of easy, medium, and hard questions.  Depending on how they do on module 1, students see an easy, medium, or hard set of questions for module 2. In order to earn the maximum score, students need to do well on module 1 to be sure they place into the hardest set of questions (worth more points) on module 2.
<b>Overall test time</b>	3 hours and 40 minutes (including the essay)	2 hours and 14 minutes
<b>Science section</b>	The ACT has a distinct “science” section with questions about data tables, graphs, charts, and descriptions of experiments. Basic knowledge of science concepts required.	There is no science section on the SAT. Instead, the test embeds science content and data interpretation throughout all sections, including reading, English usage, and math.
<b>Math</b>	A very broad range of topics with an increasing number of multistep problems, still at a breakneck pace. Calculators are allowed throughout.	Some multistep problems that demand a strong grasp of basic topics. Graphing calculators are allowed throughout. Both sections include non-multiple choice math questions where students grid in numerical answers.
<b>Difficulty/pacing<sup>2</sup></b>	Often the questions are more straightforward, but you have significantly less time to answer them.	Some questions are slightly harder, but you have much more time per question.

<sup>1</sup> For more details on the math skills on each test, see page 22.

<sup>2</sup> For more details on pacing, see the charts on page 35.



## PACING

The charts below demonstrate the difference in pacing between the SAT and ACT. The pace of the ACT is punishing for a lot of students, particularly the math section.

### ACT

SECTION	QUESTIONS	TIME (in minutes)	RATE (in seconds per question)
English	75	45	36
Math	60	60	60
Reading	40	35	52.5
Science	40	35	52.5

### SAT

SECTION	MODULE	QUESTIONS	TIME (in minutes)	RATE (in seconds per question)
Reading and Writing	1	27	32	71
	2	27	32	71
Math	1	22	35	95
	2	22	35	95



# Test Preparation

## OVERVIEW

At its worst, test prep is a demoralizing slog through weekly practice tests with disappointing results. Take a practice test. Score it. Go over your mistakes. Feel frustrated—how could I have gotten that one wrong?! Do it all over again.

For some, this routine will lead to improvements. For many, it won't. Or the improvements will feel meager when compared with the enormous and stultifying effort it took to get them.

At its best, test prep is a chance to address long-standing gaps in reading, math, and writing—niggling mysteries like “How do negative exponents work?” or “What exactly is the difference between a colon and a semicolon?” as well as bigger challenges, such as “I don't like reading” or “I hate math.”

There are many ways to prepare in order to improve your scores. For some students, doing a handful of practice tests to get used to the format and timing will suffice. Others will need to do a lot more work to get ready.

To make significant improvements, make meaningful efforts. It's tempting for students and instructors alike to just take practice tests and go over mistakes, but while practice tests are good motivators and an essential part of any test preparation program, they should not monopolize the experience. Some students will want to take one every couple of weeks, but all students should work in other ways to improve areas of weakness. You wouldn't train for a marathon by going out and running 26.2 miles every day. You'd stretch, lift weights, run hills—maybe even change your diet.

Good test prep remediates, enriches, and educates. Whether you work independently, take a class, or study with a tutor, your test preparation program should intersperse practice tests with reviewing/relearning grammar and usage rules and math concepts, while also stretching your reading and critical thinking abilities.



# Types of Test Preparation

## STUDY ON YOUR OWN OPTIONS

### Free online resources:

One of the College Board's missions in redesigning the SAT in 2016 was to reduce test-takers' reliance on expensive, private test prep by providing high-quality, online preparation for free. To that end, they engaged Khan Academy, a leading (and absolutely free) educational technology company. If you visit [www.khanacademy.org](http://www.khanacademy.org), you'll find free practice tests with videos explaining all of the answers, along with extra practice materials for every topic on the test.

**COST:** *free*

### Official test sites:

Visit [www.act.org](http://www.act.org) and [www.collegeboard.org](http://www.collegeboard.org) for other free resources.

