Form Codes AEDB, BWDB, CFDB

SAT Reasoning Test™

Question-and-Answer Service
May 2007 Administration

INSIDE:

- Test questions and correct answers
- The difficulty level for each question
- Your essay prompt and all other essay prompts administered on your test day
- Instructions for scoring your test
- Suggestions for using this report to understand your strengths and weaknesses

Not for reproduction and resale.

© 2007 The College Board. All rights reserved. College Board, SAT, and the acorn logo are registered trademarks of the College Board. connect to college success, SAT Preparation Center, and SAT Reasoning Test are trademarks owned by the College Board.

CollegeBoard SAT
connect to college success™

Unauthorized copying or reuse of any part of this page is illegal.

ESSAY
Time — 25 minutes

The essay gives you an opportunity to show how effectively you can develop and express ideas. You should, therefore, take care to develop your point of view, present your ideas logically and clearly, and use language precisely.

Your essay must be written on the lines provided on your answer sheet—you will receive no other paper on which to write. You will have enough space if you write on every line, avoid wide margins, and keep your handwriting to a reasonable size. Remember that people who are not familiar with your handwriting will read what you write. Try to write or print so that what you are writing is legible to those readers.

Important Reminders:

- **A pencil is required for the essay.** An essay written in ink will receive a score of zero.
- **Do not write your essay in your test book.** You will receive credit only for what you write on your answer sheet.
- **An off-topic essay will receive a score of zero.**

You have twenty-five minutes to write an essay on the topic assigned below.

Think carefully about the issue presented in the following excerpt and the assignment below.

> Materialism: it's the thing that everybody loves to hate. Few aspects of modern life have been more criticized than materialism. But let's face it: materialism—acquiring possessions and spending money—is a vital source of meaning and happiness in our time. People may criticize modern society for being too materialistic, but the fact remains that most of us spend most of our energy producing and consuming more and more stuff.
>
> Adapted from James Twitchell, "Two Cheers for Materialism"

Assignment: Should modern society be criticized for being materialistic? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

BEGIN WRITING YOUR ESSAY ON PAGE 2 OF THE ANSWER SHEET.

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.

Unauthorized copying or reuse of any part of this page is illegal.

ESSAY

Time — 25 minutes

The essay gives you an opportunity to show how effectively you can develop and express ideas. You should, therefore, take care to develop your point of view, present your ideas logically and clearly, and use language precisely.

Your essay must be written on the lines provided on your answer sheet—you will receive no other paper on which to write. You will have enough space if you write on every line, avoid wide margins, and keep your handwriting to a reasonable size. Remember that people who are not familiar with your handwriting will read what you write. Try to write or print so that what you are writing is legible to those readers.

Important Reminders:

- **A pencil is required for the essay.** An essay written in ink will receive a score of zero.
- **Do not write your essay in your test book.** You will receive credit only for what you write on your answer sheet.
- **An off-topic essay will receive a score of zero.**

You have twenty-five minutes to write an essay on the topic assigned below.

Think carefully about the issue presented in the following excerpt and the assignment below.

> Knowledge is power. In agriculture, medicine, and industry, for example, knowledge has liberated us from hunger, disease, and tedious labor. Today, however, our knowledge has become so powerful that it is beyond our control. We know how to do many things, but we do not know where, when, or even whether this know-how should be used.

Assignment: Can knowledge be a burden rather than a benefit? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

BEGIN WRITING YOUR ESSAY ON PAGE 2 OF THE ANSWER SHEET.

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.

Unauthorized copying or reuse of any part of this page is illegal.

ESSAY
Time — 25 minutes

The essay gives you an opportunity to show how effectively you can develop and express ideas. You should, therefore, take care to develop your point of view, present your ideas logically and clearly, and use language precisely.

Your essay must be written on the lines provided on your answer sheet—you will receive no other paper on which to write. You will have enough space if you write on every line, avoid wide margins, and keep your handwriting to a reasonable size. Remember that people who are not familiar with your handwriting will read what you write. Try to write or print so that what you are writing is legible to those readers.

Important Reminders:

- **A pencil is required for the essay.** An essay written in ink will receive a score of zero.
- **Do not write your essay in your test book.** You will receive credit only for what you write on your answer sheet.
- **An off-topic essay will receive a score of zero.**

You have twenty-five minutes to write an essay on the topic assigned below.

Think carefully about the issue presented in the following excerpt and the assignment below.

> We do not take the time to determine right from wrong. Reflecting on the difference between right and wrong is hard work. It is so much easier to follow the crowd, going along with what is popular rather than risking the disapproval of others by voicing an objection of any kind.
>
> Adapted from Stephen J. Carter, *Integrity*

Assignment: Is it always best to determine one's own views of right and wrong, or can we benefit from following the crowd? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

BEGIN WRITING YOUR ESSAY ON PAGE 2 OF THE ANSWER SHEET.

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.

Unauthorized copying or reuse of any part of this page is illegal.

ESSAY

Time — 25 minutes

The essay gives you an opportunity to show how effectively you can develop and express ideas. You should, therefore, take care to develop your point of view, present your ideas logically and clearly, and use language precisely.

Your essay must be written on the lines provided on your answer sheet—you will receive no other paper on which to write. You will have enough space if you write on every line, avoid wide margins, and keep your handwriting to a reasonable size. Remember that people who are not familiar with your handwriting will read what you write. Try to write or print so that what you are writing is legible to those readers.

Important Reminders:

- **A pencil is required for the essay.** An essay written in ink will receive a score of zero.
- **Do not write your essay in your test book.** You will receive credit only for what you write on your answer sheet.
- **An off-topic essay will receive a score of zero.**

You have twenty-five minutes to write an essay on the topic assigned below.

Think carefully about the issue presented in the following excerpt and the assignment below.

> It is often the case that revealing the complete truth may bring trouble—discomfort, embarrassment, sadness, or even harm—to oneself or to another person. In these circumstances, it is better not to express our real thoughts and feelings. Whether or not we should tell the truth, therefore, depends on the circumstances.

Assignment: Do circumstances determine whether or not we should tell the truth? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

BEGIN WRITING YOUR ESSAY ON PAGE 2 OF THE ANSWER SHEET.

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.

 Unauthorized copying or reuse of any part of this page is illegal.

SECTION 2
Time — 25 minutes
20 Questions

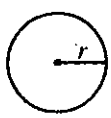
Turn to Section 2 (page 4) of your answer sheet to answer the questions in this section.

Directions: For this section, solve each problem and decide which is the best of the choices given. Fill in the corresponding circle on the answer sheet. You may use any available space for scratchwork.

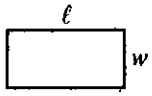
Notes

1. The use of a calculator is permitted.
2. All numbers used are real numbers.
3. Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.
4. Unless otherwise specified, the domain of any function f is assumed to be the set of all real numbers x for which $f(x)$ is a real number.

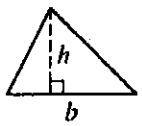
Reference Information



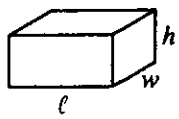
$A = \pi r^2$
$C = 2\pi r$



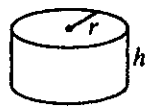
$A = \ell w$



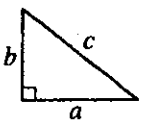
$A = \frac{1}{2}bh$



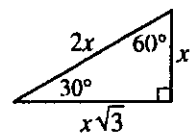
$V = \ell wh$

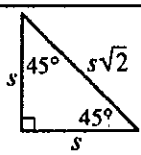


$V = \pi r^2 h$



$c^2 = a^2 + b^2$





Special Right Triangles

The number of degrees of arc in a circle is 360.
The sum of the measures in degrees of the angles of a triangle is 180.

1. If $y = x - 5$ and $20y - 5y = 15$, what is the value of x?

(A) 6
(B) 9
(C) 12
(D) 15
(E) 18

2. There are exactly 9 buttons in a bag. There are 4 blue buttons and 3 red buttons, and the rest are yellow. If one button is drawn at random from the bag, what is the probability that the button is yellow?

(A) $\frac{1}{9}$
(B) $\frac{1}{7}$
(C) $\frac{2}{9}$
(D) $\frac{2}{7}$
(E) $\frac{1}{3}$

GO ON TO THE NEXT PAGE

3. Which figure below, when placed together with the figure above, will make a complete circular disc with no overlap and no spaces?

(A)

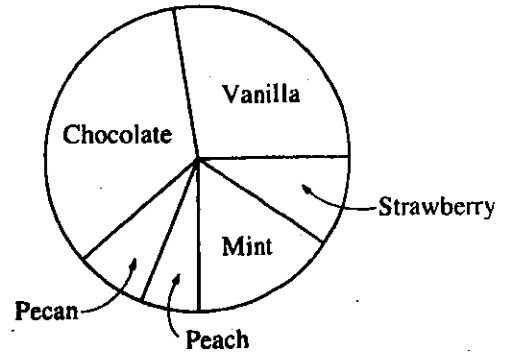
(B)

(C)

(D)

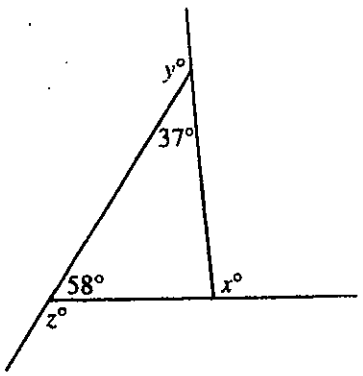
(E)

ICE-CREAM SALES BY FLAVOR



4. According to the circle graph above, how many of the ice-cream flavors individually represent less than 25 percent of the total sales?

(A) One
(B) Two
(C) Three
(D) Four
(E) Five



5. In the figure above, what is the value of $x + y + z$?

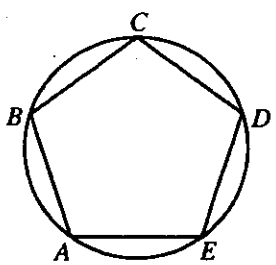
(A) 85
(B) 170
(C) 180
(D) 255
(E) 360

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

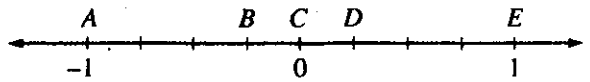
6. If $6x + 4 = 7$, what is the value of $6x - 4$?

(A) -7
(B) -1
(C) 1
(D) 7
(E) 8



7. In the circle above, pentagon $ABCDE$ is equilateral. What is the ratio of the length of arc $\overset{\frown}{ABC}$ to the length of arc $\overset{\frown}{AEC}$?

(A) 1 to 2
(B) 2 to 3
(C) 2 to 5
(D) 3 to 5
(E) 4 to 5



8. Tick marks are equally spaced on the number line above. Which of the lettered points has a coordinate equal to $\left(-\frac{1}{2}\right)^2$?

