# O winning strategies strategies to beat the ACT to beat the ACT



# **ACT Registration**

Test Date	Registration Deadline
Mid September	Early August
Late October	Mid September
Mid December	Early November
Early February*	Early January
Mid April	Early March
Mid June	Early May

<sup>\*</sup>No test centers in New York for these dates.

**When:** The ACT is offered on a Saturday morning (accomodations may be made for Saturday Sabbath observers).

**How often:** The ACT can be taken as many times as you choose, but in most cases it should be taken only 2–3 times.

**How much:** The cost is \$38 without the essay and \$54.50 with the essay. (Vouchers may be available from your guidance counselor for students who qualify.)

**Score reporting:** Your scores will be kept on record for five years and will be reported to schools upon your request. When you register for the ACT, you can select up to four schools to receive your scores for free. After you have completed the test, you can request additional reports at a cost of \$12 per test date per school.

**Contact info:** Visit www.act.org or call 319-337-1270.



You must send scores from all sections for each test administration. It is, however, at your discretion, which test date you send.

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# Get the facts!

There are many rumors about the ACT (and college admissions in general). The first step to a great score is learning what's true and what's not.

	True	False
The ACT is a test of a student's intelligence.		
The ACT is required for admission to all 4-year colleges.		
The ACT tests knowledge of science facts.		
The ACT tests precalculus.		
The ACT tests trigonometry.		
The ACT tests formal written grammar.		
The ACT allows the use of most calculators for the math section.		
The questions are arranged in increasing order of difficulty.		
A student will earn more points by guessing randomly than by leaving a question blank.		
A student should take his or her first ACT is in the spring of his or her junior year.		
The more a student understands about the ACT, the better he or she will perform on the ACT.		



Answers: F, F, F, T, T, T, T, T, T, T, T, T

Research the college admissions process and standardized testing in 9<sup>th</sup> and 10<sup>th</sup> grades and create a college plan, which includes a testing schedule and deadlines.

# Know what you need!

Standardized tests are one of the top three factors used by most colleges to determine which applicants are admitted. Since standardized tests are important to colleges, you must know what score will make you attractive to the schools you want to attend. The chart below shows the 25th to 75th percentiles of ACT scores for some popular schools.

School	ACT Range (Composite Score)
Columbia University	32 – 35
Duke University	31 – 34
University of Notre Dame	32 – 34
Emory University	30 – 34
New York University	28 – 32
UCLA	26 – 32
SUNY Binghamton	27 – 31
Butler University	25 – 30
University of Connecticut	26 – 30
Florida State University	26 – 30
Michigan State University	23 – 28
Howard University	21 – 26
SUNY Purchase	21 – 26
Virginia Commonwealth University	21 – 26
Temple University	22 – 27
Morehouse University	18 – 24
Kenyon College	28 – 32
Vassar College	30 – 33
Cornell University	30 – 34
Swarthmore College	31 – 34

All colleges may accept a student who scores below the average ACT score if that student has something else in his/her profile that shows academic potential (such as a higher than average GPA, AP classes, or college classes).

# Build your endurance with real practice!

The ACT consists of about three and a half hours of testing. Taking practice tests will build your endurance and stamina. Like an athlete, you will perform at your best only if you train and practice realistically.

Test	Content	Timing						
1	English (75 multiple-choice questions)	45 minutes						
2	Math (60 multiple-choice questions)	60 minutes						
3	Reading (40 multiple-choice questions)	35 minutes						
4	Science (40 multiple-choice questions)	35 minutes						
5	Essay (optional)	30 minutes						
	Total Time							



## Learn what will be tested!

Knowing what's going to be on the test allows you to prepare for the test. To get your best score, spend 2-3 months before the test reviewing rules and learning effective strategies.

