REVOLUTION PREP

ACT vs SAT

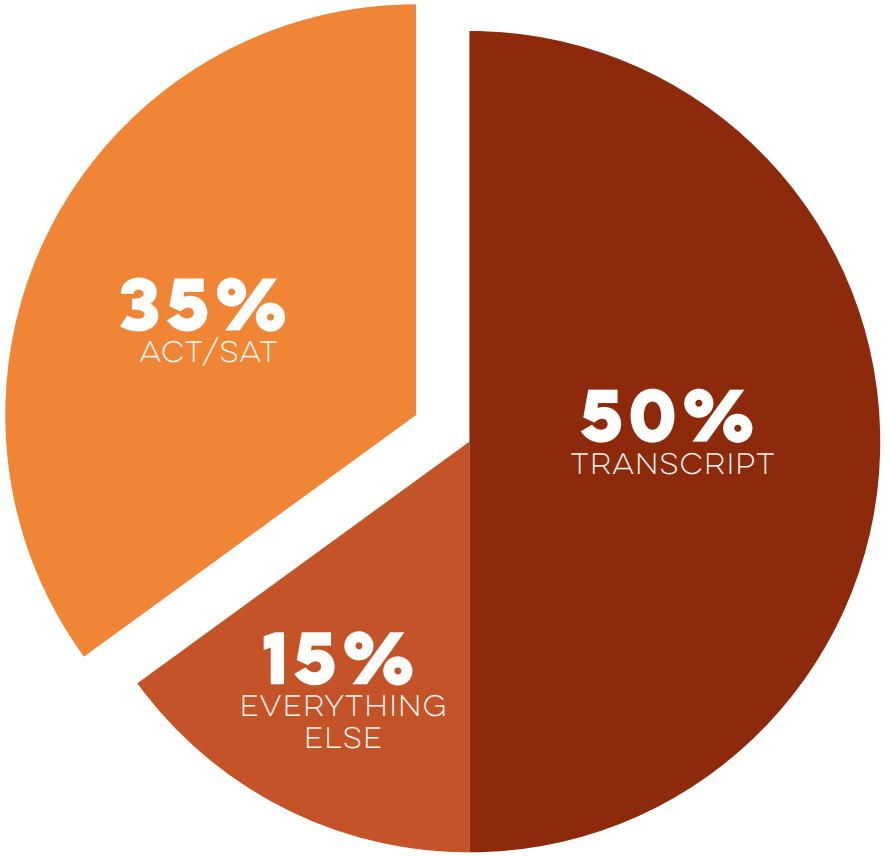




CONGRATULATIONS!

You have taken the first step to
significantly increasing your ACT or SAT score

YES, THESE TESTS ARE VERY IMPORTANT!

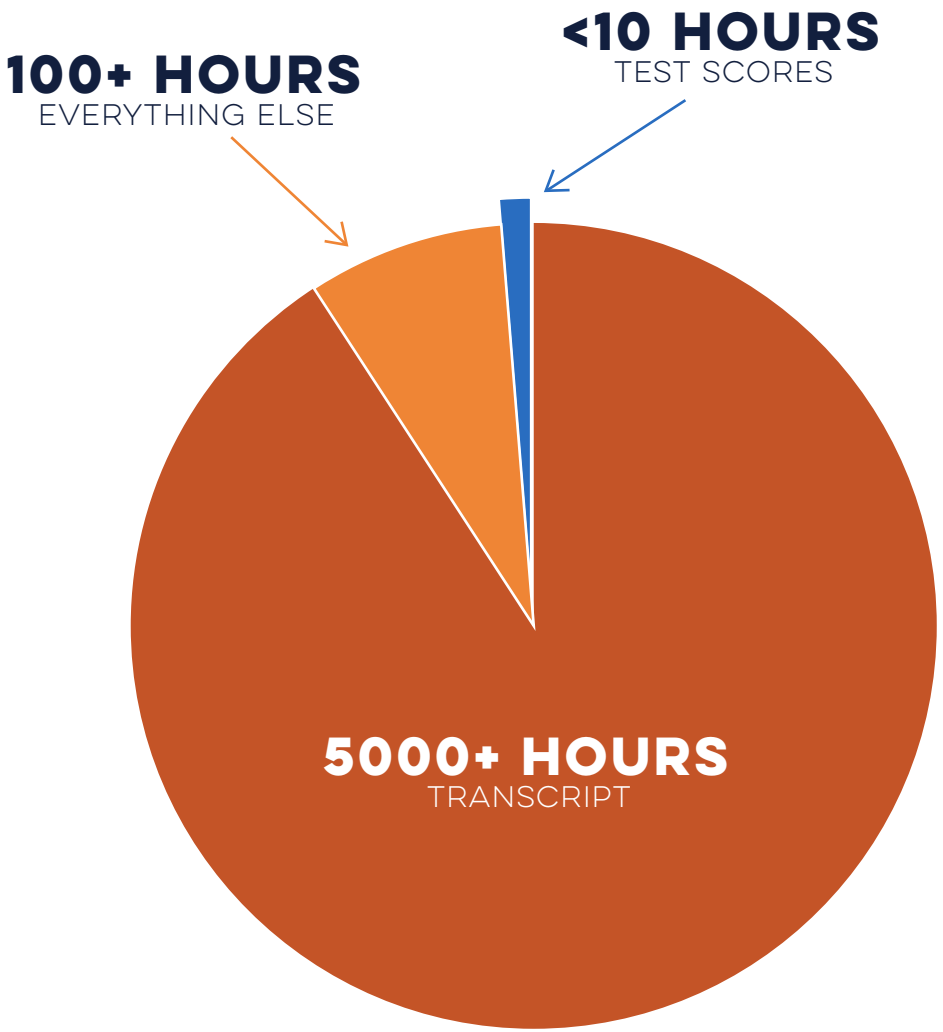


Admissions Weight



ALL COLLEGES ACCEPT THE ACT AND SAT

MOST STUDENTS **DO NOT PREPARE** FOR THIS OPPORTUNITY



Time Spent

ACT AND SAT

TRUE OR FALSE

T F There is a “good” ACT or SAT score

T F I can take the ACT and SAT more than once

T F It is easier to do well on some ACT/SAT test dates than others

T F Colleges will receive all of my ACT or SAT results

T F I should always guess “C”

T F Just doing practice questions is the best way to increase my ACT/SAT score

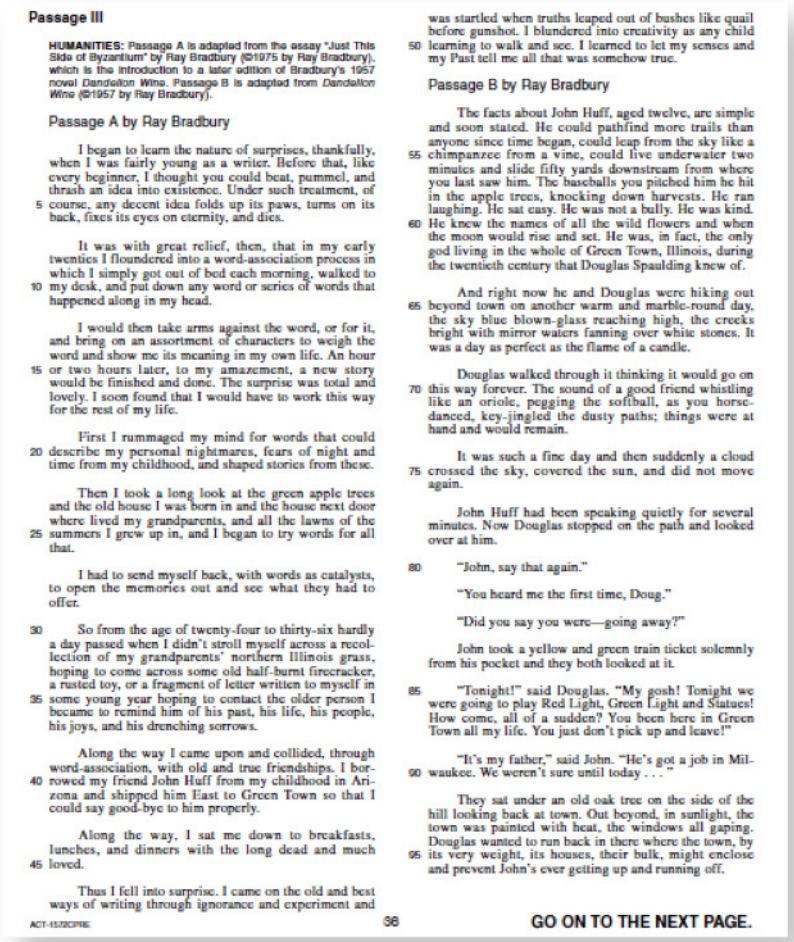
T F ACT/SAT scores are measures of my intelligence



THE ACT AND SAT **ARE VERY LONG**

ACT = 3 HOURS 35 MINUTES
SAT = 3 HOURS 50 MINUTES

Tests students are used to ~1 Hour



Passage III

HUMANITIES: Passage A is adapted from the essay "Just This Side of Byzantium" by Ray Bradbury (©1975 by Ray Bradbury), which is the introduction to a later edition of Bradbury's 1957 novel *Dandelion Wine*. Passage B is adapted from *Dandelion Wine* (©1957 by Ray Bradbury).

Passage A by Ray Bradbury

I began to learn the nature of surprises, thankfully, when I was fairly young as a writer. Before that, like every beginner, I thought you could beat, pummel, and thrash an idea into existence. Under such treatment, of course, any decent idea folds up its paws, turns on its back, fixes its eyes on eternity, and dies.

It was with great relief, then, that in my early twenties I floundered into a word-association process in which I simply got out of bed each morning, walked to my desk, and put down any word or series of words that happened along in my head.

I would then take arms against the word, or for it, and bring on an assortment of characters to weigh the word and show me its meaning in my own life. An hour or two hours later, to my amazement, a new story would be finished and done. The surprise was total and lovely. I soon found that I would have to work this way for the rest of my life.

First I rummaged my mind for words that could describe my personal nightmares, fears of night and time from my childhood, and shaped stories from these.

Then I took a long look at the green apple trees and the old house I was born in and the house next door where lived my grandparents, and all the lawns of the summers I grew up in, and I began to try words for all that.

I had to send myself back, with words as catalysts, to open the memories out and see what they had to offer.

So from the age of twenty-four to thirty-six hardly a day passed when I didn't stroll myself across a recollection of my grandparents' northern Illinois grass, hoping to come across some old half-burnt firecracker, a rusted toy, or a fragment of letter written to myself in some young year hoping to contact the older person I became to remind him of his past, his life, his people, his joys, and his drenching sorrows.

Along the way I came upon and collided, through word-association, with old and true friendships. I borrowed my friend John Huff from my childhood in Arizona and shipped him East to Green Town so that I could say good-bye to him properly.

Along the way, I sat me down to breakfasts, lunches, and dinners with the long dead and much loved.

Thus I fell into surprise. I came on the old and best ways of writing through ignorance and experiment and was startled when truths leaped out of bushes like quail before gunshot. I blundered into creativity as any child learning to walk and see. I learned to let my senses and my Past tell me all that was somehow true.