(A) A
(B) B
(C) C
(D) D
(E) E

9. If $t > w$, how much greater is the sum of s and t than the sum of s and w ?

(A) $s - t$
(B) $2s - w$
(C) $t - w$
(D) $t + w$
(E) $2s - t - w$

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

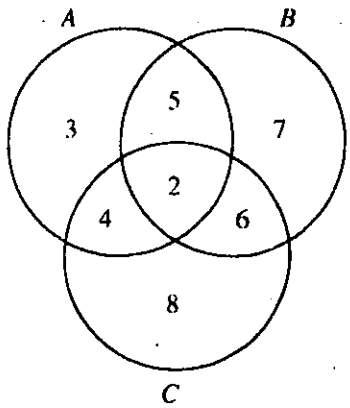
$$P(t) = 3{,}000 \cdot 2^{\frac{t}{4}}$$

10. Some organisms are being cultured in a biology lab. The population, P, of the organisms in the culture t days after the culture began is modeled by the function above. By how many organisms does the population increase from $t = 4$ to $t = 16$?

(A) 6,000
(B) 24,000
(C) 36,000
(D) 42,000
(E) 48,000

11. If the average (arithmetic mean) of 3, s, and t is 5, what is the value of $s + t$?

(A) 2
(B) 4
(C) 6
(D) 10
(E) 12



12. The figure above is a Venn diagram that represents sets A, B, and C. The number in each region indicates how many elements are in that region. How many elements are common to sets A and B ?

(A) 27
(B) 17
(C) 10
(D) 7
(E) 5

13. State University plans on accepting a total of 1,000 students for next year's class. Of the 800 students accepted so far, 60 percent are female and 40 percent are male. How many of the remaining students to be accepted must be male in order for half of the total number of students accepted to be male?

(A) 100
(B) 120
(C) 160
(D) 180
(E) 200

GO ON TO THE NEXT PAGE

 Unauthorized copying or reuse of any part of this page is illegal.

$$t^2 - k^2 < 6$$
$$t + k > 4$$

14. If t and k are positive integers in the inequalities above and $t > k$, what is the value of t?

(A) 1
(B) 2
(C) 3
(D) 4
(E) 5

15. Which of the following is equivalent to $\frac{1}{2}$ of 23 percent of 618?

(A) 23% of 309

(B) 23% of $\frac{309}{2}$

(C) $22\frac{1}{2}\%$ of 618

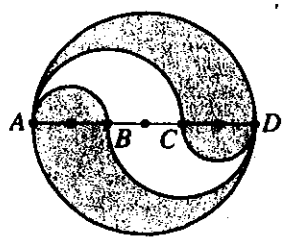
(D) $\frac{23}{2}\%$ of 309

(E) $\frac{23}{2} \times 618$

x	$f(x)$
2	−1
3	0
4	2
5	−3
6	4
7	−5
8	6

16. Several values of the function f are shown above. The function g is defined by $g(x) = f(3x + 1)$. What is the value of $g(2)$?

(A) −5
(B) −1
(C) 0
(D) 2
(E) 4



17. Semicircular arcs $\overset{\frown}{AB}$, $\overset{\frown}{AC}$, $\overset{\frown}{BD}$, and $\overset{\frown}{CD}$ divide the circle above into regions. The points shown along the diameter $\overline{AD}$ divide it into 6 equal parts. If $AD = 6$, what is the total area of the shaded regions?

(A) 4π
(B) 5π
(C) 6π
(D) 12π
(E) 24π

GO ON TO THE NEXT PAGE

18. Any 2 points determine a line. If there are 6 points in a plane, no 3 of which lie on the same line, how many lines are determined by pairs of these 6 points?

(A) 15
(B) 18
(C) 20
(D) 30
(E) 36

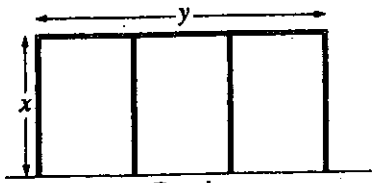
19. A certain function f has the property that $f(x + y) = f(x) + f(y)$ for all values of x and y. Which of the following statements must be true when $a = b$?

I. $f(a + b) = 2f(a)$

II. $f(a + b) = [f(a)]^2$

III. $f(b) + f(b) = f(2a)$

(A) None
(B) I only
(C) I and III only
(D) II and III only
(E) I, II, and III



20. At a beach, a rectangular swimming area with dimensions x and y meters and a total area of 4,000 square meters is marked off on three sides with rope, as shown above, and bounded on the fourth side by the beach. Additionally, rope is used to divide the area into three smaller rectangular sections. In terms of y, what is the total length, in meters, of the rope that is needed both to bound the three sides of the area and to divide it into sections?

(A) $y + \frac{4,000}{y}$

(B) $y + \frac{16,000}{y}$

(C) $y + \frac{16,000}{3y}$

(D) $3y + \frac{8,000}{3y}$

(E) $3y + \frac{16,000}{3y}$

STOP

If you finish before time is called, you may check your work on this section only. Do not turn to any other section in the test.

SECTION 4

Time — 25 minutes
24 Questions

Turn to Section 4 (page 5) of your answer sheet to answer the questions in this section.

Directions: For each question in this section, select the best answer from among the choices given and fill in the corresponding circle on the answer sheet.

Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five words or sets of words labeled A through E. Choose the word or set of words that, when inserted in the sentence, best fits the meaning of the sentence as a whole.

Example:

Hoping to ------- the dispute, negotiators proposed a compromise that they felt would be ------- to both labor and management.

(A) enforce . . useful
(B) end . . divisive
(C) overcome . . unattractive
(D) extend . . satisfactory
(E) resolve . . acceptable Ⓐ Ⓑ Ⓒ Ⓓ ●

1. Extensive travel afforded Langston Hughes a ------- perspective, but it was Harlem that served as the creative ------- for his writing.

(A) cosmopolitan . . defense
(B) worldly . . inspiration
(C) moral . . obligation
(D) stunted . . condition
(E) limited . . center

2. One requirement of timeless art is that it deepen and ------- our awareness, not that it merely confirm what we already know.

(A) hinder (B) reconcile (C) control
(D) soothe (E) extend

3. Despairing that the performance of the chief executive would ever improve, the corporation's board of directors took decisive action and ------- him.

(A) coddled (B) taunted (C) prodded
(D) ousted (E) chided

4. The discovery of the fossil was ------- and -------, surprising scientists and undermining accepted theories about plant distribution.

(A) exhilarating . . banal
(B) shocking . . prophetic
(C) startling . . revolutionary
(D) appalling . . groundbreaking
(E) unanticipated . . irrelevant

5. Citing the ------- of the Asian American community, the scholar argued that Asian Americans constituted the region's fastest-growing minority population.

(A) digression (B) proximity (C) expansion
(D) stabilization (E) correlation

6. Far from being -------, bears in some national parks are surprisingly ------- when approached by humans; still, visitors must exercise caution.

(A) benign . . cantankerous
(B) reticent . . bellicose
(C) complacent . . docile
(D) aggressive . . placid
(E) playful . . frisky

7. Before becoming a stockbroker, Victoria Woodhull had a career as a -------, someone believed to have insights about events beyond ordinary human perception.

(A) mentor (B) profiteer (C) counterfeiter
(D) clairvoyant (E) propagandist

8. The judges for the chili competition were -------, noting subtle differences between dishes that most people would not detect.

(A) obscure (B) deferential (C) discriminating
(D) sanctimonious (E) unrelenting

GO ON TO THE NEXT PAGE

The passages below are followed by questions based on their content; questions following a pair of related passages may also be based on the relationship between the paired passages. Answer the questions on the basis of what is stated or implied in the passages and in any introductory material that may be provided.

Questions 9-12 are based on the following passages.

Passage 1

A reform movement in journalism is afoot in newsrooms and boardrooms across the country. Industry organizations are launching initiatives, offering training, and fostering
Line new ways of thinking about news coverage and its effects.
5 The goals are to reinstill journalism's core values, regain credibility, and generally better the media's performance. What really is wrong with journalism? Lack of accuracy and fairness, too much sensationalism and bias are all components of the problem, but the number one issue is
10 that "people distrust our motives," said Tom Rosenstiel, founding director of the Project for Excellence in Journalism, who hopes to get more journalists thinking about standards.

Passage 2

Conditions for journalism have never been better:
15 robust media profits, strong legal protections, and sophisticated technology. Yet there is an influential movement, representing the consensus of the profession's elite, dedicated to convincing us that all is not well. Bill Kovach and Tom Rosenstiel, arguably the two most
20 prominent media critics in America, are the go-to people if you need a quotation lamenting the sensationalism of television newscasts or other media ills. Their recent book *The Elements of Journalism* suggests that unless a certain "theory of news" is adhered to, the United States might be
25 *annihilated*. Such factually uncluttered hyperbole does not merely invite a certain awe but also quite plausibly violates their number one axiom: "journalism's first obligation is to the truth."

9. Which best describes the relationship between Passage 1 and Passage 2 ?

(A) Passage 1 describes a particular campaign for change, whereas Passage 2 challenges the necessity of that change.
(B) Passage 1 describes the causes of sensationalism in journalism, whereas Passage 2 explores its effects.
(C) Passage 1 praises an individual's influence on journalism, whereas Passage 2 questions that individual's contributions.
(D) Passage 1 suggests that journalism is evolving, whereas Passage 2 argues that it is stagnating.
(E) Passage 1 defines the purpose of journalism, whereas Passage 2 examines journalism's impact on society.

10. Unlike Passage 1, Passage 2 alludes to journalism's

(A) core values
(B) specific critics
(C) complex history
(D) sensationalistic tendencies
(E) economic well-being

11. The author of Passage 2 would most likely characterize the "initiatives" mentioned in line 3 of Passage 1 as

(A) timely
(B) rational
(C) indecipherable
(D) unwarranted
(E) equivocal

12. Lines 25-28 in Passage 2 ("Such . . . truth' ") serve primarily to

(A) assuage the concerns of readers
(B) speculate about an outcome
(C) exaggerate the depth of a problem
(D) define a technical term
(E) highlight an irony

GO ON TO THE NEXT PAGE

Questions 13-24 are based on the following passage.

This passage is adapted from a 1996 book on sleep research.

To conduct some forms of sleep research, we have to find a way to track sleepiness over the day. Some people might believe that measuring sleepiness is a fairly trivial task. Couldn't you, for instance, simply count the number of times a person yawns during any given hour or so?

In most people's minds, yawning—that slow, exaggerated mouth opening with the long, deep inhalation of air, followed by a briefer exhalation—is the most obvious sign of sleepiness. It is a common behavior shared by many animals, including our pet dogs and cats but also crocodiles, snakes, birds, and even some fish. It is certainly true that sleepy people tend to yawn more than wide-awake people. It is also true that people who say they are bored by what is happening at the moment will tend to yawn more frequently. However, whether yawning is a sign that you are getting ready for sleep or that you are successfully fighting off sleep is not known. Simply stretching your body, as you might do if you have been sitting in the same position for a long period of time, will often trigger a yawn.

Unfortunately, yawns don't just indicate sleepiness. In some animals, yawning is a sign of stress. When a dog trainer sees a dog yawning in a dog obedience class, it is usually a sign that the animal is under a good deal of pressure. Perhaps the handler is pushing too hard or moving too fast for the dog to feel in control of the situation. A moment or two of play and then turning to another activity is usually enough to banish yawning for quite a while.

Yawning can also be a sign of stress in humans. Once, when observing airborne troops about to take their first parachute jump, I noticed that several of the soldiers were sitting in the plane and yawning. It was 10 A.M., just after a coffee break, and I doubted that they were tired; I knew for a fact that they were far too nervous to be bored. When I asked about this, the officer in charge laughed and said it was really quite a common behavior, especially on the first jump.