#### **English**

The English Test measures your ability to use the rules of standard written English. Specifically, the English Test measures your ability to:

- effectively use punctuation and grammar rules
- use varying sentence structures to clearly convey information
- manage the overall style and organization of a passage

#### **Mathematics**

The Mathematics Test measures math learned in 7th through 11th grades. Specifically, the Mathematics Test measures your abilities with:

- number operations and definitions
- algebra I and II
- geometry and trigonometry
- word problems and mathematical reasoning

#### Reading

The Reading Test measures your ability to:

- understand and retrieve specific information
- understand an author's purpose and reasoning
- make inferences and generalizations
- understand the central idea
- understand a sequence of events and cause-effect relationships

#### Science

The Science Test measures your ability to:

- read and understand information presented in various media
- make connections between different sets of information
- make predictions based on the available information
- examine the relationship between the information given and the conclusions drawn based on that information
- compare and contrast differing viewpoints

Knowing what to expect on the ACT will make you more confident and enable you to do better!

# Work smarter, not harder!

There is no guessing penalty on the ACT, which means you should answer every question. But that doesn't mean you have to spend time on every question. While ACT questions are not in a predictable order of difficulty, you should skip the hard questions and try them later. If you are running out of time, guess.

#### **ACT Scoring**

#### Josefina Schmoe

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Correct	В	Н	С	K	С	F	Е	G	D	F	D	Н	С	G	D	F	В	J	В	K
Student	•	J	~	F	v	J	~	~	v	G	Α	~	В	~	С	~	D	~	С	F
Question	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Question Correct	21 A	22 H	23 C	24 H	25 D	26 K	27 B	28 K	29 B	30 F	31 D	32 J	33 A	34 F	35 B	36 K	37 D	38 G	39 D	40 J

#### **Bell Curves Student**

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Correct	В	Н	С	K	С	F	Е	G	D	F	D	Н	С	G	D	F	В	J	В	K
Student	~	~	~	K	Α	~	~	K	~	G	С	G	~	~	В	G	~	~	С	~
Question	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Correct	Α	Н	С	Н	D	K	В	K	В	F	D	J	Α	F	В	K	D	G	D	J
Student	-	G	_	Κ	_	7	С		С	_	С			Κ		_	_	Κ	С	

 $<sup>^{*}</sup>$ highlighted columns are guesses

Raw Scores

Correct Answers = +1 Wrong Answers = 0

ļ				Α	CT Sca	le	d Score	es
	Scaled Score	Reading	Math	English	Science		Scaled Score	Rea
	36 35 34 33 32 31 30 29 28 27	40 39 38 37 36 35 34 33 32 31	60 59 57-58 56 55 54 53 52 50-51 47-49	75 74 73 72 71 70 69 68 66-67 65	40 39 — 38 37 — 36 35 33-34 32		18 17 16 15 14 13 12 11 10	17 14 17 9
	26 25 24 23 22 21 20	30 29 28 27 25-26 24 23 21-22	45-46 42-44 40-41 37-39 35-36 33-34 31-32 29-30	63-64 61-62 58-60 56-57 53-55 50-52 47-49	31 29-30 27-28 25-26 23-24 21-22 19-20		8 7 6 5 4 3 2	

Scaled Score	Reading	Math	English	Science
18	20	26-28	43-44	16
17	19	22-25	40-42	14-15
16	17-18	17-21	38-39	13
15	16	13-16	35-37	12
14	14-15	10-12	32-34	11
13	13	8-9	30-31	10
12	11-12	6-7	28-29	9
11	9-10	5	25-27	8
10	8	4	22-24	6-7
9	7	_	19-21	5
8	6	3	16-18	4
7	5	_	13-15	_
6	4	2	10-12	3
5	_	_	8-9	2
4	3	1	6-7	–
3	2	—	4-5	1
2	1	—	3	–
1	0	0	0-2	0

## Connect both ends of a sentence!

#### **English Questions**

[1] Holistic healing is an approach to medicine that Eastern cultures have long recognized for its potency in improving health. [2] At the heart of the holistic approach is a belief that all of the aspects comprising a human person must be integrated in the healing process. [3] The three different aspects on which holistic healing focuses are the body,

the mind, and the spirit. 1

1 [4] The emphasis

holistic medicine places on regarding the human body as a balanced whole has recently begun to influence a number of medical professionals in the Western world. [5] Some people have begun to take note of holistic healing and incorporated its basic principals in their own work.