Passage B by Ray Bradbury

The facts about John Huff, aged twelve, are simple and soon stated. He could pathfind more trails than anyone since time began, could leap from the sky like a chimpanzee from a vine, could live underwater two minutes and slide fifty yards downstream from where you last saw him. The baseballs you pitched him he hit in the apple trees, knocking down harvests. He ran laughing. He sat easy. He was not a bully. He was kind. He knew the names of all the wild flowers and when the moon would rise and set. He was, in fact, the only god living in the whole of Green Town, Illinois, during the twentieth century that Douglas Spaulding knew of.

And right now he and Douglas were hiking out beyond town on another warm and marble-round day, the sky blue blown-glass reaching high, the creeks bright with mirror waters fanning over white stones. It was a day as perfect as the flame of a candle.

Douglas walked through it thinking it would go on this way forever. The sound of a good friend whistling like an oriole, pegging the softball, as you horse-danced, key-jingled the dusty paths; things were at hand and would remain.

It was such a fine day and then suddenly a cloud crossed the sky, covered the sun, and did not move again.

John Huff had been speaking quietly for several minutes. Now Douglas stopped on the path and looked over at him.

"John, say that again."

"You heard me the first time, Doug."

"Did you say you were—going away?"

John took a yellow and green train ticket solemnly from his pocket and they both looked at it.

"Tonight!" said Douglas. "My gosh! Tonight we were going to play Red Light, Green Light and Statues! How come, all of a sudden? You been here in Green Town all my life. You just don't pick up and leave!"

"It's my father," said John. "He's got a job in Milwaukee. We weren't sure until today . . . "

They sat under an old oak tree on the side of the hill looking back at town. Out beyond, in sunlight, the town was painted with heat, the windows all gaping. Douglas wanted to run back in there where the town, by its very weight, its houses, their bulk, might enclose and prevent John's ever getting up and running off.

ACT-15ZCPIIE 38 GO ON TO THE NEXT PAGE.

COMPLETE **FULL-LENGTH PRACTICE EXAMS**

- Students have not prepared for a 4-hour test before
- Review your wrong answers
- Take practice exams just like the real thing

AVOID THE TESTS'
TRICKS AND TRAPS

Math Question

$$w = z$$
$$15w - 8z = 35$$

In the system of equations above, what is the value of $15w$?

A) 5
B) 15
C) 40
D) 75

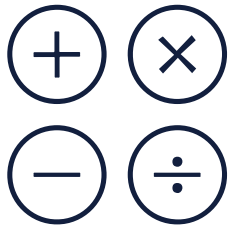
- A high GPA does not guarantee a competitive ACT or SAT score
- Only 5% of students score over 30 (ACT) or 1400 (SAT)
- Slow down to increase your score

THESE EXAMS ARE DIFFERENT

FROM HIGH SCHOOL TESTS

RAW SCORE (# OF CORRECT ANSWERS)	**MATH SECTION SCORE**
45	**680**
46	**690**
47	**690**
48	**700**
49	**710**
50	**720**
51	**730**
52	**740**
53	**750**
54	**760**
55	**770**
56	**780**
57	**790**
58	**800**

- The ACT and SAT have no guessing penalties
- You don't need to get every question correct to earn a competitive score!
- If you are stuck on a question, just skip it and come back later

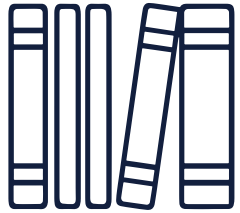


Algebra

Equations

Geometry

Word Problems



Increasing Reading Speed

Understanding Main Ideas

Words in Context



Essay Composition

Grammar

Punctuation

Rhetoric



Interpreting Data

Reading Charts and Graphs

FOCUS ON THE STUFF **YOU ALREADY KNOW**



HISTORY

$$\frac{dy}{dx}$$

CALCULUS



OBSCURE
VOCABULARY

WHAT **ISN'T TESTED**



TURN YOUR TEST ANXIETY **INTO INTENSITY**

- Getting into The Test Zone can earn you up to 3 (ACT) or 200 (SAT) additional points
- A little nervous energy is not a bad thing
- Breathing and visualization can help harness your emotions

ONLY PREPARE
FOR ONE EXAM AT A TIME

You can take an ACT and SAT practice exam to determine if you have a "test preference"

ACT	SAT	Percentile	
36	1600	99+	Harvard, Yale, Princeton, Stanford, Dartmouth College
35	1580	99+	
34	1530	99	
33	1500	99	
32	1460	97-99	
31	1430	95-99	NYU, USC, Ohio State University, Miami of Ohio
30	1400	92-96	
29	1360	90-94	
28	1320	88-92	
27	1290	85-89	Chapman University, University of Cincinnati, John Carroll University, Ohio University
26	1250	80-84	
25	1210	75-79	
24	1170	70-74	
23	1140	65-69	University of Akron, Bowling Green University, Arizona State, Boise State, Columbus State University
22	1110	60-64	
21	1070	55-59	
20	1030	45-54	
19	990	40-44	Washington State, CSU Northridge, Cleveland State University
18	950	30-39	
17	910	25-29	
16	870	20-24	
15	830	15-19	
14	780	10-14	
13	730	5-9	
12	670	1-4	
11	590	1	
10	510	<1	

ACT VS. SAT HIGHLIGHTS

	SAT	ACT
TIME	3 Hours 50 Minutes	3 Hours 35 Minutes
MAXIMUM SCORE	**1600**	**36**
SECTIONS	5	5
ESSAY	Yes	Yes
SCIENCE SECTION	**No**	**Yes**
CALCULATOR USAGE	**Not Allowed on All Math Questions**	**Allowed on All Math Questions**
TRIGONOMETRY	Yes	Yes
GUESSING PENALTY	No	No
MATH WEIGHT	**50% of Total Score**	**25% of Total Score**
ORDER OF DIFFICULTY	Only Math Follows Order of Difficulty	Only Math Follows Order of Difficulty
BIG CHALLENGE	**Higher-Order Thinking Skills**	**Time Crunch**