There is also a social aspect to yawning. Psychologists have placed actors in crowded rooms and auditoriums and had them deliberately yawn. Within moments, there is usually an increase in yawning by everyone else in the room. Similarly, people who watch films or videos of others yawning are more likely to yawn. Even just reading about yawning tends to stimulate people to yawn.

The truth of the matter is that we really don't know what purpose yawning serves. Scientists originally thought that the purpose of yawning was to increase the amount of oxygen in the blood or to release some accumulated carbon dioxide. We now know that this is not true, since increasing the concentration of carbon dioxide in the air seems not to make people more likely to yawn but to make them breathe faster to try to bring in more oxygen. On the other hand, breathing 100 percent pure oxygen does not seem to reduce the likelihood of yawning.

Since yawning seems to be associated with a lot more than the need for sleep, we obviously have to find some other measure of sleepiness. Some researchers have simply tried to ask people how sleepy they feel at any time using some sort of self-rating scale. There are, however, problems with getting people to make these types of judgments. Sometimes people simply lie to the researchers when asked about how sleepy they are. This occurs because in many areas of society admitting that one is fatigued and sleepy is considered a mark of weakness or lack of ambition and drive. In other instances, people may admit they need four cups of coffee to make it through the morning, but it may never occur to them that this might be due to the fact that they are so sleepy that they need stimulation from caffeine to be able to do their required tasks. For these reasons, many researchers have developed an alternate method to determine how sleepy a person is. It is based upon a simple definition of sleep need: The greater your sleep need, or the sleepier you are, the faster you will fall asleep if given the opportunity to do so.

13. The question in lines 4-5 is based on which of the following assumptions?

(A) Direct observation is the only reliable method of conducting sleep research.
(B) People will yawn most frequently in the moments before they fall asleep.
(C) There is a direct correlation between yawning and sleepiness.
(D) Yawning is a behavior over which individuals exert little conscious control.
(E) Conducting sleep research is a time-consuming process.

14. The comment between the dashes in lines 6-8 primarily serves to

(A) clarify a claim
(B) define a term
(C) note a qualification
(D) offer a humorous aside
(E) voice a personal insight

15. The author uses which of the following in the fourth paragraph (lines 29-37) ?

(A) Understatement
(B) Personification
(C) Analogy
(D) Metaphor
(E) Anecdote

GO ON TO THE NEXT PAGE

16. The author mentions the "coffee break" (line 33) to emphasize that a

(A) brief respite was sorely needed
(B) given attitude was inappropriate
(C) specific response was understandable
(D) particular action was unnecessary
(E) certain behavior was unexpected

17. The discussion of the "social aspect" (line 38) most directly demonstrates

(A) the power of suggestion
(B) a need for personal accountability
(C) a link between personality and behavior
(D) the psychological cost of conformity
(E) the desire for companionship

18. Which of the following, if true, would most directly disprove what "Scientists originally thought" (line 46) ?

(A) Carbon dioxide does not affect people's breathing rates.
(B) Yawning does not reduce the need for sleep, though it may make a person feel less tired.
(C) Because yawning brings more air into the lungs, it can increase the rate at which oxygen is absorbed.
(D) People do not tend to yawn much at high altitudes, where oxygen levels in the air are low.
(E) People often yawn more after exercise, when carbon dioxide levels in the blood are marginally higher.

19. Lines 55-57 ("Since . . . sleepiness") primarily serve to

(A) introduce a lighthearted digression
(B) provide a transition to a new subject
(C) offer evidence in support of a prior claim
(D) acknowledge a drawback to an approach advocated in the previous paragraph
(E) return the discussion to a problem mentioned earlier in the passage

20. In line 65, "drive" most nearly means

(A) propulsion
(B) instinct
(C) campaign
(D) vitality
(E) momentum

21. The author mentions the "other instances" (line 65) primarily to make the point that people

(A) are often intentionally deceptive about their sleep needs
(B) may not be accurate judges of their own sleepiness
(C) frequently do not experience a restful night of sleep
(D) may sometimes use stimulants like caffeine rather than feel tired
(E) are often afraid that exhaustion will interfere with their job performance

22. Which of the following, if true, would most effectively undermine the "simple definition" (line 72) ?

(A) When people are being watched by researchers, they may show different sleep patterns.
(B) When people are extremely sleepy, they may have difficulty falling asleep.
(C) Some people have the ability to go without sleep for very long periods of time.
(D) Some people yawn whether they are tired or not.
(E) Some people rarely yawn, no matter how tired they are.

GO ON TO THE NEXT PAGE

23. All of the following cases of yawning can be accounted for in the passage EXCEPT:

(A) A student yawns during a lecture on a boring subject.
(B) A musician yawns before taking the stage for a very important performance.
(C) An airplane pilot yawns to clear her ears during takeoff.
(D) A person at a party yawns after those around him begin yawning.
(E) A researcher yawns while reading a scientific article about yawning.

24. The passage as a whole is best characterized as

(A) informative
(B) confessional
(C) philosophical
(D) humorous
(E) argumentative

NOTE: The reading passages in this test are brief excerpts or adaptations of excerpts from the published material. The ideas contained in them do not necessarily represent the opinions of the College Board or Educational Testing Service. To make the test suitable for testing purposes, we may in some cases have altered the style, contents, or point of view of the original.

STOP

If you finish before time is called, you may check your work on this section only. Do not turn to any other section in the test.

Unauthorized copying or reuse of any part of this page is illegal.

SECTION 5
Time — 25 minutes
18 Questions

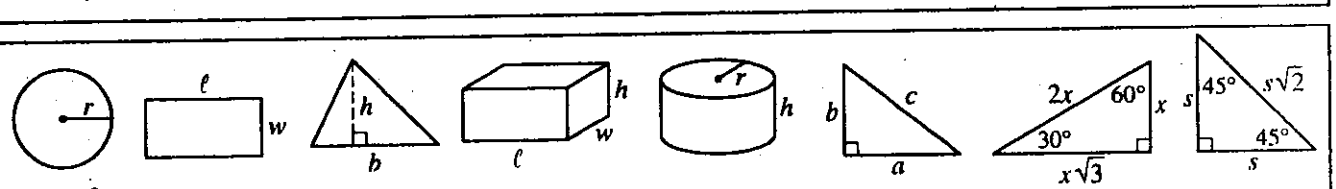
Turn to Section 5 (page 5) of your answer sheet to answer the questions in this section.

Directions: This section contains two types of questions. You have 25 minutes to complete both types. For questions 1-8, solve each problem and decide which is the best of the choices given. Fill in the corresponding circle on the answer sheet. You may use any available space for scratchwork.

Notes

1. The use of a calculator is permitted.
2. All numbers used are real numbers.
3. Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.
4. Unless otherwise specified, the domain of any function f is assumed to be the set of all real numbers x for which $f(x)$ is a real number.

Reference Information



$A = \pi r^2$
$C = 2\pi r$

$A = \ell w$

$A = \frac{1}{2}bh$

$V = \ell wh$

$V = \pi r^2 h$

$c^2 = a^2 + b^2$

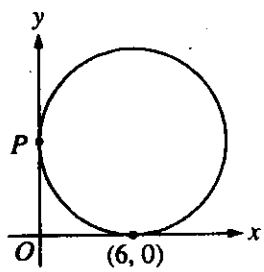
Special Right Triangles

The number of degrees of arc in a circle is 360.

The sum of the measures in degrees of the angles of a triangle is 180.

1. Fred, Norman, and Dave own a total of 128 comic books. If Dave owns 44 of them, what is the average (arithmetic mean) number of comic books owned by Fred and Norman?

(A) 42
(B) 44
(C) 46
(D) 48
(E) 50



2. In the xy-coordinate system above, the circle is tangent to the x-axis and the y-axis. What are the coordinates of point P?

(A) (0, 3)
(B) (0, 6)
(C) (3, 0)
(D) (3, 3)
(E) (6, 6)

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

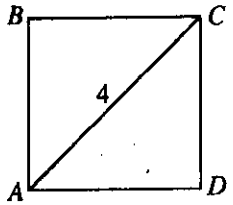
3. A hotel charges a service fee of \$1.00 per day to use its copy machine. In addition, there is a charge of \$0.10 per copy made. Which of the following represents the total charge, in dollars, to use this copy machine to make n copies in one day?

(A) $0.90n$
(B) $1.10n$
(C) $1.00 + 10n$
(D) $1.00 + 0.10n$
(E) $1.00 + 0.10 + n$

aa	*bc*
ab	*aa*
ac	*ba*

4. In the six pairs of letters shown above, if a is paired with itself, the pair has a value of 2. If a appears in a pair with another letter, the pair has a value of 1. All other pairs have a value of 0. What is the sum of the values of the six pairs?

(A) 6
(B) 7
(C) 8
(D) 10
(E) 12



5. What is the area of square $ABCD$ above?

(A) 8
(B) 12
(C) 16
(D) 20
(E) 24

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

6. If $x \neq 0$ and x is inversely proportional to y, which of the following is directly proportional to $\frac{1}{x^2}$?

(A) $-\frac{1}{y^2}$

(B) $\frac{1}{y^2}$

(C) $\frac{1}{y}$

(D) y

(E) y^2

7. Point A is a vertex of an 8-sided polygon. The polygon has 8 sides of equal length and 8 angles of equal measure. When all possible diagonals are drawn from point A in the polygon, how many triangles are formed?

(A) Four
(B) Five
(C) Six
(D) Seven
(E) Eight

$$(x - 8)(x - k) = x^2 - 5kx + m$$

8. In the equation above, k and m are constants. If the equation is true for all values of x, what is the value of m?

(A) 8
(B) 16
(C) 24
(D) 32
(E) 40

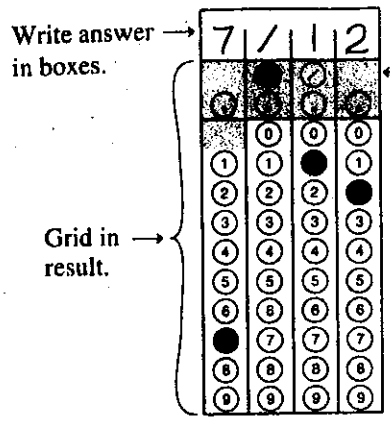
GO ON TO THE NEXT PAG

Unauthorized copying or reuse of any part of this page is illegal.

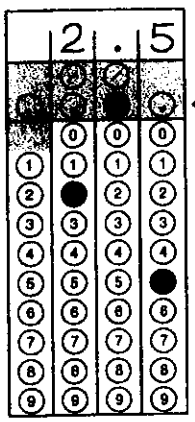
Directions: For Student-Produced Response questions 9-18, use the grids at the bottom of the answer sheet page on which you have answered questions 1-8.

Each of the remaining 10 questions requires you to solve the problem and enter your answer by marking the circles in the special grid, as shown in the examples below. You may use any available space for scratchwork.

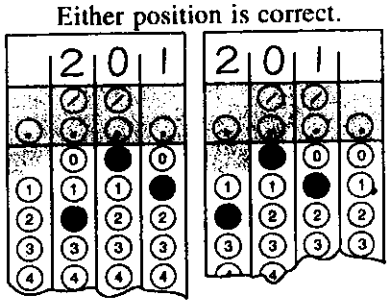
Answer: $\frac{7}{12}$



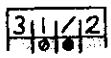
Answer: 2.5



Answer: 201
Either position is correct.