One such professional is Jean Watson. Jean Watson uses the principles of holistic healing to care for her own patients. Although she perceives the importance of traditional medical care, she believes that holistic healing offers positive

benefits. 2 The benefits complement whatever

improvements the patient may be making with traditional medical care. Therefore, Watson believes that holistic healing can definitely help a patient's recovery.

- Given that all of the following sentences are true, which one, if added here, would offer the best transition from Sentence 3 to Sentence 4?
  - **A.** By integrating these elements, the holistic approach seeks to establish health in the most comprehensive and efficient way possible.
  - **B.** Eastern cultures have been practicing holistic medicine for centuries.
  - C. Holistic medicine has been used to treat both physical and psychological ailments.
  - **D.** Western doctors have long viewed holistic medicine as a medically and scientifically unsound practice.
- 2. The writer wishes to provide support for the assertion that holistic healing offers positive benefits. Which of the following true statements would best accomplish this goal?
  - **F.** Patients often ask her about holistic medical practices.
  - **G.** For example, some patients can lower their high blood pressure through the holistic practice of acupuncture.
  - H. or instance, some doctors have argued that the holistic practice of meditation has no effect on stress levels.
  - J. Western medical schools have now included some courses on holistic medicine.

Answers: A, G

Style and Content questions on the English Test focus on an author's ability to clearly and logically convey information. The flow of a passage and relevance of each sentence is key.

# Plug in numbers when given variables!

#### **Math Questions**

3. Jason has built computers for 6 years less than Christina has. If Christina has built computers for *c* years, which of the following expressions represents the number of years that Jason has built computers?



(B) 
$$c - 6$$

(C) 
$$2c - 6$$

$$(D)$$
 2c + 6

(E) 
$$6 - 2c$$

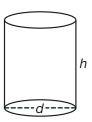
4. If for all positive integers y,  $x = y^3$  and  $z = x^2 + x$ , what is z in terms of y?

(G) 
$$y^6 + y^3$$

(H) 
$$y^5 + y^3$$

(J) 
$$y^4$$

(K) 
$$y^2 + y$$



5. The right circular cylinder shown above has diameter *d* and height *h*. Which of the following expressions represents the volume of the smallest rectangular box that completely contains the cylinder?

(A) 
$$(d + h)^2$$

(B) 
$$d^2h^2$$

(D) 
$$d^2h$$

# Read for the information you need to answer the given questions!

#### **Reading Questions**

Line Since the inception of the law regulating creative property, there has been a war against "piracy." The precise contours of "piracy" are hard to sketch, but the animating injustice is easy to capture. As Lord Mansfield wrote in a case that

extended the reach of English copyright law to include sheet music.

"A person may use the copy by playing it, but he has no right to rob the author of the profit, by multiplying copies and disposing of them for his own use."

Today the Internet has provoked a war against "piracy". Peer-to-peer (p2p) file sharing is among the most efficient of the technologies the Internet enables. Using distributed intelligence, p2p

15 systems facilitate the easy spread of content in a way unimagined a generation ago.

This efficiency does not respect the traditional lines of copyright. The network doesn't discriminate between the sharing of copyrighted 20 and uncopyrighted content. Thus has there been a vast amount of sharing of copyrighted content. That sharing in turn has excited the war, as copyright owners fear it will "rob the author of the profit."

25 The warriors have turned to the courts, legislatures, and technology to defend their "property" against this "piracy." A generation of Americans, the warriors warn, is being raised to believe that "property" should be "free." Forget attoos, never mind body piercing—our kids are becoming thieves!

There's no doubt that "piracy" is wrong, and that pirates should be punished. But before we summon the executioners, we should put this notion of "piracy" in some context. Though the term is increasingly used, at its core is an idea that is almost certainly wrong.

- 6. The author's use of quotations around the word "piracy" serves to:
  - (F) demonstrate his doubt that piracy exists
  - (G) raise a question about the definition of the word
  - (H) minimize the severity that is often attached to the term
  - (J) mock those who use the term incorrectly
- 7. The passage indicates that peer-topeer file sharing has had which of the following effects?
  - (A) An increase in the sharing of copyrighted content
  - (B) A decrease in the sharing of noncopyrighted content
  - (C) The increased likelihood that authors will be robbed of their profit
  - (D) The corruption of youth through the promotion of theft

Answers: G, A

Reading Comprehension questions require you to be aware of different details for different types of passages. Figure out which of the four passages you do the best with and do those passages first.