READING



ACT READING

TEST 3

35 MINUTES
40 QUESTIONS

Main Ideas: 50%

Details: 40%

Words in Context: 5%

Analyzing Multiple Texts: 5%

SAT READING

TEST 1

65 MINUTES
52 QUESTIONS

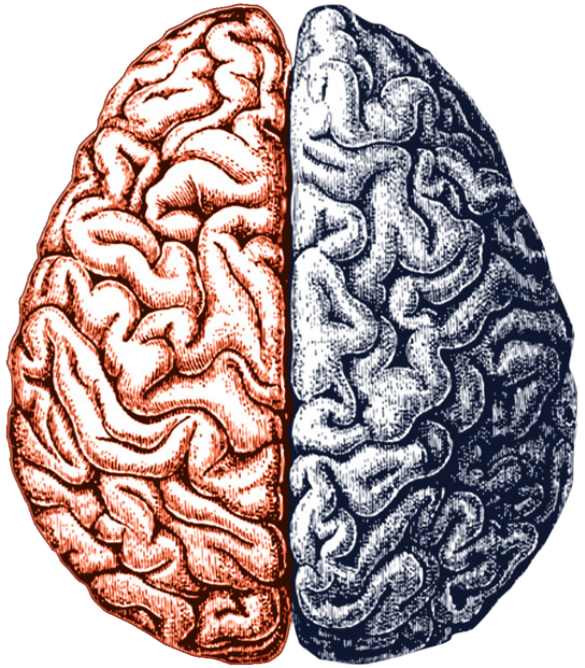
Main Ideas: 50%

Command of Evidence: 20%

Words in Context: 15%

Evaluating Data: 10%

Analyzing Multiple Texts: 5%



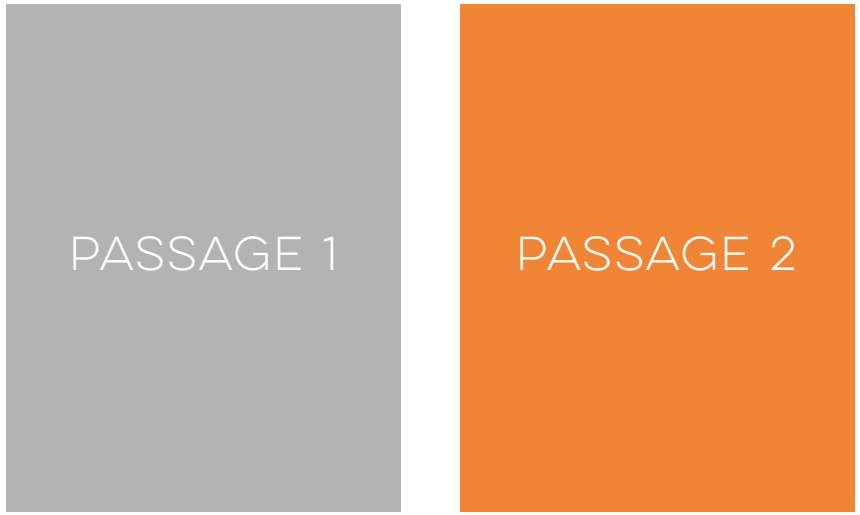
COMMON CHALLENGE #1

USE YOUR TWO-TRACK MIND TO IDENTIFY MAIN IDEAS



COMMON CHALLENGE #2
DON'T TRUST THE ANSWERS

On the ACT and SAT Reading questions
you must anticipate and eliminate



COMMON CHALLENGE #3

CONQUER TWO-PASSAGE READING

If you struggle with multiple texts,
save them until the end

ACT TEST PREFERENCE

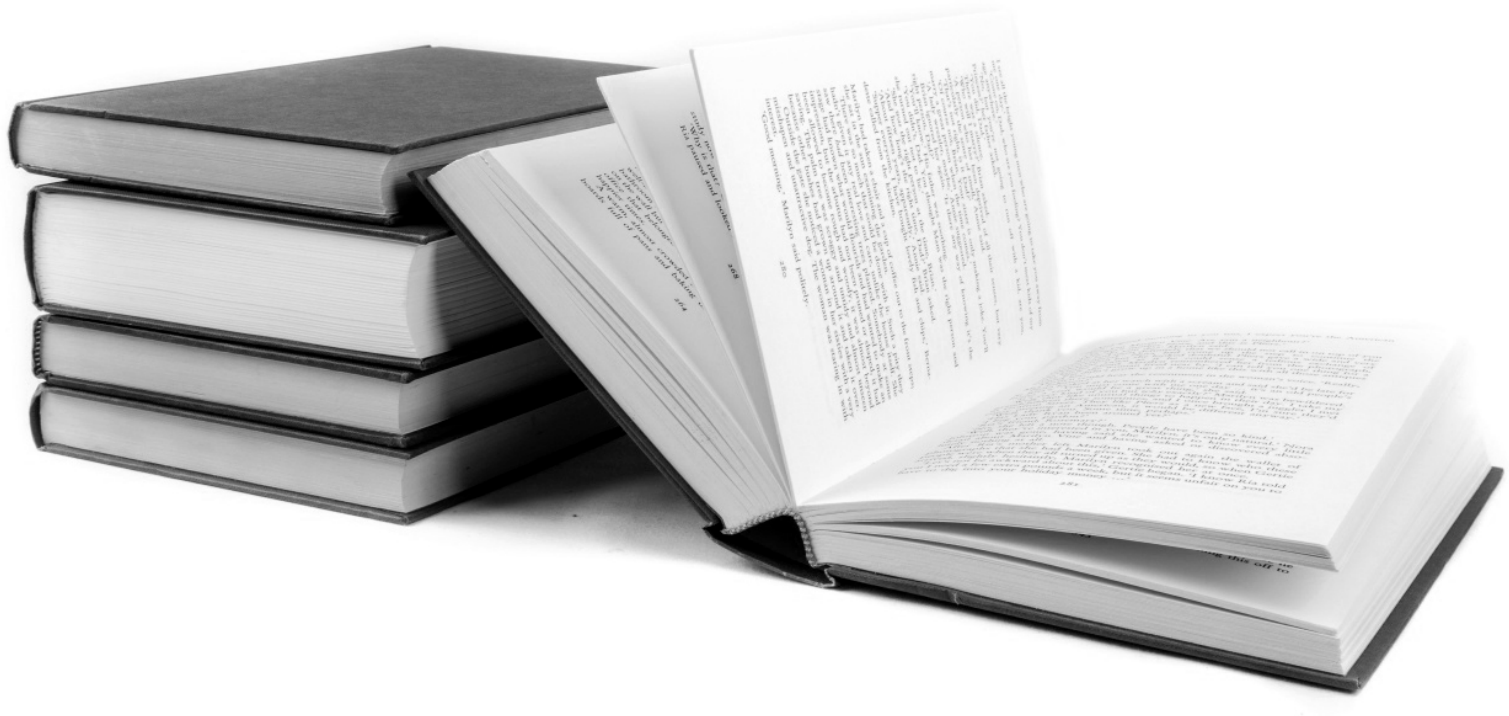
THE STUDENT CAN QUICKLY IDENTIFY MAIN IDEAS

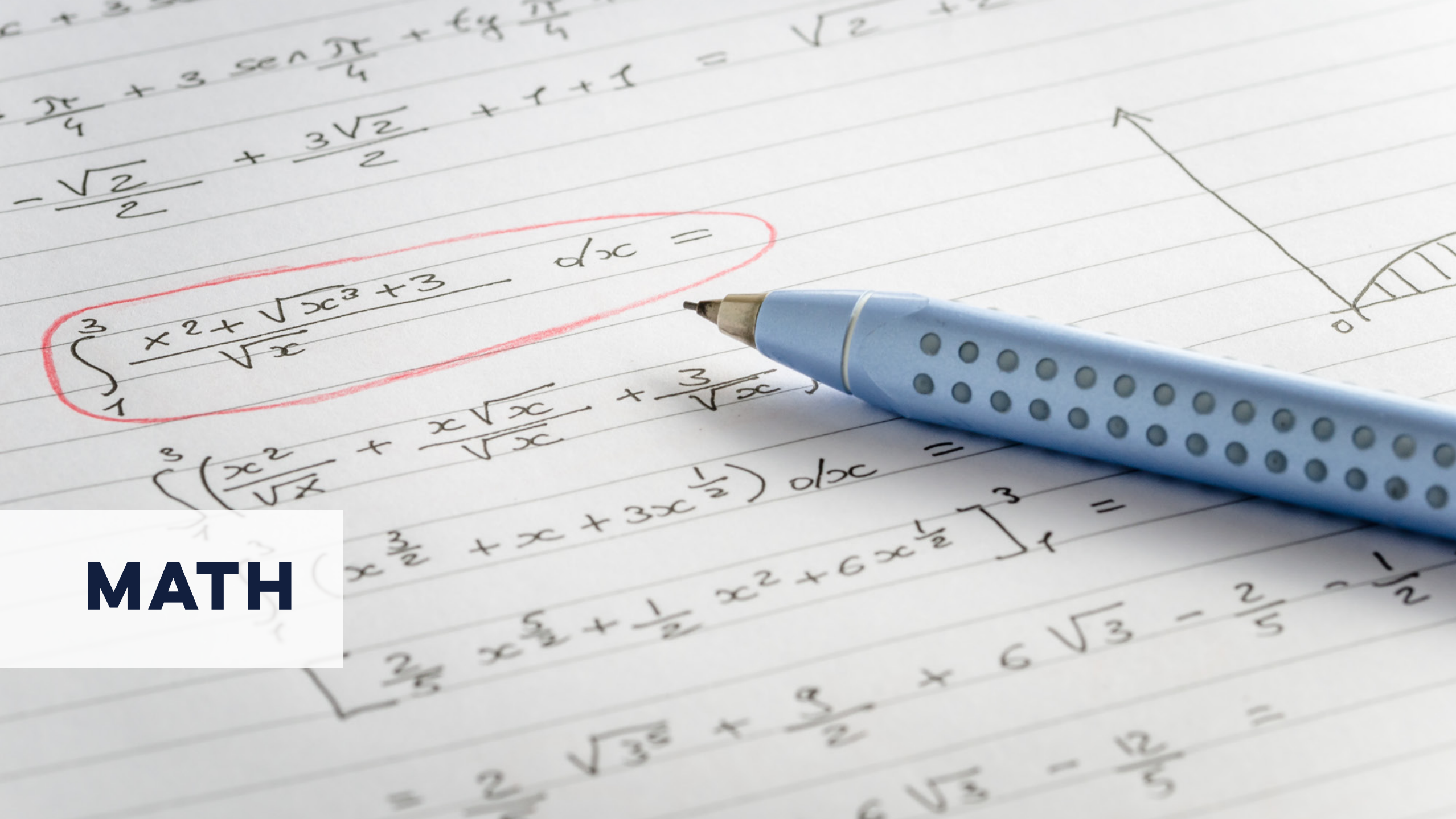


ACT = 9 minutes per passage
SAT = 13 minutes per passage

SAT TEST PREFERENCE

THE STUDENT ENJOYS DENSE MATERIALS




MATH

ACT MATH

TEST 2

60 MINUTES
60 QUESTIONS

Arithmetic and Algebra: 55%

Geometry: 40%

Trigonometry: 5%

SAT MATH

TEST 3 (NO CALCULATOR)
TEST 4 (CALCULATOR)

80 MINUTES
58 QUESTIONS

Arithmetic and Algebra: 85%

Geometry: 10%

Trigonometry: <1%

ACT VS. SAT MATH

EXAMPLES

ACT

2. The monthly fees for single rooms at 5 colleges are $370, $310, $380, $340, and $310, respectively. What is the mean of these monthly fees?

F. $310
G. $340
H. $342
J. $350
K. $380

SAT

35

An online store receives customer satisfaction ratings between 0 and 100, inclusive. In the first 10 ratings the store received, the average (arithmetic mean) of the ratings was 75. What is the least value the store can receive for the 11th rating and still be able to have an average of at least 85 for the first 20 ratings?

COMMON CHALLENGE #1
IDENTIFYING CONCEPTS

ACT

15. This month, Kami sold 70 figurines in 2 sizes. The large figurines sold for $12 each, and the small figurines sold for $8 each. The amount of money he received from the sales of the large figurines was equal to the amount of money he received from the sales of the small figurines. How many large figurines did Kami sell this month?

A. 20
B. 28
C. 35
D. 42
E. 50

16. A car accelerated from 88 feet per second (fps) to 220 fps in exactly 3 seconds. Assuming the acceleration was constant, what was the car's acceleration, in feet per second per second, from 88 fps to 220 fps ?

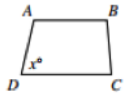
F. $\frac{1}{44}$
G. $29\frac{1}{3}$
H. 44
J. $75\frac{1}{3}$
K. $102\frac{2}{3}$

17. In a plane, the distinct lines $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$ intersect at A, where A is between C and D. The measure of $\angle BAC$ is 47°. What is the measure of $\angle BAD$?

A. 43°
B. 47°
C. 94°
D. 133°
E. 137°

20. For trapezoid $ABCD$ shown below, $\overline{AB} \parallel \overline{DC}$, the measures of the interior angles are distinct, and the measure of $\angle D$ is $x°$. What is the degree measure of $\angle A$ in terms of x ?

F. $(180 - x)°$
G. $(180 - 0.5x)°$
H. $(180 + 0.5x)°$
J. $(180 + x)°$
K. $x°$



21. To get a driver's license, an applicant must pass a written test and a driving test. Past records show that 80% of the applicants pass the written test and 60% of those who have passed the written test pass the driving test. Based on these figures, how many applicants in a random group of 1,000 applicants would you expect to get driver's licenses?

A. 200
B. 480
C. 600
D. 750
E. 800

22. If a, b, and c are positive integers such that $a^b = x$ and $c^b = y$, then $xy =$?

F. ac^b
G. ac^{2b}
H. $(ac)^b$
J. $(ac)^{2b}$
K. $(ac)^{b^2}$

SAT

7

$\sqrt{2x+6} + 4 = x + 3$

What is the solution set of the equation above?

A) {−1}
B) {5}
C) {−1, 5}
D) {0, −1, 5}

8

$f(x) = x^3 - 9x$
$g(x) = x^2 - 2x - 3$

Which of the following expressions is equivalent to $\frac{f(x)}{g(x)}$, for $x > 3$?

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9

$(x-6)^2 + (y+5)^2 = 16$

In the xy-plane, the graph of the equation above is a circle. Point P is on the circle and has coordinates $(10, -5)$. If $\overline{PQ}$ is a diameter of the circle, what are the coordinates of point Q ?