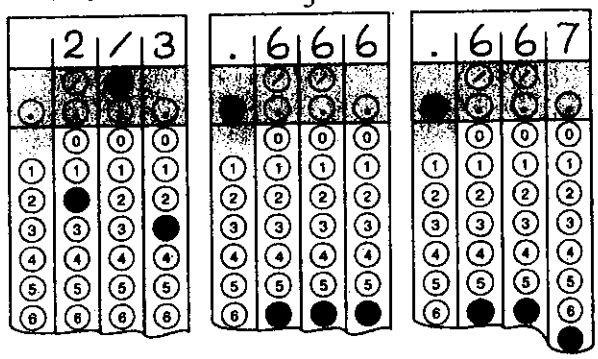


Note: You may start your answers in any column, space permitting. Columns not needed should be left blank.

- Mark no more than one circle in any column.
- Because the answer sheet will be machine-scored, **you will receive credit only if the circles are filled in correctly.**
- Although not required, it is suggested that you write your answer in the boxes at the top of the columns to help you fill in the circles accurately.
- Some problems may have more than one correct answer. In such cases, grid only one answer.
- No question has a negative answer.
- **Mixed numbers** such as $3\frac{1}{2}$ must be gridded as 3.5 or 7/2. (If  is gridded, it will be interpreted as $\frac{31}{2}$, not $3\frac{1}{2}$.)

- **Decimal Answers:** If you obtain a decimal answer with more digits than the grid can accommodate, it may be either rounded or truncated, but it must fill the entire grid. For example, if you obtain an answer such as 0.6666..., you should record your result as .666 or .667. **A less accurate value such as .66 or .67 will be scored as incorrect.**

Acceptable ways to grid $\frac{2}{3}$ are:



9. Flying at a constant speed, a bird traveled 62 miles in 4 hours. At this rate, how many miles did the bird travel in 3 hours?

10. Points Q, R, S, and T lie on a circle with center P. If the radius of the circle is 1, what is the value of $PQ + PR + PS + PT$?

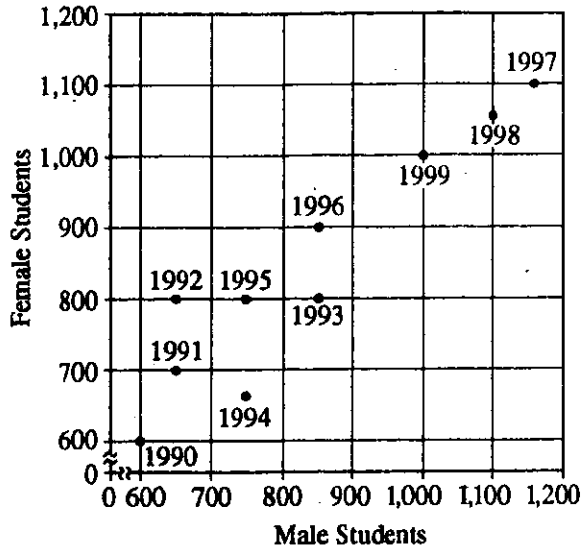
GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

11. If $10^{ab} = 10{,}000$, where a and b are positive integers, what is one possible value of a ?

12. In the xy-plane, the line $2x - 3y = c$ passes through point $(5, -1)$. What is the value of c ?

FEMALE AND MALE STUDENTS AT CENTRAL HIGH SCHOOL, 1990–1999

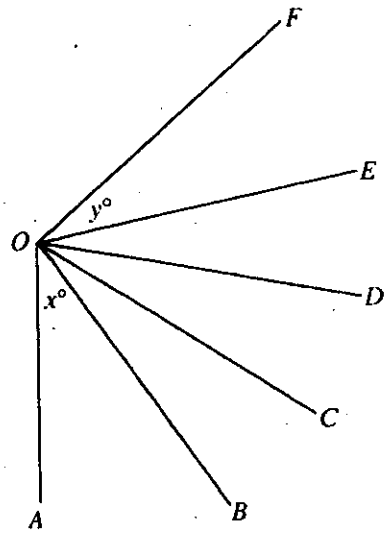


13. The scatterplot above shows the number of male and female students at Central High School from 1990 to 1999. In which one of the years shown was the absolute value of the difference between the numbers of male and female students greatest?

14. Five times a number is the same as the number added to five. What is the number?

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

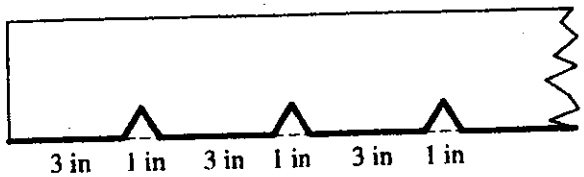


Note: Figure not drawn to scale.

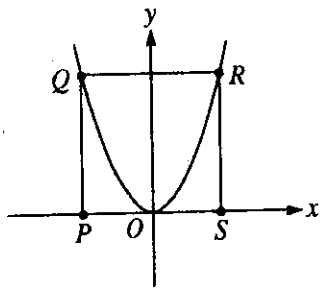
15. In the figure above, six segments intersect at O; $\overline{OD}$ bisects $\angle AOF$, $\overline{OC}$ bisects $\angle AOE$, and $\overline{OB}$ bisects $\angle AOD$. If $x = 40$ and $y = 30$, what is the measure of $\angle BOE$? (Disregard the degree symbol when gridding your answer.)

1, 2, 2, 3, 3, 3, 4, 4, 4, 4, . . .

16. All positive integers appear in the sequence above, and each positive integer k appears in the sequence k times. In the sequence, each term after the first is greater than or equal to each of the terms before it. If the integer 12 first appears in the sequence as the nth term, what is the value of n ?



17. One end of an 80-inch-long paper strip is shown in the figure above. The notched edge, shown in bold, was formed by removing an equilateral triangle from the end of each 4-inch length on one edge of the paper strip. What is the total length, in inches, of the bold notched edge on the 80-inch paper strip?



18. In the figure above, $PQRS$ is a square and points Q, R, and O lie on the graph of $y = ax^2$, where a is a constant. If the area of the square is 64, what is the value of a ?

STOP

If you finish before time is called, you may check your work on this section only. Do not turn to any other section in the test.

Unauthorized copying or reuse of any part of this page is illegal.

SECTION 6

Time — 25 minutes
35 Questions

Turn to Section 6 (page 6) of your answer sheet to answer the questions in this section.

Directions: For each question in this section, select the best answer from among the choices given and fill in the corresponding circle on the answer sheet.

The following sentences test correctness and effectiveness of expression. Part of each sentence or the entire sentence is underlined; beneath each sentence are five ways of phrasing the underlined material. Choice A repeats the original phrasing; the other four choices are different. If you think the original phrasing produces a better sentence than any of the alternatives, select choice A; if not, select one of the other choices.

In making your selection, follow the requirements of standard written English; that is, pay attention to grammar, choice of words, sentence construction, and punctuation. Your selection should result in the most effective sentence—clear and precise, without awkwardness or ambiguity.

EXAMPLE:

Laura Ingalls Wilder published her first book <u>and she was sixty-five years old then</u>.

(A) and she was sixty-five years old then
(B) when she was sixty-five
(C) at age sixty-five years old
(D) upon the reaching of sixty-five years
(E) at the time when she was sixty-five

Ⓐ ● Ⓒ Ⓓ Ⓔ

1. <u>Norman Rockwell was an illustrator and painter that was able to make a living at it.</u>

   (A) Norman Rockwell was an illustrator and painter that was able to make a living at it.
   (B) Norman Rockwell was able to make a living as an illustrator and painter.
   (C) An illustrator and painter, Norman Rockwell was able to make a living at it.
   (D) Able to make a living from them, Norman Rockwell illustrated and painted.
   (E) By illustrating and painting was how Norman Rockwell was able to make a living.

2. <u>Because of repeatedly asking in vain for a comprehensive health-care plan,</u> the employees called in sick as a protest against their employer's stubbornness.

   (A) Because of repeatedly asking in vain for a comprehensive health-care plan,
   (B) After repeatedly asking in vain for a comprehensive health-care plan,
   (C) They have repeatedly asked in vain for a comprehensive health-care plan, then
   (D) Repeatedly asking in vain for a comprehensive health-care plan, finally
   (E) While they repeatedly ask in vain for a comprehensive health-care plan,

3. In the tennis match Martina Hingis took advantage of Venus Williams' error and tied the <u>score; however, Williams fought back to take the lead again</u>.

   (A) score; however, Williams fought back to take the lead again
   (B) score; Williams, though, fought back again took the lead
   (C) score; however, Williams fighting back to take the lead again
   (D) score, along with Williams fighting back to take the lead again
   (E) score; in fact, Williams fought back to take the lead again

4. Nursing and physical therapy <u>are an example of health-care fields that</u> have shortages in staffing.

   (A) are an example of health-care fields that
   (B) are examples of health-care fields that
   (C) are examples where health-care fields
   (D) exemplifies a health-care field that
   (E) exemplify health-care fields where they

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

5. Alice Guy Blaché, an early filmmaker, introduced close-ups and double exposures, also she set cars on fire, used rats in special effects sequences, and ran film backward.

(A) exposures, also she set
(B) exposures, and also she sets
(C) exposures, she set
(D) exposures; she also set
(E) exposures by her setting

6. The company maintains computer systems for small businesses, plus it will manage their payroll accounts.

(A) businesses, plus it will manage
(B) businesses, in addition it will manage
(C) businesses and manages
(D) businesses, and, additionally, they also manage
(E) businesses, it manages

7. Studying dance for many years, practicing difficult steps every day, and frequent performances has enabled the young dancer to secure the leading role in the spring production.

(A) frequent performances has enabled the young dancer
(B) frequent performances would have enabled the young dancer
(C) frequently performing, the young dancer being enabled
(D) frequent performing, these enabled the young dancer
(E) performing frequently enabled the young dancer

8. Though now one of the most famous abstract artists, critics once ridiculed Jackson Pollock for his technique of splattering paint on canvases.

(A) critics once ridiculed Jackson Pollock
(B) critics once were ridiculing Jackson Pollock
(C) Jackson Pollock once ridiculed by critics
(D) Jackson Pollock was once ridiculed by critics
(E) Jackson Pollock, having once been ridiculed by critics

9. Legendary nineteenth-century endurance rider Frank T. Hopkins, who rode an American mustang to victory in a 3,000-mile race across the Arabian Desert, and the hero of the Disney movie *Hidalgo*.

(A) and
(B) and who has become
(C) also has become
(D) is
(E) having been

10. To introduce itself to a wider audience, the little-known band sold its CD's cheaply to enthusiastic fans, who in turn shared the music with friends.

(A) sold its CD's cheaply
(B) sold their CD's cheaply
(C) sells its CD's at a low price
(D) prices their CD's low for to sell
(E) will sell its CD's at a cheap price

11. Twice as many bird species inhabit Ecuador as in North America.

(A) as in
(B) as inhabit
(C) instead of in
(D) when compared to
(E) than

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

The following sentences test your ability to recognize grammar and usage errors. Each sentence contains either a single error or no error at all. No sentence contains more than one error. The error, if there is one, is underlined and lettered. If the sentence contains an error, select the one underlined part that must be changed to make the sentence correct. If the sentence is correct, select choice E. In choosing answers, follow the requirements of standard written English.