### Workbooks:

There are dozens of guides with comprehensive test prep programs that students can work through on their own. If you take this route, you'll also want to take real practice tests to gauge your progress. You can download SAT practice tests for free from Khan Academy ([www.khanacademy.org](http://www.khanacademy.org)). The ACT's official guidebook with three real tests is available at bookstores and online. The guidebook we at Zinc recommend is *Up Your Score: ACT*, written by our very own Chris Arp.

**COST:** *\$20 and up*

### Zinc Learning Labs:

For reading comprehension help, you can make a student account at [www.zinclearninglabs.com](http://www.zinclearninglabs.com). You'll find an effective, fun way to increase your vocabulary, along with links to hundreds of curated articles with multiple choice questions that test reading comprehension. Paid teacher and admin accounts help schools create a culture of advanced literacy, but students who want to prepare on their own for the SAT or ACT can make free student accounts.

**COST:** *Please contact [support@zinclearninglabs.com](mailto:support@zinclearninglabs.com) for a quote.*

### Self-guided online classes:

Many websites now offer paid online test prep programs. Students take diagnostic tests and then are guided through lessons and exercises to improve their skills. These courses typically involve practice tests as well. Some sites charge a flat fee. Others offer monthly subscriptions.

### ACT Online Prep™:

ACT has an online portal providing students with access to practice problems, practice tests, and a "personalized learning path" designed to provide students with targeted content based on individual needs. It's also available to schools and school districts.

**COST:** *Varies. Check [act.org](http://act.org) for details.*



### ACT Kaplan Online Prep Live

ACT has partnered with the test prep company Kaplan to provide an online portal with access to “interactive live streaming instruction,” official ACT resources and assessment materials, and instructors available to answer questions outside of class hours.

**COST:** Six week subscriptions begin at \$99.95; students who qualify for fee waivers get free access



**TIP:** Even the most well-intentioned students can have trouble sticking with a self-guided program when faced with other demands on their time. Self-guided options work best for motivated, self-disciplined students.

## CLASSES:

### Online classes (with instructor):

Taking a class online lets you access resources you might not find in your local community without leaving your home. Big companies offer online classes with instructors that include access to self-guided online resources. Also, some online classes have smaller groups with more personalized attention from instructors.

**COST:** Ranges from about \$300–\$600

### In-person classes:

For some students, going to a classroom with other students and a live instructor will be the best option. Big test prep companies offer such classes in most cities. Increasingly, many smaller companies also compete to offer in-person classes at schools. Some of these classes include self-guided online components as well.

**COST:** Ranges from about \$600–\$2500



**TIP:** Having a place to show up every week—whether virtual or real—with weekly homework to turn in helps many students find time to practice and prepare. When choosing a class, you would do well to consider class size. Most students will get much more out of being in a smaller group.

### Tutoring:

No tutor has a magic wand, but great one-on-one test prep presents each student with exactly what the student needs, challenges the student with appropriate outside work in reading and math, and defuses anxieties. Increasingly, one-on-one tutoring happens online, as both parties like the convenience, and the digital environment offers many conveniences while limiting distractions.

**COST:** Anywhere from \$20–\$1500/hour



**TIP:** Anyone can hang out a shingle and call themselves a test prep tutor. Just because someone did well on a test or went to an elite university does not mean they will do a great job tutoring. Look for a tutor who will relate well with the student, loves teaching, and will do more than just correct practice test errors.



# Resources and References

## The College Board [www.collegeboard.org](http://www.collegeboard.org)

### Good for:

- Detailed information on the PSAT, SAT, SAT Subject Tests, and AP Exams
- Obtaining information about accommodations and how to apply for them
- Some practice problems and free test prep
- Information on colleges, including admissions statistics, data on enrollment, and more

## ACT [www.actstudent.org](http://www.actstudent.org)

### Good for:

- Detailed information on the ACT and the PreACT
- Obtaining information about accommodations and how to apply for them
- Practice problems and test prep resources for the ACT

## FairTest [www.fairtest.org](http://www.fairtest.org)

### Good for:

- Information on test-optional and test-flexible schools

## Khan Academy [www.khanacademy.org](http://www.khanacademy.org)

### Good for:

- Full-length free practice SATs with explanations of the answers
- Detailed information on all parts of the SAT
- Practice SAT problems for all sections of the test
- Grammar, math, and reading lessons

## Zinc Learning Labs [www.zinclearninglabs.com](http://www.zinclearninglabs.com)

### Good for:

- Curated selection of leveled articles, accompanied by reading comprehension questions and writing prompts
- Fun, fast-paced vocab games that make learning words for test prep engaging and addictive
- Interactive video lessons led by student teachers that provide explicit reading instruction using commonly taught texts





# The Zinc Approach

Zinc is L.E.A.R.N.