A) (2, −5)
B) (6, −1)
C) (6, −5)
D) (6, −9)

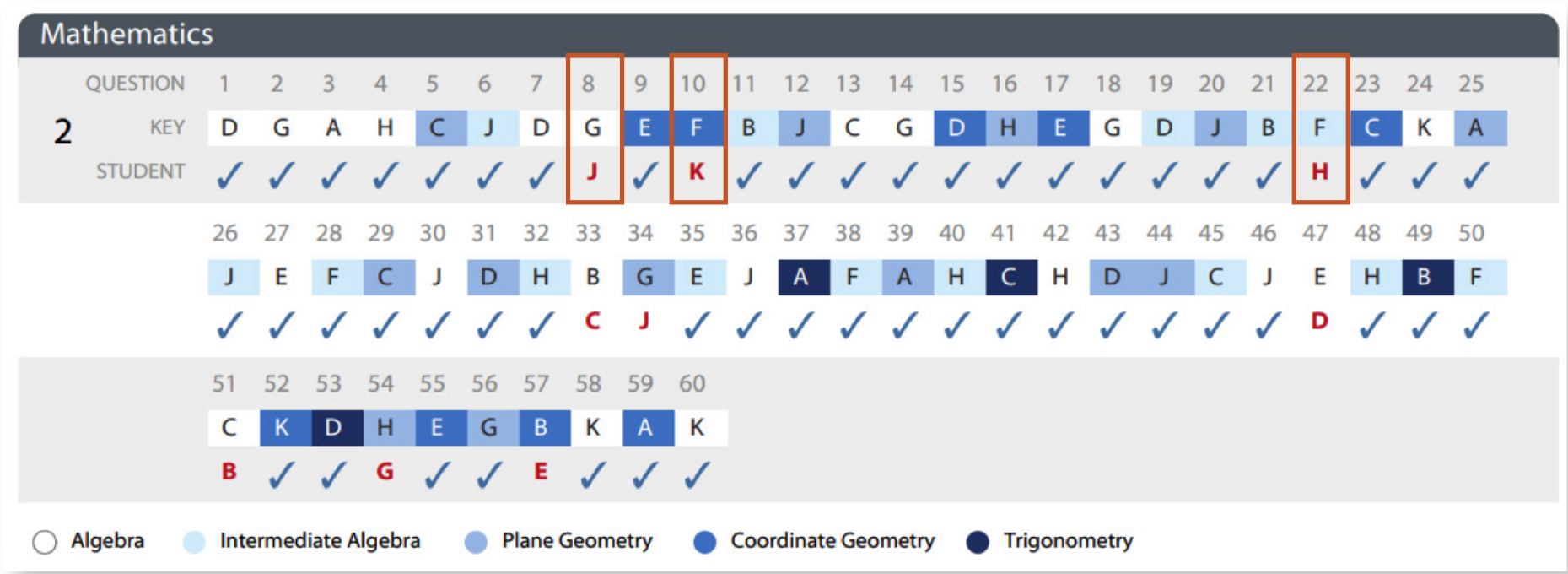
10

A group of 202 people went on an overnight camping trip, taking 60 tents with them. Some of the tents held 2 people each, and the rest held 4 people each. Assuming all the tents were filled to capacity and every person got to sleep in a tent, exactly how many of the tents were 2-person tents?

A) 30
B) 20
C) 19
D) 18

COMMON CHALLENGE #2
AVOIDING CARELESS ERRORS

ACT Score Report (Math)



Mathematics

	QUESTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
2	KEY	D	G	A	H	C	J	D	G	E	F	B	J	C	G	D	H	E	G	D	J	B	F	C	K	A
	STUDENT	✓	✓	✓	✓	✓	✓	✓	J	✓	K	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	H	✓	✓	✓

	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	J	E	F	C	J	D	H	B	G	E	J	A	F	A	H	C	H	D	J	C	J	E	H	B	F
	✓	✓	✓	✓	✓	✓	✓	C	J	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	D	✓	✓	✓

	51	52	53	54	55	56	57	58	59	60
	C	K	D	H	E	G	B	K	A	K
	B	✓	✓	G	✓	✓	E	✓	✓	✓

Algebra Intermediate Algebra Plane Geometry Coordinate Geometry Trigonometry

COMMON CHALLENGE #3
ALGEBRA

ACT

15. This month, Kami sold 70 figurines in 2 sizes. The large figurines sold for $12 each, and the small figurines sold for $8 each. The amount of money he received from the sales of the large figurines was equal to the amount of money he received from the sales of the small figurines. How many large figurines did Kami sell this month?

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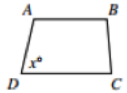

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SAT

7

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A) 30
B) 20
C) 19
D) 18

ACT TEST PREFERENCE

THE STUDENT HAS TAKEN PRE-CALCULUS

Law of Sines

60. The sides of an acute triangle measure 14 cm, 18 cm, and 20 cm, respectively. Which of the following equations, when solved for θ, gives the measure of the smallest angle of the triangle?

(Note: For any triangle with sides of length a, b, and c that are opposite angles A, B, and C, respectively, $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$ and $c^2 = a^2 + b^2 - 2ab \cos C$.)

F. $\frac{\sin \theta}{14} = \frac{1}{18}$

G. $\frac{\sin \theta}{14} = \frac{1}{20}$

H. $\frac{\sin \theta}{20} = \frac{1}{14}$

J. $14^2 = 18^2 + 20^2 - 2(18)(20)\cos \theta$

K. $20^2 = 14^2 + 18^2 - 2(14)(18)\cos \theta$

Geometric Sequence

7. The first term is 1 in the geometric sequence 1, −3, 9, −27, ⋯. What is the SEVENTH term of the geometric sequence?

A. −243
B. −30
C. 81
D. 189
E. 729

Matrices

45. Given that $a\begin{bmatrix} 2 & 6 \\ 1 & 4 \end{bmatrix} = \begin{bmatrix} x & 27 \\ y & z \end{bmatrix}$ for some real number a, what is $x + z$?

A. $\frac{4}{3}$

B. $\frac{27}{2}$

C. 26

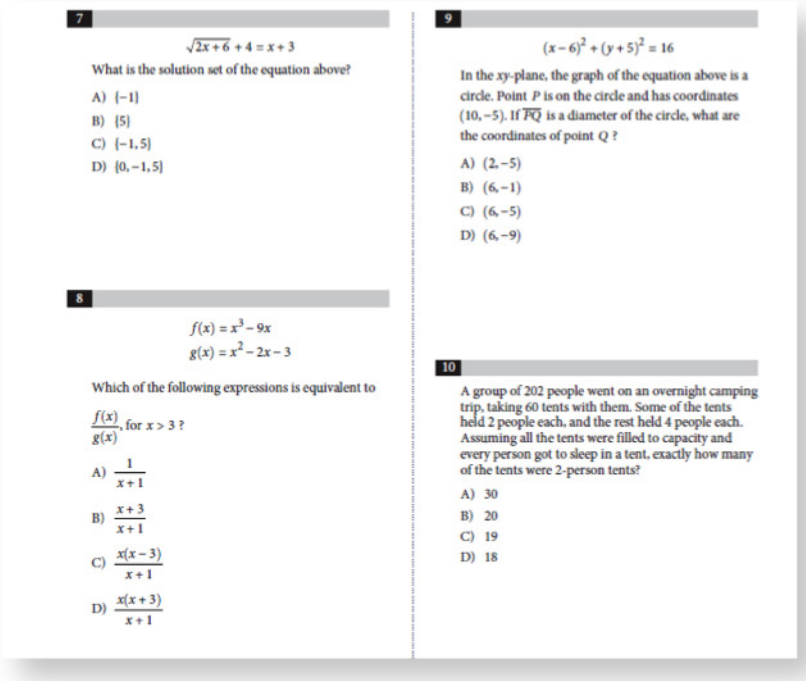
D. 27

E. 48

SAT TEST PREFERENCE

THE STUDENT IS STRONGER IN ALGEBRA THAN GEOMETRY

SAT Math



7

$\sqrt{2x+6}+4=x+3$

What is the solution set of the equation above?

A) $\{-1\}$
B) $\{5\}$
C) $\{-1, 5\}$
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9

$(x-6)^2+(y+5)^2=16$

In the xy-plane, the graph of the equation above is a circle. Point P is on the circle and has coordinates $(10, -5)$. If $\overline{PQ}$ is a diameter of the circle, what are the coordinates of point Q?

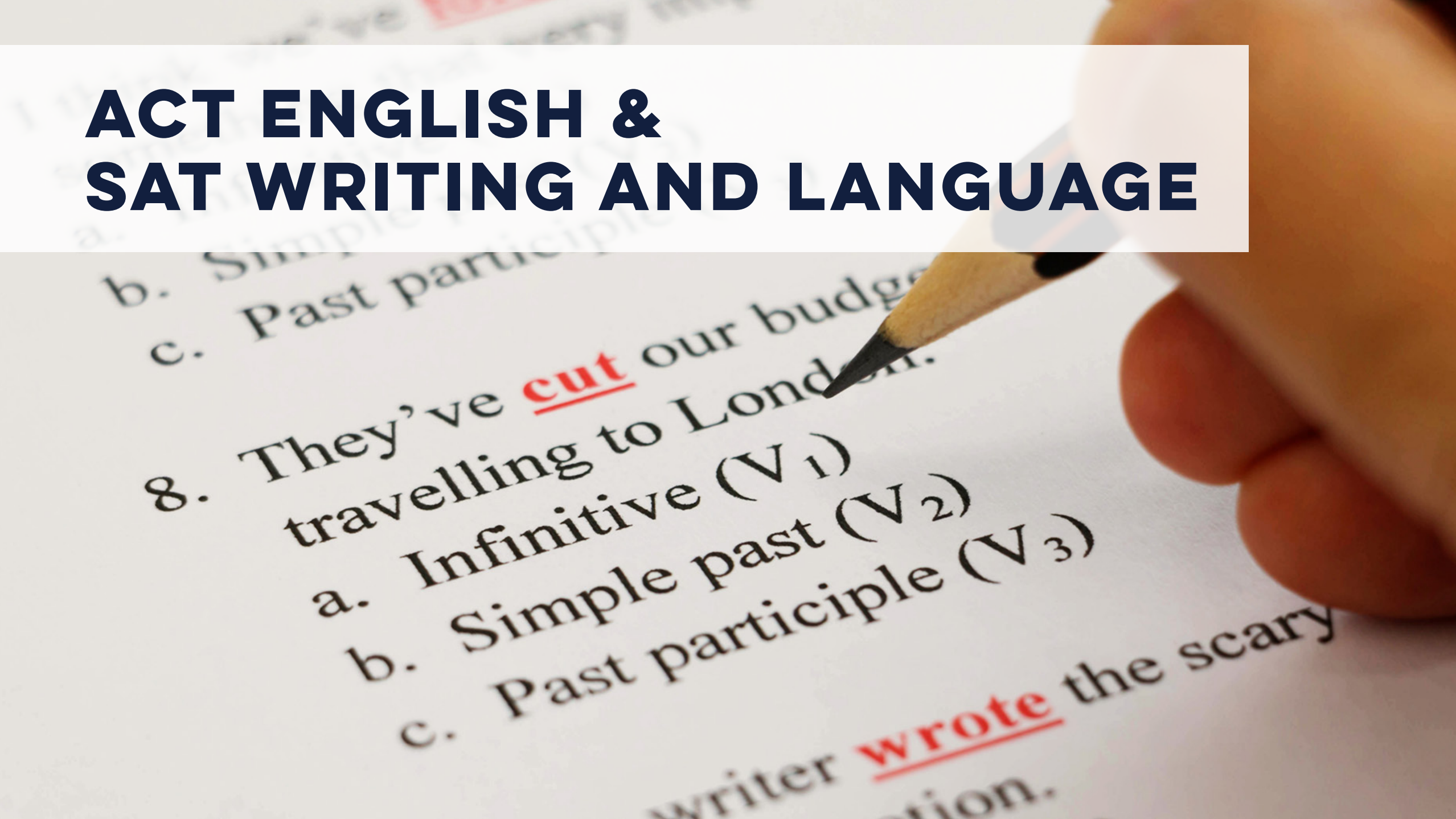
A) $(2, -5)$
B) $(6, -1)$
C) $(6, -5)$
D) $(6, -9)$

10

A group of 202 people went on an overnight camping trip, taking 60 tents with them. Some of the tents held 2 people each, and the rest held 4 people each. Assuming all the tents were filled to capacity and every person got to sleep in a tent, exactly how many of the tents were 2-person tents?