EXAMPLE:

The other (A) delegates and him (B) immediately (C) accepted the resolution drafted by (D) the neutral states. No error (E)

Ⓐ ● Ⓒ Ⓓ Ⓔ

12. Of the hundreds of warm-water coral species, only a few (A) are highly prized (B) for use in jewelry because of their (C) beauty, luster, and they are hard. (D) No error (E)

13. Because of its innovativeness and its (A) effective presentation, Mary's science project received (B) more judges' votes at the exhibit (C) than did Jim. (D) No error (E)

14. Mr. Johnson's assumption that a teenager had robbed his house being unfounded (A), for (B) the witnesses described the person they had seen (C) fleeing as a woman (D) in her 40s. No error (E)

15. Waterways close to land poses (A) challenges to navigation that differ (B) greatly from (C) those (D) posed by the open seas. No error (E)

16. During (A) my most recent (B) trip, I came across (C) a wonderful antique store wandering (D) in the old quarter of the city. No error (E)

17. It is difficult to predict what kinds (A) of books will be (B) popular in the years ahead, because tastes change and topics either get overexplored and (C) lose their (D) relevance. No error (E)

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

18. As (A) children mature, they develop an independence (B) that their parents, who have been (C) responsible for them since they were born, often find difficult to accept (D). No error (E)

19. Horse psychology, a science that investigates the reasons for (A) the behavior of horses, help (B) trainers both motivate their charges (C) and prevent (D) problems. No error (E)

20. To an Iranian (A), only a salt desert truly merits the name "desert," for other types (B) of deserts can be sown with dates, figs, and pistachios and it can be watered (C) by sprinklers or by ancient (D) subterranean canals called *qanats*. No error (E)

21. Ms. Kovak proudly displayed her research group's (A) most ingenious invention (B), a vacuum cleaner that empties its own (C) dust bag when pressing a button (D). No error (E)

22. Famous for their (A) sticky feet, the gecko can (B) run up (C) walls and across ceilings as well as hang (D) from a surface by its toes. No error (E)

23. Both her work on community service projects and her dedication to learning (A) has gained (B) Ms. Stevens the respect of (C) the entire (D) faculty. No error (E)

24. After the uprising of October 10, 1911, that has led (A) to the establishment of (B) a Chinese republic, many Chinese Americans decided to return to China in (C) hopes of a bright future there (D). No error (E)

25. At the art show, Amy enjoyed looking at (A) her friend Mark's innovative paintings, which she (B) thought were more original (C) than the other artists (D). No error (E)

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

26. Traffic was heavy, so by the time Brianne finally

arrived at (A) the theater, we waited (B) for her for an hour,

missing (C) the entire (D) first act of the play. No error (E)

27. Although its reputation is not as good as (A) it once was (B),

the university is still proud of their (C) productive,

intelligent graduates, many of whom have gone

on to earn (D) national recognition. No error (E)

28. Although (A) familiar to us from representations (B)

in ancient art, war chariots are rare museum artifacts

because by (C) the sixth century B.C. they were

no longer (D) used in battle. No error (E)

29. A volunteer organization, the Covington Soup Kitchen

has been feeding (A) needy families since (B) 1977, annually

distributing nearly (C) a million pounds of food

each year (D). No error (E)

Directions: The following passage is an early draft of an essay. Some parts of the passage need to be rewritten.

Read the passage and select the best answers for the questions that follow. Some questions are about particular sentences or parts of sentences and ask you to improve sentence structure or word choice. Other questions ask you to consider organization and development. In choosing answers, follow the requirements of standard written English.

Questions 30-35 refer to the following passage.

(1) Seeds of Peace Camp in Otisfield, Maine, is unlike any other camp in the world. (2) Due to the fact of bringing together teenagers from opposite sides of conflicts all over the globe. (3) At Seeds of Peace the campers, who have been taught to hate the enemy, learn to see that the enemy has a name and a face. (4) When they learn to get along on an individual basis, they start to question calling someone "enemy."

(5) During each three-week session, young people who are enemies in their home countries eat and play together, share bunkhouses, and cope with the homesickness they have in common. (6) Guided by specially trained counselors, the youngsters engage in daily, structured conversations called "coexistence sessions." (7) These conversations are often emotional but therapeutic. (8) The campers live side by side from the moment of their arrival.

(9) John Wallach, an award-winning journalist who covered conflicts in the Middle East for two decades, founded Seeds of Peace in 1993. (10) He chose the campsite because it is a beautiful natural setting far from the places of conflict. (11) Countries may select their campers but cannot pay for the camp. (12) The camp remains unaffiliated with any nation, organization, or peace group. (13) It is financed by private fund-raising efforts.

(14) According to Wallach, "If you begin to know your enemy, if you begin to understand your enemy, it's inevitable that you will begin to feel some empathy." (15) He believed that peace has to start among the young, being that the hatred of the adults in the campers' homelands is very deeply ingrained.

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

30. In context, what is the best revision of sentence 2 (reproduced below) ?

Due to the fact of bringing together teenagers from opposite sides of conflicts all over the globe.

(A) Due to the camp's bringing together teenagers all over the globe from opposite sides of conflicts.
(B) They brought together teenagers from opposite sides of conflicts from all over the globe.
(C) All over the globe, teenagers are brought together from opposite sides of conflicts by Seeds of Peace Camp.
(D) Teenagers are brought together by it from opposite sides of conflicts all over the globe.
(E) It brings together teenagers from opposite sides of conflicts all over the globe.

31. Paragraph one would best be improved by the addition of

(A) a quotation about the beauty of the camp from a former camper
(B) examples of the native countries of the various campers
(C) the names of chief staff members of the camp
(D) a description of a typical day at camp
(E) a reference to other efforts to promote peace

32. Where is the best place for sentence 8 ?

(A) (Where it is now)
(B) After sentence 1
(C) At the end of the first paragraph (after sentence 4)
(D) At the beginning of the second paragraph (before sentence 5)
(E) After sentence 15

33. In context, which version of sentences 11 and 12 best combines them into a single sentence?

(A) Countries may select their campers but cannot pay for the camp, which remains unaffiliated with any nation, organization, or peace group.
(B) Unaffiliated with any nation, organization, or peace group, countries may select their campers but cannot pay for the camp.
(C) Countries may select their campers, in addition, they cannot pay for the camp, which remains unaffiliated with any nation, organization, or peace group.
(D) Countries cannot pay for the camp although they may select their campers, the camp remains unaffiliated with any nation, organization, or peace group.
(E) It remains unaffiliated with any nation, organization, or peace group, and although countries may select their campers, they cannot pay for the camp.

34. Which of the following revisions is most needed in sentence 15 (reproduced below) ?

He believed that peace has to start among the young, being that the hatred of the adults in the campers' homelands is very deeply ingrained.

(A) Insert "Furthermore" at the beginning.
(B) Add "people" after "young".
(C) Change "being that" to "since".
(D) Change "adults" to "elders".
(E) Change "is" to "are".

35. Which of the following, if placed after sentence 15, would be the most effective concluding sentence for the essay?

(A) Seeds of Peace is an outstanding example of Maine's many summer camps.
(B) There is a great need for international understanding and cooperation today.
(C) Only camps like Seeds of Peace make world peace a reality.
(D) An interesting fact is that prospective campers must undergo a competitive selection process, including writing an essay.
(E) Thanks to Wallach's convictions, over 2,000 campers are now helping to sow the seeds of peace around the world.

STOP

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.

Unauthorized copying or reuse of any part of this page is illegal.

SECTION 7
Time — 25 minutes
24 Questions

Turn to Section 7 (page 6) of your answer sheet to answer the questions in this section.

Directions: For each question in this section, select the best answer from among the choices given and fill in the corresponding circle on the answer sheet.

Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five words or sets of words labeled A through E. Choose the word or set of words that, when inserted in the sentence, best fits the meaning of the sentence as a whole.

Example:

Hoping to ------- the dispute, negotiators proposed a compromise that they felt would be ------- to both labor and management.

(A) enforce . . useful
(B) end . . divisive
(C) overcome . . unattractive
(D) extend . . satisfactory
(E) resolve . . acceptable

Ⓐ Ⓑ Ⓒ Ⓓ ●

1. Although the archaeologist ------- the symbols on the cave wall, she was unable to ------- them because they were too faint.

(A) replicated . . ignore
(B) perused . . discard
(C) obliterated . . translate
(D) recollected . . conceal
(E) scrutinized . . decipher

2. Popular interest in music performed by folk singer Jean Ritchie acted as a ------- because it ------- a wider interest in the music of Ritchie's native Kentucky.

(A) deterrent . . launched
(B) panacea . . overcame
(C) barrier . . awakened
(D) catalyst . . stirred
(E) provocation . . mitigated

3. Oceanographers have identified more than 50 "dead zones" around the world: areas of sea that various forms of pollution have rendered ------- life.

(A) conducive to (B) invaluable to
(C) imperative to (D) indistinguishable from
(E) bereft of

4. The few female physicians practicing at the end of the nineteenth century might be considered ------- because they constituted a very small percentage of all physicians.

(A) miscreants (B) revisionists (C) anomalies
(D) pacifists (E) extremists

5. Rose smiled approvingly but gave neither written nor spoken permission to proceed with the project: her consent, in short, was -------.

(A) tacit (B) fervent (C) unqualified
(D) impetuous (E) conditional

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

The passages below are followed by questions based on their content; questions following a pair of related passages may also be based on the relationship between the paired passages. Answer the questions on the basis of what is stated or implied in the passages and in any introductory material that may be provided.

Questions 6-7 are based on the following passage.

Poetry discovered me when I was four or five. My mother wrote a poem for me, and I had to recite it in church. Soon I was writing my own poems. This was during a time when my primary artistic expression was drawing, usually with crayons. We also called it "coloring." Since my command of the crayon was greater than my command of writing, in a sense my drawings became my poems. Then at about the age of twelve—while still drawing and now painting with a passion—I seriously (too seriously!) committed myself to writing poetry. I wanted to be a Renaissance artist: write, paint, compose music, invent things.

6. In lines 6-8 ("Since . . . poems"), the author suggests that drawing and writing were

(A) talents that were not generally encouraged by adults
(B) activities that served the same desire for self-expression
(C) accomplishments that gave pleasure to others
(D) abilities that had already been developed to the limit of the author's talent
(E) hobbies that would be supplanted as the author grew to adulthood

7. In the passage, the author's childhood wish "to be a Renaissance artist" (lines 11-12) is best understood as

(A) an early sign of artistic ability
(B) a common goal of young people
(C) a naïve and grandiose ambition
(D) the beginning of an arduous and painful apprenticeship
(E) the spark that initiated a devotion to the visual arts

Questions 8-9 are based on the following passage.

The Second World War was a watershed event for all Americans. It brought the Great Depression to an end and marked the beginning of significant socioeconomic and political changes for women and racial minorities. Chinese American women played an important role in these long-term changes.

Galvanized by motives ranging from Chinese nationalism to American patriotism and feminism, Chinese American women initiated an outpouring of highly organized activities in such areas as fund-raising, propaganda, civil defense, and Red Cross work. While some women in San Francisco's Chinatown enlisted in the armed services, many others went to work in businesses outside their neighborhood and in defense industries for the first time.