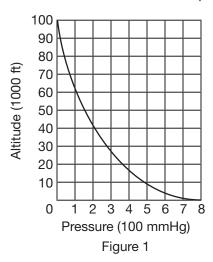
## Find the connections!

#### **Charts and Graphs Questions**

Scientists study a variety of different environments. An environment of particular interest is that of high altitudes and the effects of the air pressure changes.

#### Study 1

At different altitudes it was found that air pressure varied. Research showed that air closer to the earth's surface is pulled more and therefore its weight is increased, pulling the air molecules closer together and therefore increasing pressure. Figure 1 shows the correlation between altitude and air pressure.



- 8. Based on the information in Figure 1, air pressure:
  - (F) increases as altitude increases.
  - (G) decreases as altitude increases.
  - (H) stays constant as altitude increases.
  - (J) increases then decreases as altitude increases.

#### Study 2

It has been shown that reduced air pressure lowers the boiling point of all fluids. This is because the boiling point of a liquid is the temperature at which the vapor pressure of the liquid becomes equal to external pressure of the surrounding air. The vapor pressure does not need to be as great if there is less external pressure and subsequently lower temperatures are required to bring a liquid to its boiling point. The effect of altitude on water's boiling point is demonstrated in Table 1.

Tab	le 1
External Pressure (mmHg)	Boiling Point of H <sub>2</sub> 0 (°C)
760	100
700	97.7
600	93.5
500	88.3
400	81.1

- 9. Based on the information in Table 1 and Figure 1, the lowest boiling point will be at which of the following altitudes
  - (A) Sea level
  - (B) 1,000 ft.
  - (C) 2,000 ft.
  - (D) 3,000 ft.

Answers: G, D

Many science passages are presented with more than one experiment or viewpoint. To ensure understanding, read one at a time and answer its corresponding question.

# Create a winning essay template before going to the test!

Many of our purchases are now done over the Internet rather than in traditional storefronts. Industries like publishing and entertainment have seen significant financial impacts from the rise in Internet commerce. Brick and mortar stores have been shuttered due to their lack of ability to compete. The convenience of online shopping is generally seen as positive, but what do we lose when we can no longer interact with the items we buy? Given the trending increase in Internet transactions, it is worth examining the impact of its growth on our lives. Read and carefully consider these perspectives. Each suggests a particular way of thinking about the growth in online retail.

#### **Perspective One**

When we no longer interact with people for our goods, we lose an essential element of the human experience. Having a face-to-face relationship with merchants fosters trust and loyalty.

#### Perspective Two

Traditional stores cannot compete with online retailers selection and pricing. Online retailers offer more choices at lower prices. These factors make it the clear choice for consumers.

#### **Perspective Three**

Internet commerce is changing the nature of industry and expanding its longstanding boundaries. This urges both online and traditional merchants to come up with innovative ideas.

#### Template:

Introduction: 3–5 sentences that state my position on the topic (quote part of the assignment); Indicate the reasons I plan to use

Body paragraph 1: 5–7 sentences that consider the three perspectives given

Body paragraph 2: 5–7 sentences that explain and support my position

Body paragraph 3: 3-5 sentences that analyze the relationship between your position and the given perspectives

Conclusion: 3–5 sentences that summarize my position and close the essay

#### My favorite sentences:

I firmly believe that (insert topic). My position is most clearly demonstrated when you consider (reason 1 and reason 2).

First, when one examines (reason 1), it becomes clear that this supports (position).

#### My favorite examples:

Edgar Allan Poe...

- ...showed perseverance (no one liked his work during his time)
- ...demonstrates that belief in self leads to good things

World War II...

- ...showed teamwork (together, the Allies overcame what one could not alone)
- ...shows the benefits of teamwork, democracy, and community

Lord of the Flies...

- ...by William Golding; main characters Piggy, Jack, and Ralph
- ...shows the nature of man in extreme circumstances

The key factors in maximizing your essay score are clarity of position, relevance of examples, and proper essay structure.