A) 30
B) 20
C) 19
D) 18

ACT ENGLISH & SAT WRITING AND LANGUAGE



ACT ENGLISH

TEST 1

45 MINUTES
75 QUESTIONS

Grammar and Diction: 40%

Main Ideas: 35%

Punctuation: 20%

Words in Context: 5%

SAT WRITING

TEST 2

35 MINUTES
44 QUESTIONS

Grammar and Diction: 40%

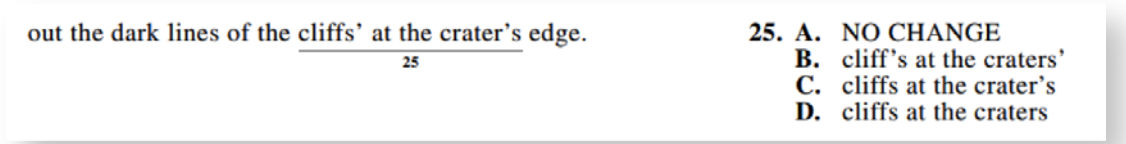
Main Ideas: 25%

Punctuation: 20%

Evaluating Data: 10%

Words in Context: 5%

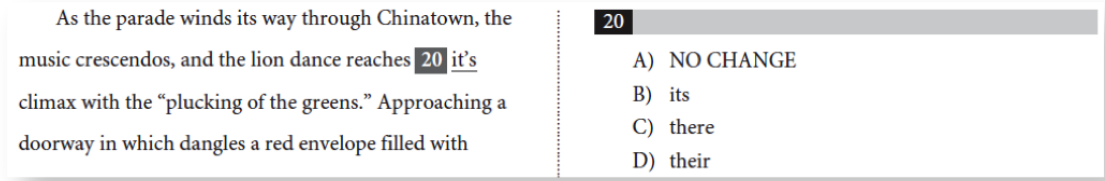
ACT English



out the dark lines of the cliffs' at the crater's edge.
25

25. **A.** NO CHANGE
B. cliff's at the craters'
C. cliffs at the crater's
D. cliffs at the craters

SAT Writing and Language



As the parade winds its way through Chinatown, the music crescendos, and the lion dance reaches 20 it's climax with the "plucking of the greens." Approaching a doorway in which dangles a red envelope filled with

20

A) NO CHANGE
B) its
C) there
D) their

COMMON CHALLENGE #1 **DON'T TRUST YOUR GRAMMAR EAR**

COMMON CHALLENGE #2
PUNCTUATION MATTERS

ACT English

The resulting snowflake has three long sides and three sides that are so short they are difficult to detect. Although these snowflakes appear to have a triangular shape—[12] they actually have a hexagonal pattern. Such snowflakes offer evidence that even when impurities

12. **F.** NO CHANGE
G. shape,
H. shape;
J. shape:

SAT Writing and Language

Champions of court reporting, though, argue the [29] opposite. They argue that with the increased reliance on technology, errors actually increase. Because digital systems record [30] indiscriminately; they cannot discern important parts of the proceedings from other noises in the courtroom. [31] Despite this, a digital device does indeed record everything, but that includes loud noises, such as a book dropping, that can make the actual words spoken impossible to hear. A court reporter, however,

29

Which choice most effectively combines the sentences at the underlined portion?

A) opposite, such
B) opposite—
C) opposite, which is
D) opposite; their opinion is

30

A) NO CHANGE
B) indiscriminately, they
C) indiscriminately. They
D) indiscriminately, therefore they

COMMON CHALLENGE #3
CONNECTING MAIN IDEAS

ACT English

masks that represent comedy and tragedy. [51]

51. The writer is considering adding the following sentence:

Masks figured prominently in classical Greek theater performances, in part due to the fact that one actor would usually play several characters.

Should the writer make this addition here?

A. Yes, because it connects the paragraph's point about theatrical masks to the larger subject of classical Greek theater.
B. Yes, because it explains the masks' significance to classical Greek theater and architecture.
C. No, because it only addresses classical Greek theater and doesn't include information about Roman theater.
D. No, because it deviates from the paragraph's focus on the Lyceum Theatre's architecture.

SAT Writing and Language

Questions 1-11 are based on the following passage and supplementary material.

Compost: Don't Waste This Waste

Over the past generation, people in many parts of the United States have become accustomed to dividing their household waste products into different categories for recycling. [1] Regardless, paper may go in one container, glass and aluminum in another, regular garbage in a third. Recently, some US cities have added a new

1

A) NO CHANGE
B) However,
C) Furthermore,
D) For example,

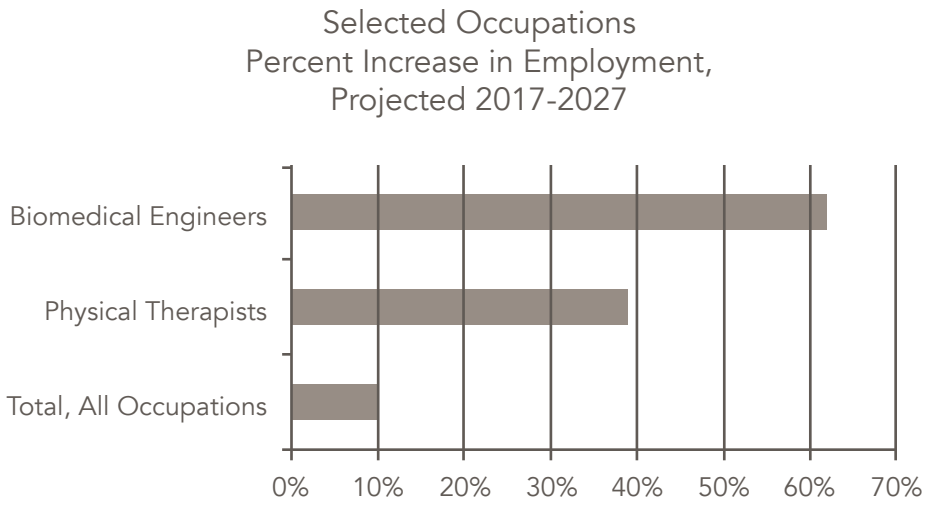
ACT TEST PREFERENCE

THE STUDENT CAN MAINTAIN FOCUS FOR 75 QUESTIONS



SAT TEST PREFERENCE

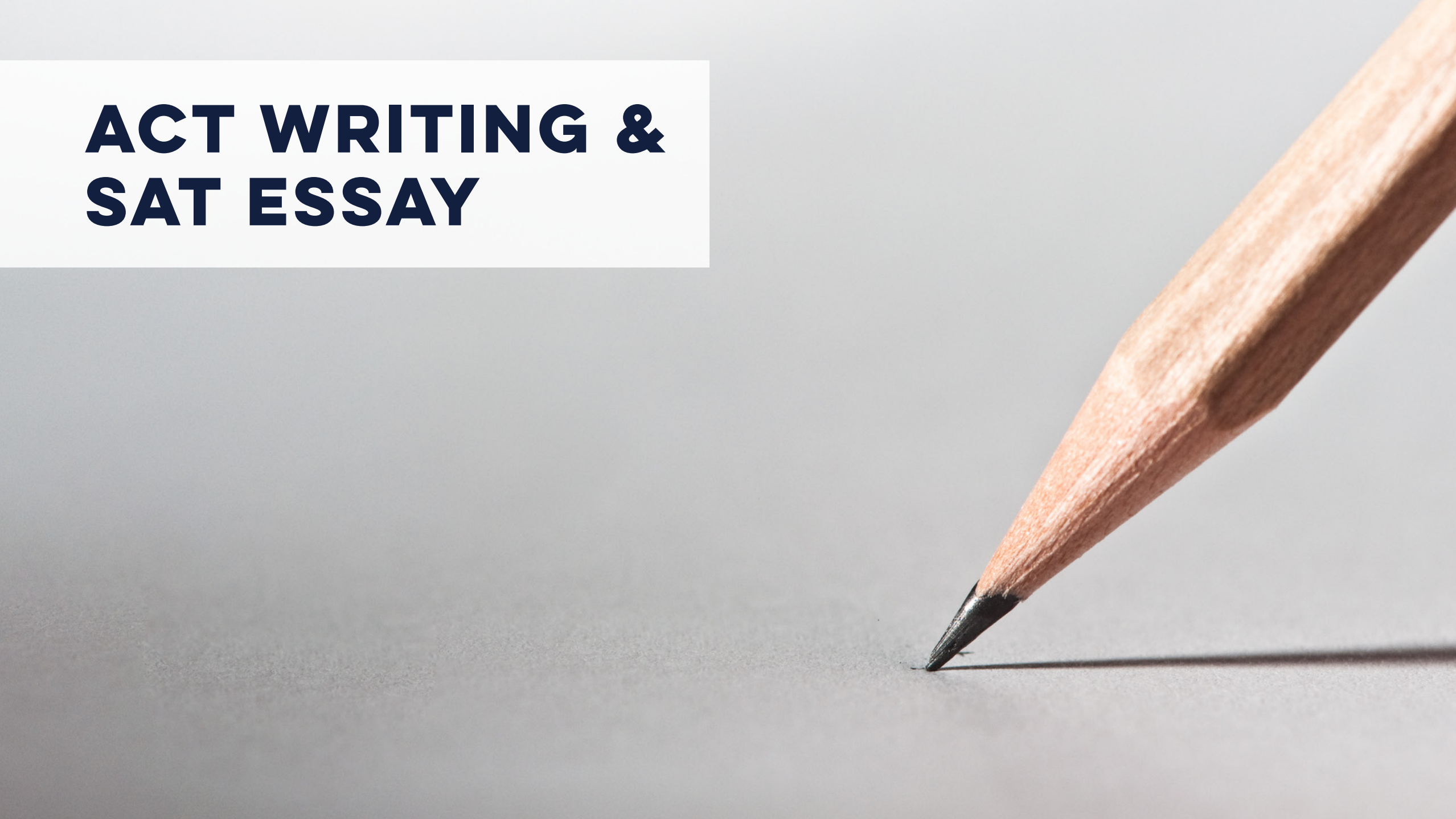
THE STUDENT IS NOT INTIMIDATED BY DATA



Which choice provides accurate data based on the graph?

A) The job of physical therapist will grow faster from 2017 to 2027 than it did from 2006 to 2016.
B) The job of biomedical engineer will be the fastest-growing job of all occupations from 2017 to 2027.
C) The job of physical therapist will grow faster than the job of biomedical engineer from 2017 to 2027.
D) The job of physical therapist will grow faster than the average of all occupations from 2017 to 2027.