8. The primary purpose of the passage is to

(A) highlight the contributions of San Francisco's Chinatown to the war effort
(B) describe the different jobs held by women during the Second World War
(C) explain how the Second World War helped to end the Great Depression
(D) discuss the impact of the Second World War on Chinese American women
(E) highlight the influence of feminism on Chinese American women

9. Which best characterizes the relationship between the first paragraph and the second paragraph?

(A) The first paragraph relates an anecdote that illustrates a generalization made in the second paragraph.
(B) The first paragraph presents a claim that is supported in the second paragraph.
(C) The paragraphs offer different explanations for the same phenomenon.
(D) The second paragraph digresses from the topic discussed in the first paragraph.
(E) The second paragraph challenges the validity of the argument made in the first paragraph.

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

Questions 10-14 are based on the following passage.

This passage is adapted from a novel set in London in the 1870's.

All along the burnished footpaths of Greek Street, the shopkeepers are out already, the second wave of early risers. Of course they regard themselves as the first wave. The grim procession of factory workers less than an hour ago might as well have happened in another country in another age. Welcome to the real world.

Getting up as early as the shopkeepers do is, in their view, stoic heroism beyond the understanding of lazier mortals. Not that they are cruel, these industrious men. It's just that the shopkeepers of Greek Street care nothing about the shadowy creatures who actually manufacture the goods that they sell. The world has outgrown its quaint rural intimacies, and now it's the modern age: an order is put in for fifty cakes of Coal Tar Soap, and a few days later, a cart arrives and the order is delivered. How that soap came to exist is no question for a modern man. Everything in this world issues fully formed from a benign monster called manufacture; a never-ending stream of objects—of graded quality, of perfect uniformity—from behind veils of smoke.

You may point out that the clouds of smut from the factory chimneys of Hammersmith and Lambeth blacken all the city alike, a humbling reminder of where the cornucopia really comes from. But humility is not a trait for the modern man, and filthy air is quite good enough for breathing; its only disadvantage is the film of muck that accumulates on shop windows.

But what use is there, the shopkeepers sigh, in nostalgia for past times? The machine age has come, the world will never be clean again, but oh: what compensation!

Already they're working up a sweat, their only sweat for the day, as they labor to open their shops. They ease the tainted frost from the windows with sponges of lukewarm water and sweep the slush into the gutter with stiff brooms. Standing on their toes, stretching their arms, they strip off the shutters, panels, iron bars and stanchions that have kept their goods safe another night. All along the street, keys rattle in keyholes as each shop's ornate metal clothing is stripped away.

The men are in a hurry now, in case someone with money should come along and choose a wide-open shop over a half-open one. Passers-by are few and often strange at this hour of the morning, but all types may stray into Greek Street and there's no telling who'll spend.

10. The shopkeepers' attitude toward the workers who are described in lines 4-6 is best characterized as

(A) ambivalent
(B) dismissive
(C) combative
(D) fearful
(E) suspicious

11. In line 13, "an order" most nearly means

(A) a command from a military authority
(B) an instruction to provide something
(C) an established system of organization
(D) a customary procedure
(E) a logical arrangement

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

12. The author uses the phrase "benign monster" (line 17) in order to

(A) criticize the greed of the merchants on Greek Street
(B) evoke sympathy for the fate of the factory workers
(C) characterize the process by which modern goods are created
(D) suggest that consistency is not always an outcome of mass production
(E) emphasize the many hardships of life on Greek Street

13. The "compensation" referred to in line 30 is best understood as the

(A) economic costs of a polluted environment
(B) ability of merchants to market goods effectively
(C) lucrative profits that manufacturers glean from shopkeepers
(D) awareness that present success will not make up for past failure
(E) financial benefits that come with industrialization

14. In the final paragraph, the shopkeepers can best be described as

(A) frantic about the delivery of their goods
(B) elated about their abundant profits
(C) eager for the arrival of customers
(D) nonchalant about their success as merchants
(E) suspicious of the neighboring shopkeepers

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

Questions 15-24 are based on the following passages.

The following passages were adapted from articles published in 1999 and 2000, respectively.

Passage 1

In 1929 a teenager named Ridgely Whiteman wrote to the Smithsonian Institution in Washington, D.C., about what he called warheads that he had found near Clovis, New Mexico. These "warheads" were actually spear points, elegantly chipped to sharpness on both edges and finished off with a groove, or flute, down the center of each side. Eventually, such fluted points turned up in the oldest archaeological excavations elsewhere in North America.

Stone cannot be carbon-dated, but the dating of organic material found with these tools showed that the people who used them were in America no earlier than about 13,500 years ago. The story most archaeologists built on these ancient tools was of a people they nicknamed Clovis, who came into North America via Siberia, moved south through an ice-free corridor, then dispersed, their descendants occupying North and South America within a thousand years. Since their tools were often found with the bones of mammoths and other large creatures, scientists usually described the Clovis people as big-game hunters. As late as 1996 a prominent archaeologist, Frederick Hadleigh West, could state that "Clovis is taken to be the basal, the founding, population for the Americas." But in the past decade such certainty has been dramatically shaken.

The most straightforward challenge to the old story is the matter of time. The era in which the Clovis people lived is limited by a time barrier that stops about 13,500 years ago: there is geologic evidence that an ice-free corridor between Siberia and North America would not have been open much before then. But in 1997 a blue-ribbon panel of archaeologists visited a site in Chile called Monte Verde and agreed that people had lived there at least 14,500 years ago, about 1,000 years before the first sign of Clovis people in North America. Acceptance of the Monte Verde date not only broke the time barrier but also focused new interest on other sites that may have even earlier dates.

Passage 2

One of the biggest barriers to accepting pre-Clovis sites has been geographic. During the most recent ice age, the New World was pretty much closed to pedestrian traffic: the northwest corridor in Canada would have been covered with ice. Though ancient humans might have mastered prehistoric crampons,* mastodons almost certainly did not, and finding food and shelter under those circumstances would have been difficult at best. But the latest idea circulating among archaeologists and anthropologists has people ditching their crampons and spears for skin-covered boats. Maybe the first Americans came not by land but by sea, hugging the ice-age coast.

When the seafaring theory was proposed in the mid-1970's, it sank for lack of evidence. But as the time line for New World occupation has changed, the theory seems downright sensible, if not quite provable. The Pacific Rim has vast resources of salmon and sea mammals, and people need only the simplest of tools to exploit them: nets, weirs, clubs, knives. Whereas ancient landlubbers would have had to reinvent their means of hunting, foraging, and housing as they passed through different terrains, ancient mariners could have had smooth sailing through relatively unchanging coastal environments. And recent geologic studies show that even when glaciers stretched down into North America, there were thawed pockets of coastline in northwest North America where people could take refuge and gather provisions. "Most archaeologists have a continental mind-set," says anthropologist Robson Bonnichsen, "but the peopling of the Americas is likely to be tied very much to the development and spread of maritime adaptation."

* spiked devices attached to boots to prevent slippage when climbing on ice

15. Both authors agree on which of the following points?

(A) A maritime environment would have presented unique challenges to early Americans.
(B) The first Americans most likely subsisted on mastodons and other big game.
(C) Overland travel to the New World would have been difficult during the most recent ice age.
(D) It may never be definitively determined when America was initially settled.
(E) The Clovis people were most likely the first Americans.

16. In lines 5-6, "finished off" most nearly means

(A) defeated
(B) terminated
(C) completed
(D) disposed of
(E) consumed totally

17. The quotation in lines 21-22 serves primarily to

(A) provide concrete evidence
(B) discredit a widely shared assumption
(C) support a provocative claim
(D) offer an opposing viewpoint
(E) summarize a common understanding

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

18. In line 33, "sign" most nearly means

(A) omen
(B) symbol
(C) gesture
(D) indication
(E) figure

19. The author of Passage 2 would most likely claim that the information presented in lines 25-36 of Passage 1

(A) validates the notion that the peopling of America occurred shortly after the most recent ice age
(B) adds credibility to the theory that the first Americans may have arrived by boat
(C) indicates that overland travel to the New World was not possible
(D) demonstrates that early Americans must have relied on the sea for sustenance
(E) reveals that archaeologists can differ over even the most basic facts

20. Which of the following, if found on the west coast of America, would best support the "latest idea" (line 44) ?

(A) Primitive fishing hooks dating back 9,000 years
(B) Simple cooking tools dating back 11,000 years
(C) Stone arrowheads dating back 13,000 years
(D) Crude boat anchors dating back 15,000 years
(E) Fossilized mastodon bones dating back 17,000 years

21. The author of Passage 2 implies that the findings of the "geologic studies" (lines 59-60) are

(A) proof that a particular theory is correct
(B) virtually certain to be verified independently
(C) characteristic of, though not essential to, an experimental approach
(D) critical of, though not opposed to, a specific hypothesis
(E) grounds for granting increased plausibility to a particular theory

22. Which of the following can be found in both passages?

I. A theory about how people originally traveled to America
II. An exact date the Americas were initially settled
III. Reference to possible sources of food for early Americans

(A) I only
(B) II only
(C) I and III only
(D) II and III only
(E) I, II, and III

23. Both passages make use of which of the following?

(A) Political allusion
(B) Direct quotation
(C) Rhetorical questioning
(D) Personal anecdote
(E) Extended metaphor

24. Which best describes the relationship between the two passages?

(A) Passage 2 disproves a hypothesis that is debated in some detail in Passage 1.
(B) Passage 2 examines the implications of using a term that is defined in Passage 1.
(C) Passage 2 traces the origins of an ancient technology that is discussed in Passage 1.
(D) Passage 2 presents a theory that may help explain a finding mentioned in Passage 1.
(E) Passage 2 describes an archaeological discovery that verifies the central claim made in Passage 1.

STOP

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.

Unauthorized copying or reuse of any part of this page is illegal.

SECTION 8
Time — 20 minutes
16 Questions

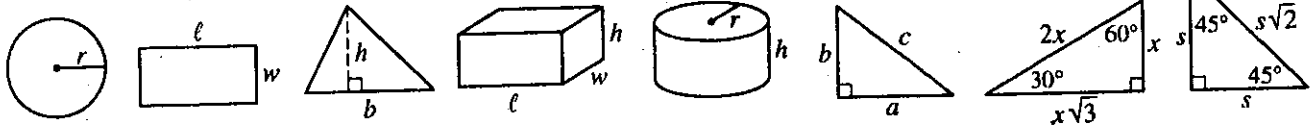
Turn to Section 8 (page 7) of your answer sheet to answer the questions in this section.

Directions: For this section, solve each problem and decide which is the best of the choices given. Fill in the corresponding circle on the answer sheet. You may use any available space for scratchwork.

Notes

1. The use of a calculator is permitted.
2. All numbers used are real numbers.
3. Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.
4. Unless otherwise specified, the domain of any function f is assumed to be the set of all real numbers x for which $f(x)$ is a real number.

Reference Information



$A = \pi r^2$
$C = 2\pi r$

$A = \ell w$

$A = \frac{1}{2}bh$

$V = \ell wh$

$V = \pi r^2 h$

$c^2 = a^2 + b^2$

Special Right Triangles

The number of degrees of arc in a circle is 360.
The sum of the measures in degrees of the angles of a triangle is 180.