Zinc gets results by helping students cultivate the core L.E.A.R.N. competencies:

**L**ove, **E**ffort, **A**ttention, **R**eadng, and **N**umbers.

At Zinc, test prep offers a unique opportunity to foster a true Love-based approach to learning and life, cultivate persistent Effort, harness Attention successfully, improve Reading comprehension, and confirm or expand facility with Numbers.

We also teach our students to avoid getting stuck and wasting time by learning to think and problem-solve in iterations.

Our secret weapon is reading. When students discover a love for advanced reading, the tests become a lot easier and many doors open.

At Zinc, we are devoted to identifying and cultivating great teaching talent.

Zinc teachers and tutors are chosen not only for their high academic achievements but also for their demonstrated accomplishments as teachers. They then receive extensive training from the company's founder and partners, and participate in a two-year mentorship program.



# Our Services

## Complimentary consultations

Give us a call (212-924-3040) or send us an email ([info@zinc.nyc](mailto:info@zinc.nyc))! We will thoughtfully assess your needs and help you make a plan.

## One-on-one tutoring

### In person and online

We offer comprehensive preparation for the SAT, ACT, ISEE, SSAT, SHSAT, GRE, GMAT, LSAT, MCAT, Hunter Test, TACHS, and most AP Exams. We also have tutors who specialize in almost all academic subjects. A significant portion of our tutoring is done online through Skype, Google Hangouts, or FaceTime. We have students all over the world, from New Jersey to Abu Dhabi.

## Classes

Zinc partners with independent schools and nonprofit organizations to offer SAT, ACT, ISEE, SSAT, and SHSAT classes, both in person and online.

## SAT/ACT Boot Camps

Our fast-paced, high-energy summer intensives are a great fit for students who are just getting started with test prep and for those preparing for a fall test sitting. Visit [www.zinc.nyc/sat-act-bootcamp/](http://www.zinc.nyc/sat-act-bootcamp/) for details.

## Practice Tests

Zinc offers practice tests almost every weekend in New York City and online. Check our website ([www.zinc.nyc](http://www.zinc.nyc)) for more details, and to sign up. Practice tests are proctored and mirror a real testing environment. After taking a practice test with Zinc, you will receive a detailed, customized score report to assess your performance.

## Zinc Learning Labs

Zinc Learning Labs ([www.zinclearninglabs.com](http://www.zinclearninglabs.com)) is an online literacy tool for students. Our close reading exercises employ interactive video lessons led by student teachers to provide explicit reading instruction using commonly taught texts. Our set of apps also includes fun, effective vocabulary instruction and curated, leveled reading content. Zinc Reading Labs is free for students working with a Zinc tutor. Teachers, schools, and families can purchase paid accounts to assign articles and vocab sets and track student progress.



# About Us



Matt Bardin, Founder and CEO



**Zinc Educational Services** is a New York City-based tutoring and test prep company serving clients all over the world.

In addition to New York-based and worldwide private tutoring, Zinc partners with top schools to offer both in-person and online test prep classes.

Matt Bardin, Zinc's Founder and CEO, graduated from Princeton University in 1987. Matt taught at public secondary schools in New York and was a founding director of Teach for America. Matt founded Zinc Educational Services (formerly Veritas Tutors & Test Prep) in 2001, and has been raising test scores with his unique approach for over 25 years. Matt is the author of *Zen and the Art of the SAT*, and the host of "REAL Learning Radio" on Sirius XM.

While he continues to tutor students all over the world, Matt also founded and leads Zinc Learning Labs, a web app that improves students' vocabulary and reading comprehension. Zinc Learning Labs recently integrated into the digital platform of a major curriculum publisher for use in thousands of middle and high schools all over the United States.



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