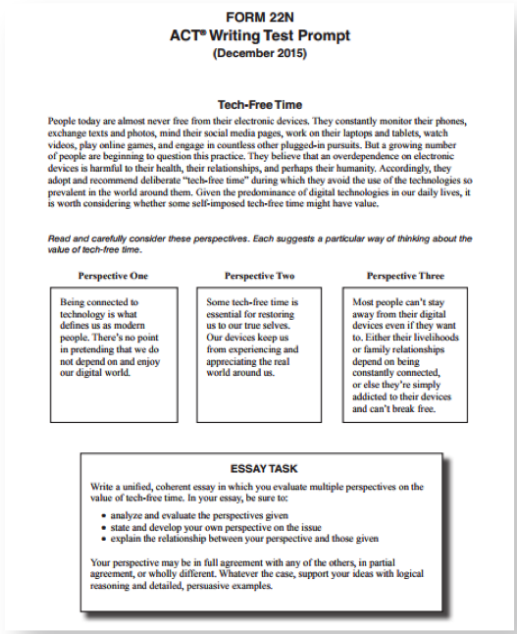
ACT WRITING & SAT ESSAY



ACT WRITING

TEST 5 (MAX SCORE = 12)

40 MINUTES
1 PROMPT



FORM 22N
ACT® Writing Test Prompt
(December 2015)

Tech-Free Time

People today are almost never free from their electronic devices. They constantly monitor their phones, exchange texts and photos, mind their social media pages, work on their laptops and tablets, watch videos, play online games, and engage in countless other plugged-in pursuits. But a growing number of people are beginning to question this practice. They believe that an overdependence on electronic devices is harmful to their health, their relationships, and perhaps their humanity. Accordingly, they adopt and recommend deliberate "tech-free time" during which they avoid the use of the technologies so prevalent in the world around them. Given the predominance of digital technologies in our daily lives, it is worth considering whether some self-imposed tech-free time might have value.

Read and carefully consider these perspectives. Each suggests a particular way of thinking about the value of tech-free time.

Perspective One

Being connected to technology is what defines us as modern people. There's no point in pretending that we do not depend on and enjoy our digital world.

Perspective Two

Some tech-free time is essential for restoring us to our true selves. Our devices keep us from experiencing and appreciating the real world around us.

Perspective Three

Most people can't stay away from their digital devices even if they want to. Either their livelihoods or family relationships depend on being constantly connected, or else they're simply addicted to their devices and can't break free.

ESSAY TASK

Write a unified, coherent essay in which you evaluate multiple perspectives on the value of tech-free time. In your essay, be sure to:

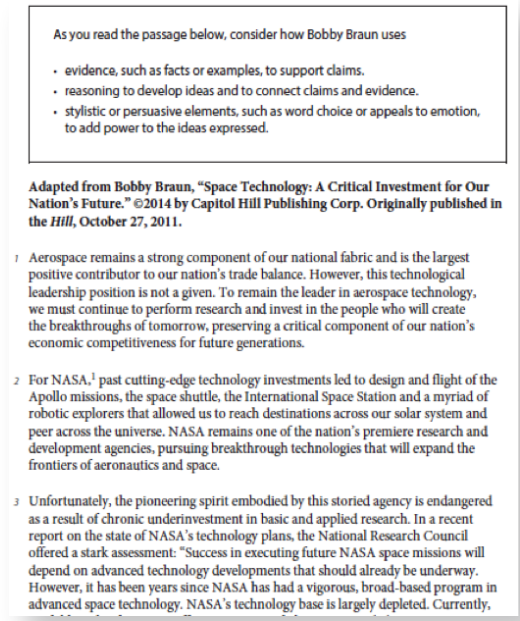
- analyze and evaluate the perspectives given
- state and develop your own perspective on the issue
- explain the relationship between your perspective and those given

Your perspective may be in full agreement with any of the others, in partial agreement, or wholly different. Whatever the case, support your ideas with logical reasoning and detailed, persuasive examples.

SAT ESSAY

TEST 5 (MAX SCORE = 24)

50 MINUTES
1 PROMPT



As you read the passage below, consider how Bobby Braun uses

- evidence, such as facts or examples, to support claims.
- reasoning to develop ideas and to connect claims and evidence.
- stylistic or persuasive elements, such as word choice or appeals to emotion, to add power to the ideas expressed.

Adapted from Bobby Braun, "Space Technology: A Critical Investment for Our Nation's Future." ©2014 by Capitol Hill Publishing Corp. Originally published in the *Hill*, October 27, 2011.

1 Aerospace remains a strong component of our national fabric and is the largest positive contributor to our nation's trade balance. However, this technological leadership position is not a given. To remain the leader in aerospace technology, we must continue to perform research and invest in the people who will create the breakthroughs of tomorrow, preserving a critical component of our nation's economic competitiveness for future generations.

2 For NASA,[1] past cutting-edge technology investments led to design and flight of the Apollo missions, the space shuttle, the International Space Station and a myriad of robotic explorers that allowed us to reach destinations across our solar system and peer across the universe. NASA remains one of the nation's premiere research and development agencies, pursuing breakthrough technologies that will expand the frontiers of aeronautics and space.

3 Unfortunately, the pioneering spirit embodied by this storied agency is endangered as a result of chronic underinvestment in basic and applied research. In a recent report on the state of NASA's technology plans, the National Research Council offered a stark assessment: "Success in executing future NASA space missions will depend on advanced technology developments that should already be underway. However, it has been years since NASA has had a vigorous, broad-based program in advanced space technology. NASA's technology base is largely depleted. Currently,



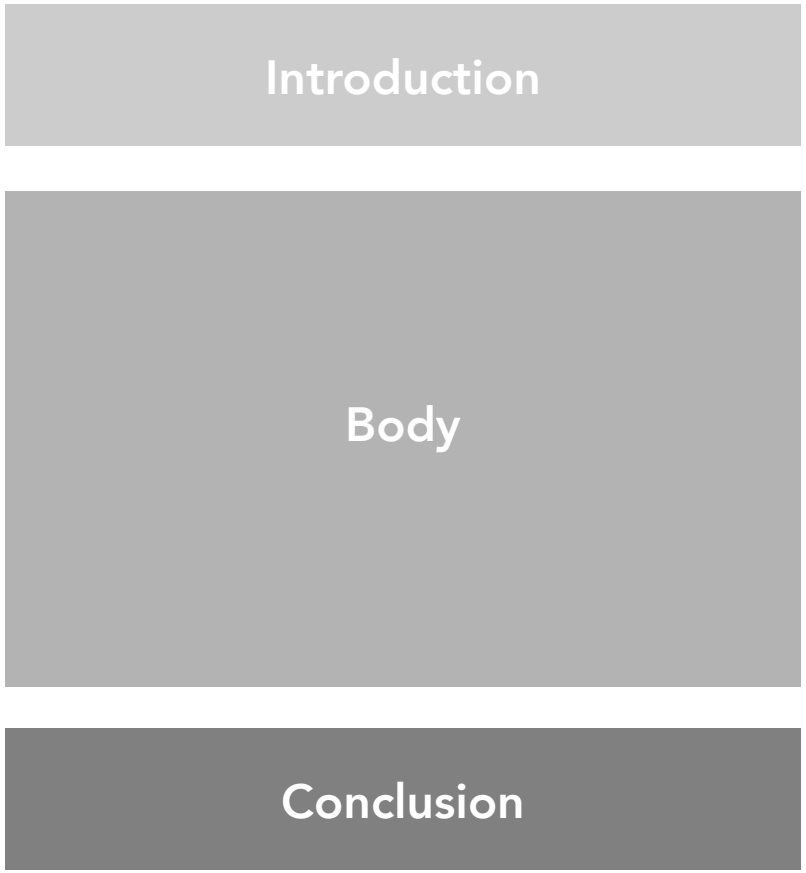
COMMON CHALLENGE #1

THE GRADERS SPEND LITTLE TIME LOOKING AT YOUR ESSAY

So your writing needs to be
clear and direct

COMMON CHALLENGE #2
TAKE TIME TO BRAINSTORM

ETHOS	LOGOS	PATHOS	FIGURATIVE LANGUAGE



COMMON CHALLENGE #3

USE I-B-C STRUCTURE

ACT TEST PREFERENCE

YOU CAN WRITE A STRONG PERSUASIVE ESSAY



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J'Accuse...!

LETTRE AU PRÉSIDENT DE LA RÉPUBLIQUE

Par ÉMILE ZOLA

LETTRE

A M. FÉLIX FAURE

Président de la République

Monsieur le Président,

Me permettez-vous, dans ma gratitude pour le bienveillant accueil que vous m'avez fait un jour, d'avoir le souci de votre juste gloire et de vous

lieu, des papiers disparaissaient, comme il en disparaît aujourd'hui encore; et l'auteur du bordereau était recherché, lorsqu'un *a priori* se fit peu à peu que cet auteur ne pouvait être qu'un officier de l'état-major, et un officier d'artillerie : double erreur manifeste, qui montre avec quel esprit superficiel on avait étudié ce bordereau, car un examen raisonné démontre qu'il ne pouvait s'agir que d'un officier de troupe. On cherchait donc dans la maison, on examinait les écritures, c'était comme une affaire de famille, un traître à surprendre

Est-ce donc vrai, les choses indicibles, les choses dangereuses, capables de mettre l'Europe en flammes, qu'on a dû enterrer soigneusement derrière ce huis clos? Non! il n'y a eu, derrière, que les imaginations romanesques et démentes du commandant du Paty de Clam. Tout cela n'a été fait que pour cacher le plus saugrenu des romans-feuilletons. Et il suffit, pour s'en assurer, d'étudier attentivement l'acte d'accusation lu devant le conseil de guerre.

Ah! le néant de cet acte d'accusation! Qu'un homme ait pu être condamné sur cet acte, c'est un prodige

profondément, s'inquiètent, cherchent, finissent par se convaincre de l'innocence de Dreyfus.

Je ne ferai pas l'historique des doutes, puis de la conviction de M. Scheurer Kestner. Mais, pendant qu'il fouillait de son côté, il se passait des faits graves à l'état-major même. Le colonel Sandherr était mort, et le lieutenant-colonel Picquart lui avait succédé comme chef du bureau des renseignements. Et c'est à ce titre, dans l'exercice de ses fonctions, que ce dernier eut un jour entre les mains une lettre-télégramme, adressée au

avec lui une correspondance amicale. Seulement, il est des secrets qu'il ne fait pas bon d'avoir surpris.

A Paris, la vérité marchait, irrésistible, et l'on sait de quelle façon l'orage attendu éclata. M. Mathieu Dreyfus dénonça le commandant Esterhazy comme le véritable auteur du bordereau, au moment où M. Scheurer-Kestner allait déposer, entre les mains du garde des sceaux, une demande en revision du procès. Et c'est ici que le commandant Esterhazy paraît. Des témoignages le montrent d'abord affolé, prêt au suicide ou à la fuite.

conseil de guerre déferait ce qu'un conseil de guerre avait fait?

Je ne parle même pas du choix toujours possible des juges. L'idée supérieure de discipline, qui est dans le sang de ces soldats, ne suffit-elle à infirmer leur pouvoir même d'équité? Qui dit discipline dit obéissance.

Lorsque le ministère de la guerre, le grand chef, a établi publiquement, aux acclamations de la représentation nationale, l'autorité absolue de la chose jugée, vous voulez qu'un conseil de guerre lui donne un formel démenti? Hiérarchiquement, cela est impossible.