1. If $\frac{3}{4}$ of a number is 18, what is $\frac{1}{4}$ of the number?

(A) $\frac{3}{2}$
(B) $\frac{9}{2}$
(C) 6
(D) 12
(E) 24

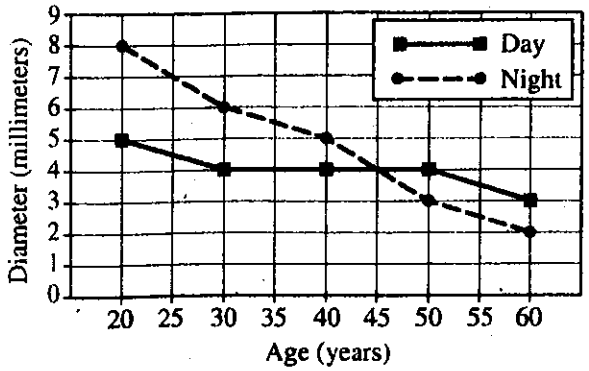
2. For all integers k, let k^* be defined by $k^* = k(k-1)$. What is the value of 5^*?

(A) 9
(B) 20
(C) 24
(D) 25
(E) 30

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

AVERAGE DIAMETER OF EYE PUPIL



3. The graph above shows the effect of aging on the diameter of the eye pupil. Based on the graph, what is the best estimate of the age at which the average diameter of the eye pupil during the day will equal the average diameter of the eye pupil at night?

(A) 20
(B) 30
(C) 35
(D) 45
(E) 60

4. On each of the days Monday through Friday, Toni spent 1 hour commuting to work and 1 hour commuting back home. What fraction of the total number of hours in these five days did she spend commuting?

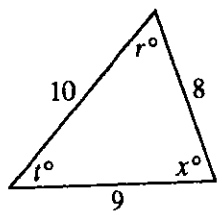
(A) $\frac{1}{12}$
(B) $\frac{1}{24}$
(C) $\frac{5}{12}$
(D) $\frac{5}{24}$
(E) $\frac{10}{168}$

5. If $\sqrt{3} = x + 1$, what is the value of $(x + 1)^2$?

(A) $\sqrt{2}$
(B) $\sqrt{3}$
(C) 3
(D) 9
(E) 16

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.



6. Which of the following must be true about t, r, and x in the figure above?

(A) $t < r < x$
(B) $t < x < r$
(C) $r < t < x$
(D) $x < t < r$
(E) $x < r < t$

7. If $|6 - 5y| > 20$, which of the following is a possible value of y?

(A) -3
(B) -1
(C) 1
(D) 3
(E) 5

8. The legs of right triangle ABC have lengths 3 and 4. What is the perimeter of a right triangle with each side twice the length of its corresponding side in $\triangle ABC$?

(A) 8
(B) 14
(C) 16
(D) 24
(E) 48

NUMBER OF CAR RENTAL LOCATIONS

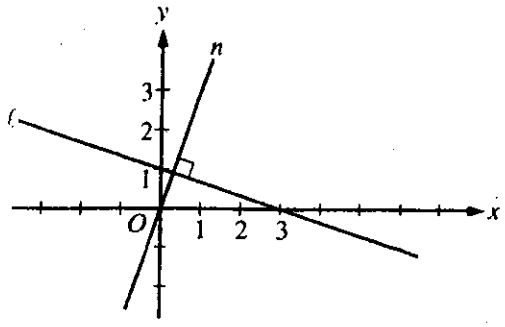
Company	United States Locations	Foreign Locations
A	1,400	4,000
B	1,300	3,300
C	1,012	3,618
D	1,242	2,268
E	762	2,100

9. The table above shows the number of car rental locations for five car rental companies. For which of the five companies is the ratio of the number of foreign locations to the number of United States locations the greatest?

(A) *A*
(B) *B*
(C) *C*
(D) *D*
(E) *E*

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.



10. In the xy-coordinate plane above, line n is perpendicular to line ℓ. What is the slope of line n?

(A) -3

(B) $-\frac{1}{3}$

(C) $\frac{1}{3}$

(D) 2

(E) 3

11. If k is a constant and $2x + 5 = 3kx + 5$ for all values of x, what is the value of k?

(A) 5

(B) 3

(C) 2

(D) $\frac{3}{2}$

(E) $\frac{2}{3}$

GO ON TO THE NEXT PAGE

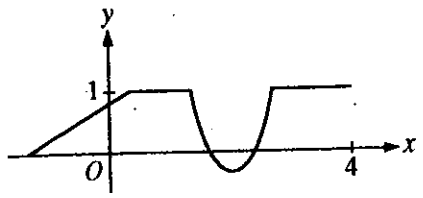
Unauthorized copying or reuse of any part of this page is illegal.

12. The sum of eleven different integers is zero. What is the least number of these integers that must be positive?

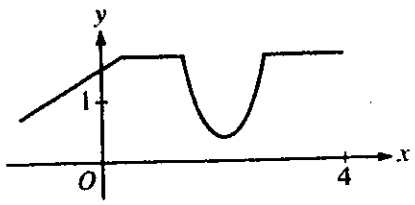
(A) None
(B) One
(C) Five
(D) Six
(E) Ten

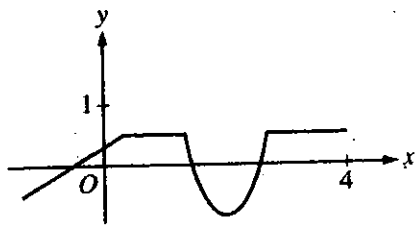
13. In a certain game, each token has one of three possible values: 1 point, 5 points, or 10 points. How many different combinations of these token values are worth a total of 17 points?

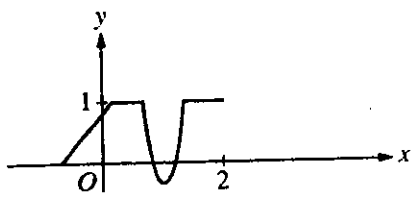
(A) Two
(B) Three
(C) Four
(D) Five
(E) Six

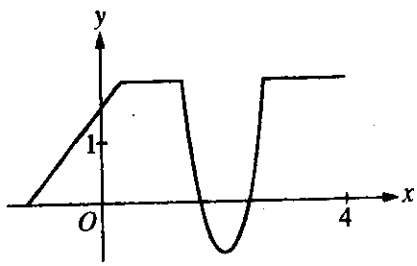


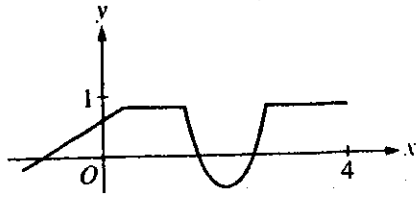
14. The graph of $y = f(x)$ is shown above. Which of the following could be the graph of $y = 2f(x)$?

(A)


(B)


(C)


(D)


(E)


GO ON TO THE NEXT PAGE

 Unauthorized copying or reuse of any part of this page is illegal.

2, −4, 8, ...

15. The first term of the sequence above is 2, and every term after the first term is −2 times the preceding term. How many of the first 50 terms of this sequence are less than 100 ?

(A) 22
(B) 25
(C) 28
(D) 30
(E) 37

16. A cube with volume 8 cubic centimeters is inscribed in a sphere so that each vertex of the cube touches the sphere. What is the length of the diameter, in centimeters, of the sphere?

(A) 2
(B) $\sqrt{6}$ (approximately 2.45)
(C) 2.5
(D) $2\sqrt{3}$ (approximately 3.46)
(E) 4

STOP

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.

Unauthorized copying or reuse of any part of this page is illegal.

SECTION 9

Time — 20 minutes
19 Questions

Turn to Section 9 (page 7) of your answer sheet to answer the questions in this section.

Directions: For each question in this section, select the best answer from among the choices given and fill in the corresponding circle on the answer sheet.

Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are five words or sets of words labeled A through E. Choose the word or set of words that, when inserted in the sentence, best fits the meaning of the sentence as a whole.

Example:

Hoping to ------- the dispute, negotiators proposed a compromise that they felt would be ------- to both labor and management.

(A) enforce . . useful
(B) end . . divisive
(C) overcome . . unattractive
(D) extend . . satisfactory
(E) resolve . . acceptable

Ⓐ Ⓑ Ⓒ Ⓓ ●

1. Paradoxically, during the French Revolution, the very leaders who proclaimed ------- philosophies sometimes also engaged in ------- practices.

(A) regal . . imperial
(B) simplistic . . neutral
(C) liberating . . repressive
(D) totalitarian . . absolutist
(E) scandalous . . compromised

2. Despite his brilliant career, Gerald was plagued by doubts and could not ------- his feelings of -------.

(A) imagine . . worthlessness
(B) reconcile . . superiority
(C) embrace . . insecurity
(D) dispel . . inferiority
(E) fathom . . levity

3. Jane was both ------- and -------: she was blatantly proud and offensively bold.

(A) haughty . . impudent
(B) irresolute . . insolent
(C) presumptuous . . loquacious
(D) arrogant . . articulate
(E) reverential . . contemptuous

4. New Zealand and Spain can accurately be described as ------- because they are diametrically opposite one another on the globe.

(A) satellites (B) antipodes (C) reversals
(D) bifurcations (E) dichotomies

5. Ken took his ------- obligations seriously, patiently caring for his mother throughout her long recuperation.

(A) filial (B) symbiotic (C) avuncular
(D) convivial (E) funerary

6. The sound produced by the youth orchestra was so ------- that even its least experienced members were abashed.

(A) cacophonous (B) syncopated (C) harmonic
(D) collaborative (E) mellifluous

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

The passage below is followed by questions based on its content. Answer the questions on the basis of what is stated or implied in the passage and in any introductory material that may be provided.

Questions 7-19 are based on the following passage.

This passage is adapted from a 1998 memoir in which the author recalls her childhood in Chicago in the 1960's.

A trip to the library was like a great excursion to a different country. To get there, we had to walk a mile. But the distance between where we lived and where we were going was much greater. To get there we traveled beyond the usual parameters of school and church and the shopping strip we frequented, into the manicured lawns and gardens of Hyde Park. I loved the walk as much as the destination itself. In the middle of the anger that was my home and the upheaval of a changing world in which it seemed I had no place, our semimonthly excursions to the library were a piece of perfection. I had around me at one time all the people I loved best—my mother and brothers and sister—and all the things I loved best—quiet, space, and books.

We went to the T. B. Blackstone Library, not far from Lake Michigan. You could easily miss the building if you didn't know what you were looking for. But once you were inside, you could never mistake it for anything else. We passed through two sets of heavy brass doors to the lobby of the library, a great domed entrance with a ceiling adorned with what I used to imagine were the angels of books. They were great gilded figures armed with harps and with scrolls and other instruments of learning.

If we turned right, we could see an alcove with tables; this led, in turn, to a spacious reading room adorned with a gigantic and ancient globe that sat in front of the largest windows. At some point during every visit, I found my way into that room to touch the globe, to finger the ridges and the painted canvas already frayed and separating from its sphere. I liked to look at Africa, with the coded colors of the different countries like the Belgian Congo and Rhodesia, and try to remember which countries were fighting to be free just as we were struggling for civil rights. I had heard Daddy talking about the struggle, arguing with the television as someone discussed it on a news show. And I had seen pictures on the news of people gathered together marching. But I didn't really know anything about Africa except what I saw in the Tarzan movies, which I watched a lot, but thought were really strange. (Why did that White man live in a tree?)