SAT TEST PREFERENCE

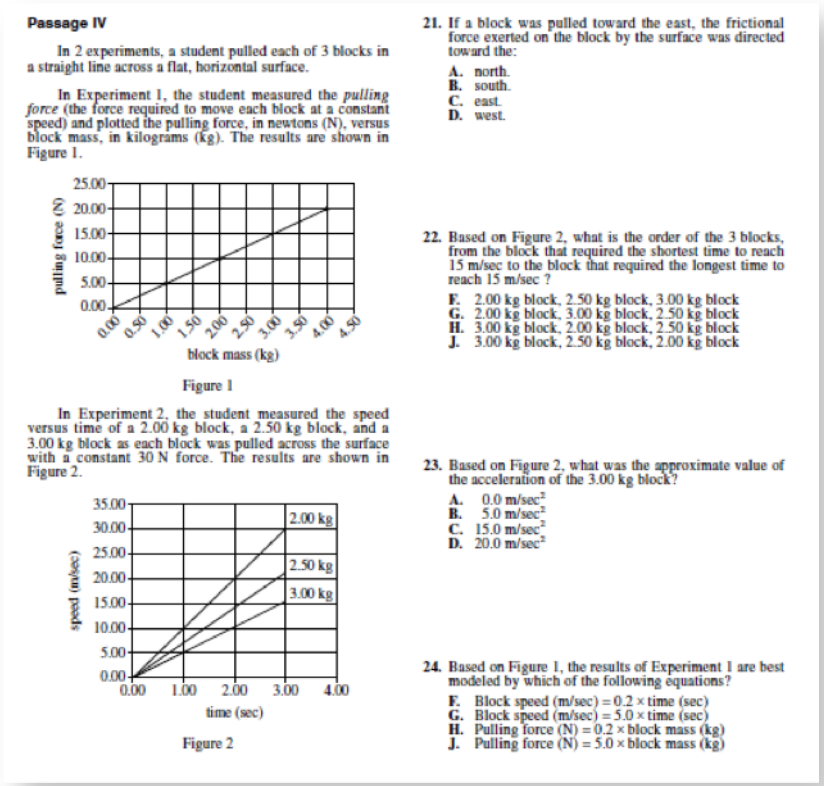
YOU KNOW YOUR RHETORIC



ETHOS (personal credibility)
LOGOS (logic and reason)
PATHOS (emotion)
FIGURATIVE LANGUAGE

ACT SCIENCE





Passage IV

In 2 experiments, a student pulled each of 3 blocks in a straight line across a flat, horizontal surface.

In Experiment 1, the student measured the *pulling force* (the force required to move each block at a constant speed) and plotted the pulling force, in newtons (N), versus block mass, in kilograms (kg). The results are shown in Figure 1.

Figure 1

In Experiment 2, the student measured the speed versus time of a 2.00 kg block, a 2.50 kg block, and a 3.00 kg block as each block was pulled across the surface with a constant 30 N force. The results are shown in Figure 2.

Figure 2

21. If a block was pulled toward the east, the frictional force exerted on the block by the surface was directed toward the:

A. north.
B. south.
C. east.
D. west.

22. Based on Figure 2, what is the order of the 3 blocks, from the block that required the shortest time to reach 15 m/sec to the block that required the longest time to reach 15 m/sec ?

F. 2.00 kg block, 2.50 kg block, 3.00 kg block
G. 2.00 kg block, 3.00 kg block, 2.50 kg block
H. 3.00 kg block, 2.00 kg block, 2.50 kg block
J. 3.00 kg block, 2.50 kg block, 2.00 kg block

23. Based on Figure 2, what was the approximate value of the acceleration of the 3.00 kg block?

A. 0.0 m/sec^2
B. 5.0 m/sec^2
C. 15.0 m/sec^2
D. 20.0 m/sec^2

24. Based on Figure 1, the results of Experiment 1 are best modeled by which of the following equations?

F. Block speed (m/sec) = 0.2 × time (sec)
G. Block speed (m/sec) = 5.0 × time (sec)
H. Pulling force (N) = 0.2 × block mass (kg)
J. Pulling force (N) = 5.0 × block mass (kg)

ACT SCIENCE

TEST 4

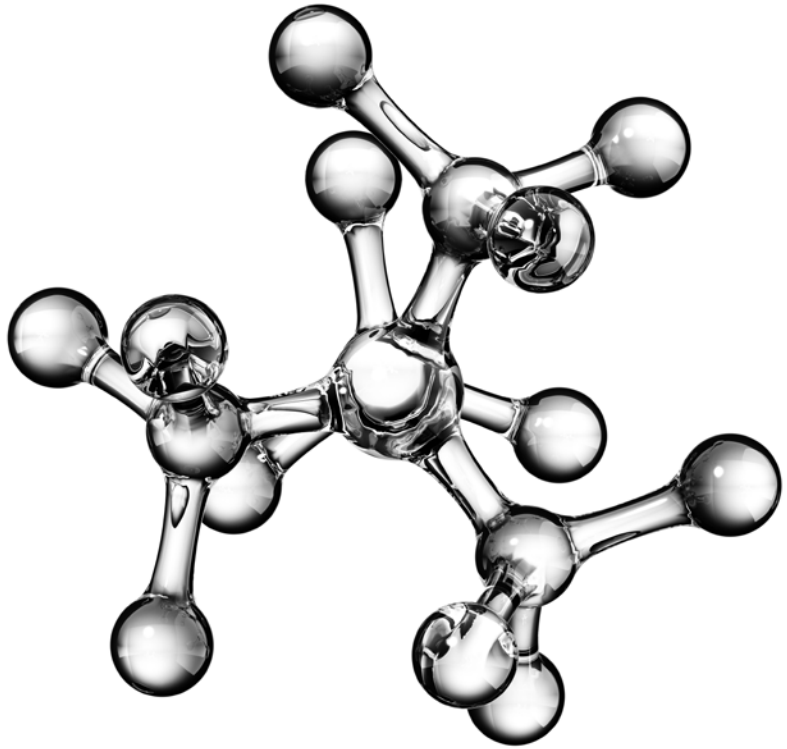
35 MINUTES
40 QUESTIONS

Six or Seven Total Passages

Charts and Graphs: 3 or 4 passages
One experiment, with given data

Multiple Experiments: 3 or 4 passages
More than one experiment, with given data

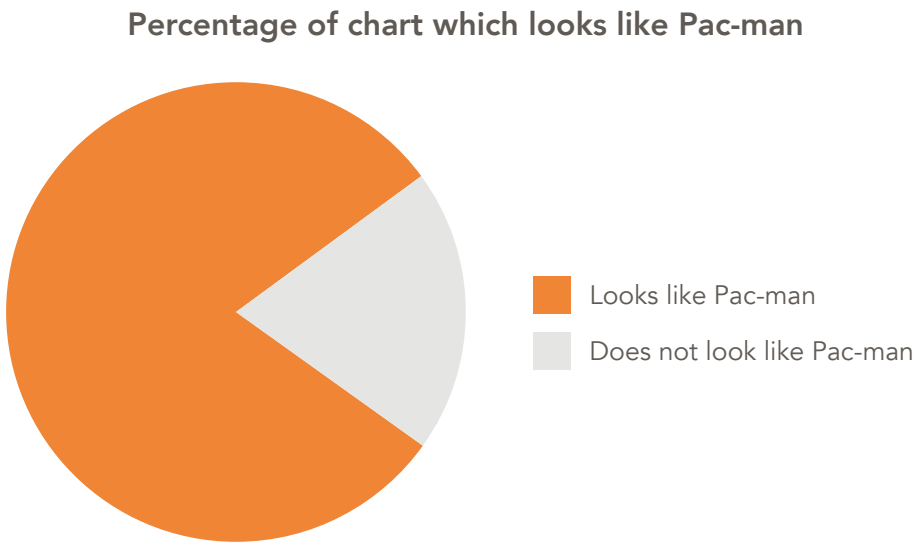
Conflicting Viewpoints: 0 or 1 passages
More than one experiment, no given data



ACT SCIENCE TIP #1

ACT SCIENCE IS NOT REALLY ABOUT SCIENCE

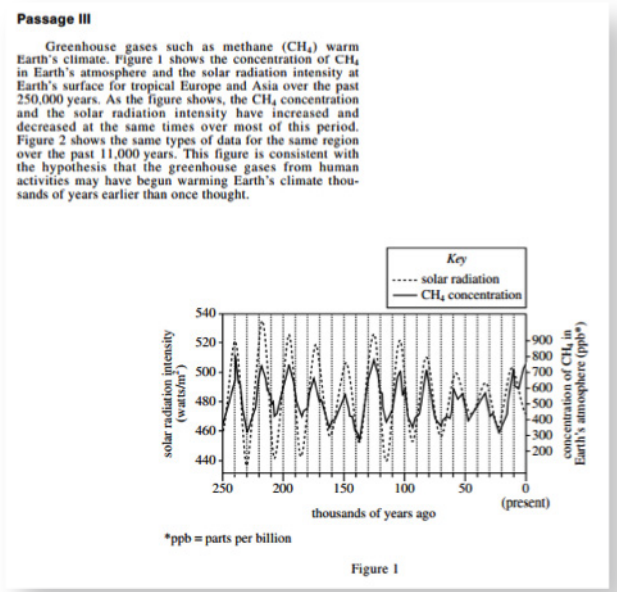
Only ~2 questions require outside science knowledge



ACT SCIENCE TIP #2

IDENTIFY SIMPLE TRENDS IN THE DATA

Don’t get lost in facts and figures



Passage III

Greenhouse gases such as methane (CH_4) warm Earth's climate. Figure 1 shows the concentration of CH_4 in Earth's atmosphere and the solar radiation intensity at Earth's surface for tropical Europe and Asia over the past 250,000 years. As the figure shows, the CH_4 concentration and the solar radiation intensity have increased and decreased at the same times over most of this period. Figure 2 shows the same types of data for the same region over the past 11,000 years. This figure is consistent with the hypothesis that the greenhouse gases from human activities may have begun warming Earth's climate thousands of years earlier than once thought.

Figure 1

ACT SCIENCE TIP #3

DO CHARTS AND GRAPHS PASSAGES FIRST

Chart and graphs passages have **the easiest questions**

ACT SCIENCE

EXAMPLE

Passage I

Cats and humans have coexisted for thousands of years. Because of the close relationship that can develop between cats and humans, humans can sometimes develop cat scratch disease (CSD). It is a bacterial disease caused by the spread of *Bartonella henselae* from a cat to a human via a scratch or bite (traumatic cat contact). About 40% of cats carry *B. henselae* at some point in their lives. These cats do not show any signs of illness, which makes it impossible to determine which cats can spread CSD. While CSD rarely proves fatal, it can result in several painful and potentially dangerous symptoms. Table 1 shows some symptoms and their onset and typical duration.

Table 1

Symptom	Onset	Typical Duration
Infection at the site of scratch or bite	3-30 days after contact	1-4 weeks
Prolonged fever	5-30 days after contact	1-2 weeks
Swollen lymph nodes	7-30 days after contact	4-8 weeks
Fatigue	7-30 days after contact	3-4 weeks

On the basis of the data in Table 1, if a person were infected with *B. henselae* after traumatic cat contact, one would predict that symptoms would begin appearing:

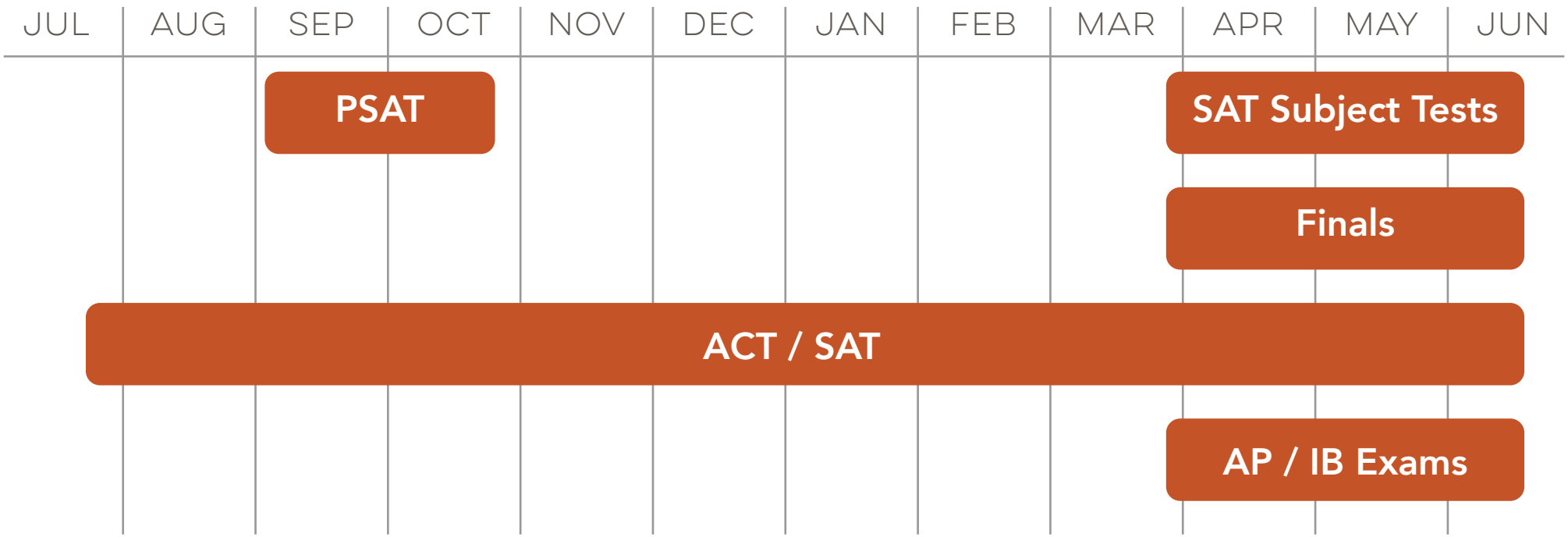
A. after 6 weeks.
B. within 30 days.
C. after 1 day.
D. immediately.

NEXT STEPS



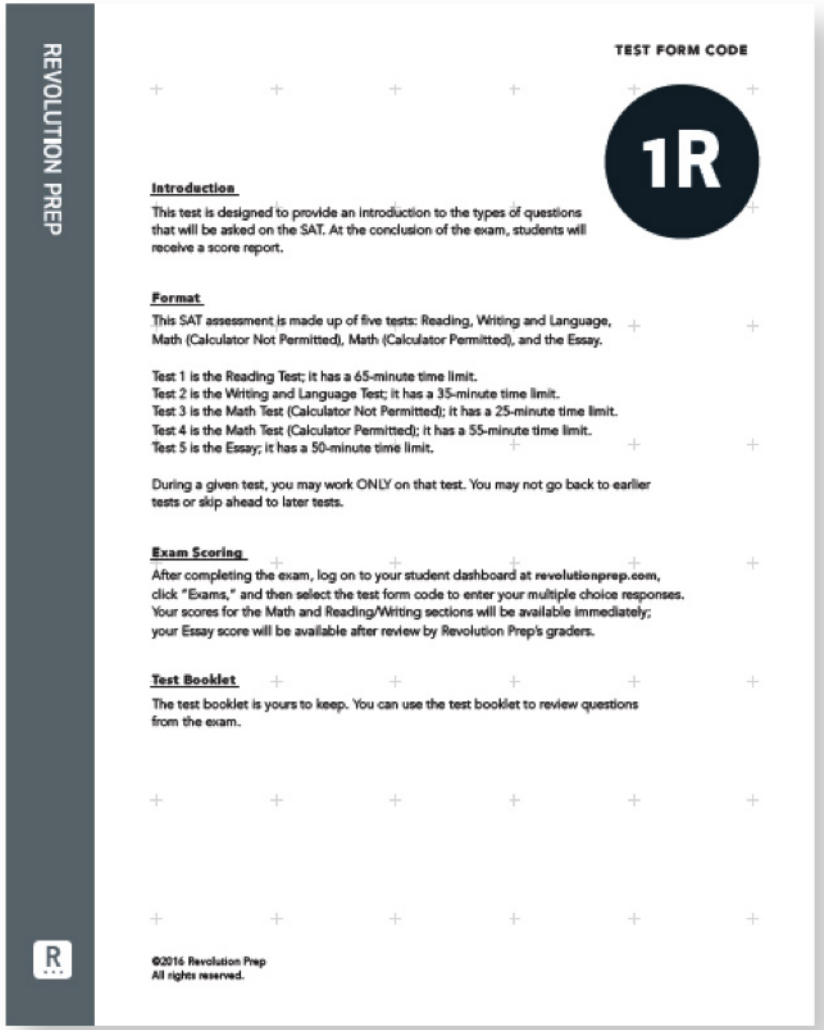
PLANNING AHEAD IS CRITICAL

JUNIOR YEAR



SCHOOL	25TH PERCENTILE (SAT/ACT)	75TH PERCENTILE (SAT/ACT)
Columbia	1470/32	1590/35
DePauw	1140/25	1350/29
Duke	1440/32	1570/35
Emory	1360/30	1520/34
Florida State	1210/25	1360/29
Harvard	1470/32	1600/35
Middlebury	1360/29	1540/33
New York University	1340/28	1510/32
Northwestern	1450/31	1570/35
Notre Dame	1410/32	1550/34
Stanford	1450/31	1590/35
St Lawrence	1180/26	1380/30
University of California - Berkeley	1280/30	1530/34
United States Naval Academy	1250/26	1450/32
University of Florida	1250/25	1420/31
University of Miami	1270/28	1450/34
University of Virginia	1330/28	1510/34
Vanderbilt	1480/31	1590/35
Virginia Military Institute	1120/23	1300/27
Virginia Tech	1180/24	1380/29

DEFINE YOUR **GOAL SCORE**



REVOLUTION PREP

TEST FORM CODE

1R

Introduction

This test is designed to provide an introduction to the types of questions that will be asked on the SAT. At the conclusion of the exam, students will receive a score report.

Format

This SAT assessment is made up of five tests: Reading, Writing and Language, Math (Calculator Not Permitted), Math (Calculator Permitted), and the Essay.

Test 1 is the Reading Test; it has a 65-minute time limit.
Test 2 is the Writing and Language Test; it has a 35-minute time limit.
Test 3 is the Math Test (Calculator Not Permitted); it has a 25-minute time limit.
Test 4 is the Math Test (Calculator Permitted); it has a 55-minute time limit.
Test 5 is the Essay; it has a 50-minute time limit.

During a given test, you may work ONLY on that test. You may not go back to earlier tests or skip ahead to later tests.

Exam Scoring

After completing the exam, log on to your student dashboard at **revolutionprep.com**, click "Exams," and then select the test form code to enter your multiple choice responses. Your scores for the Math and Reading/Writing sections will be available immediately; your Essay score will be available after review by Revolution Prep's graders.

Test Booklet

The test booklet is yours to keep. You can use the test booklet to review questions from the exam.

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DETERMINE YOUR **STARTING SCORE**

TAKE EXAMS AT AN
ADVANTAGEOUS TIME

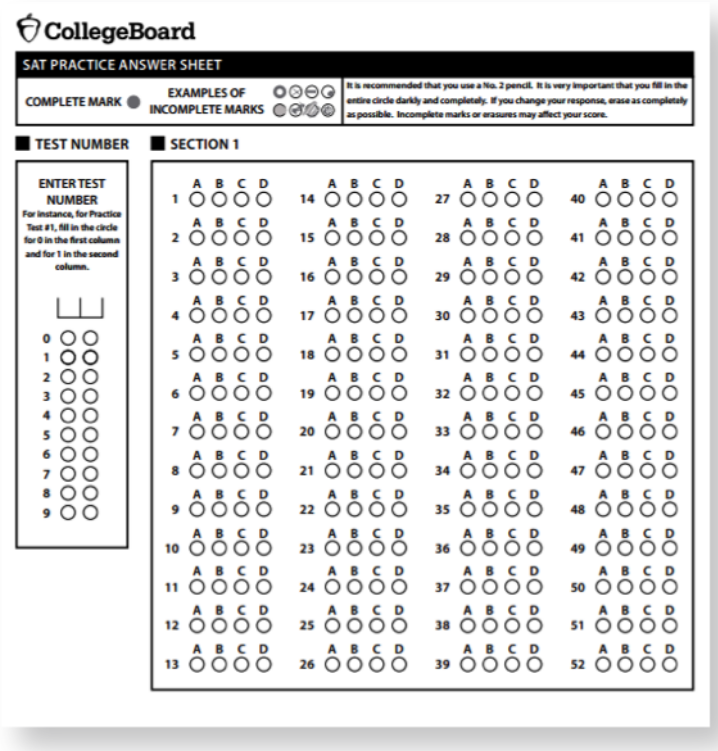
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
ACT		✓		✓		✓	✓		✓	✓		✓
SAT			✓		✓	✓		✓		✓	✓	✓

As of the 2017-2018 school year, The ACT and SAT are both offered seven times during the year.

= Question and Answer Service

TAKE THE ACT OR SAT

AT LEAST TWICE



- A majority of students score higher the second time they take the ACT and SAT
- Plan ahead
- Use results from the first exam to inform your preparation

FIND OUT IF YOU NEED TO TAKE
SAT SUBJECT TESTS

REQUIRED	RECOMMENDED	OPTIONAL
~25 highly selective universities	~20 highly selective universities	~40 highly selective universities
Brown	Columbia	Bowdoin
CalTech	Dartmouth	Carleton
Cornell	Duke	Oberlin
Harvard	Princeton	Swarthmore
Northwestern (Some Programs)	UCLA (Some Programs)	Wesleyan

CHOOSING THE RIGHT

SAT SUBJECT TEST



- Goal schools may ask for specific tests
- Students can be prepared to take Subject Tests as early as Freshman year
- Take AP exams and Subject Tests around the same time

APPROACH THE PROCESS

WITH A GROWTH MINDSET

I can learn anything I want to.
When I'm frustrated, I persevere.
I want to challenge myself.
When I fail, I learn.
Tell me I try hard.
If you succeed, I'm inspired.
My effort and attitude
determine everything.



I'm either good at it, or I'm not.
When I'm frustrated, I give up.
I don't like to be challenged.
When I fail, I'm no good.
Tell me I'm smart.
If you succeed, I feel threatened.
My abilities determine everything.

KNOW YOUR
PREPARATION OPTIONS



SELF STUDY



TAKE A CLASS



WORK WITH A TUTOR

ANY

QUESTIONS




REVOLUTION PREP