I read a lot of books about mythology, and then about science: not the missiles and spaceships Brother preferred, but the birds and the bees—literally. I brought home a giant book of birds and searched the skies and trees for anything other than robins and pigeons. And I read about bees because I liked the idea that all of them listened to the queen and couldn't go on without her. I went through a phase of loving books with practical science experiments and used up a whole bottle of white vinegar by pouring it on the sides of our apartment building to prove that it was constructed of limestone.

One Saturday, as I wandered through the young adult section, I saw a title: *Little Women*, by Louisa May Alcott. I could tell from looking at the shelf that she'd written a lot of books, but I didn't know anything about her. I had learned from experience that titles weren't everything. A book that sounded great on the shelf could be dull once you got it home, and every bad book I brought home meant one less book to read until we went back in two weeks. So I sat in a chair near the shelves to skim the first paragraphs:

> "Christmas won't be Christmas without any presents," grumbled Jo, lying on the rug.
>
> "It's so dreadful to be poor!" sighed Meg, looking down at her old dress.
>
> "I don't think it's fair for some girls to have plenty of pretty things, and other girls nothing at all," added little Amy, with an injured sniff.
>
> "We've got Father and Mother and each other," said Beth contentedly from her corner.

It was a good thing I'd already decided on some other books to take home, because I didn't look through the rest of the section that day. I read and read and read *Little Women* until it was time to walk home, and, except for a few essential interruptions like sleeping and eating, I would not put it down until the end. Even the freedom to watch weekend television held no appeal for me in the wake of Alcott's story. It was about girls, for one thing, girls who could almost be like me, especially Jo. It seemed to me a shame that she wasn't Black; then our similarity would be complete. She loved to read, she loved to make up plays, she hated acting ladylike, she had a dreadful temper. I had found a kindred spirit.

7. The author viewed the "semimonthly excursions" (line 10) with

   (A) apprehension
   (B) detachment
   (C) resentment
   (D) pride
   (E) delight

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

8. In lines 16-18 ("You could . . . else"), the author distinguishes between

(A) general and particular impressions
(B) objective and subjective experiences
(C) external and internal appearances
(D) public and private observations
(E) true and false assumptions

9. The tone of the statement in lines 17-18 ("But once . . . else") is one of

(A) arrogance
(B) foreboding
(C) conviction
(D) diffidence
(E) sarcasm

10. The author's reaction to the "ceiling" (line 20) conveys her

(A) aspirations of becoming a novelist
(B) distaste for religious imagery
(C) puzzlement about artistic symbolism
(D) reverence for the library's educational offerings
(E) discomfort in the presence of high culture

11. For the author, to "look at Africa" on the globe (line 30) served as a reminder of

(A) an American movement for social change
(B) a personal experience abroad
(C) the diversity of cultures around the world
(D) the ethnic diversity of her neighborhood
(E) the influence of African politics on America

12. What does the description in lines 34-36 ("I had . . . show") suggest about the author's father?

(A) He was uncomfortable discussing politics with his children.
(B) He did not approve of most television news coverage.
(C) He had strong feelings about the Civil Rights movement.
(D) He generally had a pessimistic worldview.
(E) He was an outspoken public advocate for equal rights.

13. The author refers to "Tarzan movies" in line 39 to demonstrate that, as a child, she had

(A) no concerns about the authenticity of most films
(B) a preference for watching movies rather than reading books
(C) a fascination with movie actors
(D) limited knowledge about Africa
(E) little interest in fictional characters

14. The primary purpose of the fourth paragraph (lines 41-51) is to

(A) contrast the books about mythology and science that the author had been reading
(B) discuss why the author enjoyed books that were about birds and bees
(C) characterize the author's reading interests during a particular period of time
(D) distinguish between books preferred by the author and those preferred by her brother
(E) provide several examples of practical science experiments that the author conducted

15. Lines 52-60 ("One Saturday . . . paragraphs") suggest that the author accepted which of the following generalizations about books?

(A) Books seem duller when read in libraries than when read at home.
(B) Interesting books are often very dull in their first few paragraphs.
(C) Novels are usually more interesting than nonfiction works.
(D) Book titles can sometimes be misleading.
(E) Books are rarely as interesting as their titles.

16. The author uses an extended quote in lines 61-69 ("Christmas . . . corner") as part of a larger attempt to

(A) convey the impact of an unexpected discovery
(B) illustrate the suddenness of a decision
(C) simulate a child's misconceptions
(D) criticize the artificiality of the "young adult" classification
(E) describe a young reader's sense of history

GO ON TO THE NEXT PAGE

17. In line 65, "fair" most nearly means

(A) comely
(B) temperate
(C) equitable
(D) auspicious
(E) mediocre

18. The description in lines 70-75 ("It was . . . end") suggests that the author found *Little Women* to be

(A) bewildering
(B) unremarkable
(C) hilarious
(D) profound
(E) captivating

19. The list in lines 80-82 ("She loved . . . temper") serves primarily to

(A) support a hypothesis
(B) challenge an interpretation
(C) emphasize an inconsistency
(D) substantiate a comparison
(E) develop a critique

STOP

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.

Unauthorized copying or reuse of any part of this page is illegal.

SECTION 10

Time — 10 minutes
14 Questions

Turn to Section 10 (page 7) of your answer sheet to answer the questions in this section.

Directions: For each question in this section, select the best answer from among the choices given and fill in the corresponding circle on the answer sheet.

The following sentences test correctness and effectiveness of expression. Part of each sentence or the entire sentence is underlined; beneath each sentence are five ways of phrasing the underlined material. Choice A repeats the original phrasing; the other four choices are different. If you think the original phrasing produces a better sentence than any of the alternatives, select choice A; if not, select one of the other choices.

In making your selection, follow the requirements of standard written English; that is, pay attention to grammar, choice of words, sentence construction, and punctuation. Your selection should result in the most effective sentence—clear and precise, without awkwardness or ambiguity.

EXAMPLE:

Laura Ingalls Wilder published her first book <u>and she was sixty-five years old then</u>.

(A) and she was sixty-five years old then
(B) when she was sixty-five
(C) at age sixty-five years old
(D) upon the reaching of sixty-five years
(E) at the time when she was sixty-five

Ⓐ ● Ⓒ Ⓓ Ⓔ

1. Wa Nu <u>assured the worried members of her group that they would finish the project on time</u>.

   (A) assured the worried members of her group that they would finish the project on time
   (B) assured them of finishing the project on time, the members of her group were worried
   (C) assured that the project would be finished on time to the worried members of her group
   (D) assuring the worried members of her group that they would finish the project on time
   (E) assures the worried members of her group, they would finish the project on time

2. Richard Rodriguez pointed out that <u>Mission San Luis Rey, a Spanish church with an Arabic dome getting its name to honor a French king</u>.

   (A) Mission San Luis Rey, a Spanish church with an Arabic dome getting its name to honor a French king
   (B) Mission San Luis Rey, a Spanish church with an Arabic dome, was named in honor of a French king
   (C) Mission San Luis Rey's being a Spanish church with an Arabic dome got named in honor of a French king
   (D) they named Mission San Luis Rey, a Spanish church in honor of a French king that had an Arabic dome
   (E) the name of Mission San Luis Rey having been a Spanish church with an Arabic dome honoring a French king

3. <u>Joan feeling tired and frustrated, and</u> she was able to finish her painting before the light faded.

   (A) Joan feeling tired and frustrated, and
   (B) Joan felt tired and frustrated.
   (C) Although Joan felt tired and frustrated,
   (D) Despite Joan felt tired and frustrated,
   (E) Nevertheless, Joan felt tired and frustrated,

4. Men and women leave the village before sunrise to hike four miles up steep, precarious trails to the <u>forests, to be returning by late afternoon</u> with 70-pound loads of firewood on their backs.

   (A) forests, to be returning by late afternoon
   (B) forests, and it is late afternoon that they return
   (C) forests, they return by late afternoon
   (D) forests and return by late afternoon
   (E) forests to have returned by late afternoon

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of any part of this page is illegal.

5. The Poetry Book Society is an organization in London that provides information and guidance for all lovers of contemporary poetry and giving them discounts on books of poetry.

(A) provides information and guidance for all lovers of contemporary poetry and giving them discounts on books of poetry
(B) provides information, guidance, and the getting of discounts on books of poetry for all lovers of contemporary poetry
(C) not only provides information and guidance for lovers of contemporary poetry but also gives them discounts on books of poetry
(D) has been providing information and guidance for lovers of contemporary poetry and were giving discounts on books of poetry
(E) are providing information and guidance for all lovers of contemporary poetry and having given them discounts on books of poetry

6. During the American Civil War, American Red Cross founder Clara Barton ministered to soldiers on the battlefields, at Antietam, so close was she to the actual fighting that a bullet pierced her sleeve.

(A) battlefields, at Antietam, so close was she to the actual fighting
(B) battlefields, she was at Antietam so close to the actual fighting
(C) battlefields, being so close to the actual fighting at Antietam so
(D) battlefields; at Antietam, she was so close to the actual fighting
(E) battlefields; she was at Antietam so close to the actual fighting so

7. Because their flight was missed, the bride's parents ran frantically to another part of the airport to catch another plane that might still arrive in time for the wedding.

(A) Because their flight was missed, the bride's parents ran
(B) Because the bride's parents missed their flight, they had to run
(C) The bride's parents had missed their flight, thus, finally, running
(D) The bride's parents had missed their flight, then they ran
(E) Their flight was missed, which eventually caused the bride's parents to run

8. Buffalo herds, which once thrived in the Great Plains of North America, trampled vegetation, and future plant growth was aided by this by returning nutrients to the soil.

(A) and future plant growth was aided by this by returning nutrients
(B) future plant growth was thereby aided and nutrients returned
(C) thereby aiding future plant growth by returning nutrients
(D) thereby an aid to future plant growth returned nutrients
(E) but this aided future plant growth and nutrients were returned

9. The students criticized the administration for failing either to renovate the old dormitories nor replace them with new buildings.

(A) nor replace
(B) nor replacing
(C) nor did they replace
(D) or by replacing
(E) or to replace

10. Because insufficient funding causes the failure of many new businesses is the reason why Tamar and Robert waited to open their coffee shop until they had enough money.

(A) Because insufficient funding causes the failure of many new businesses is the reason why
(B) Because insufficient funding causes the failure of many new businesses,
(C) Insufficient funding causes the failure of many new businesses is the reason why
(D) As a result of insufficient funding causing the failure of many new businesses;
(E) The fact of insufficient funding is causing many new businesses to fail is why

11. Theodore Roosevelt was not just a great reformer; he was also a great president.

(A) Theodore Roosevelt was not just a great reformer; he was also a great president.
(B) Theodore Roosevelt was not just a great reformer, and also a great president.
(C) Theodore Roosevelt was not just a great reformer; but also a great president.
(D) Great not just as a reformer, but Theodore Roosevelt was also a great president.
(E) Not just as a reformer, Theodore Roosevelt was also a great president.

GO ON TO THE NEXT PAGE

Unauthorized copying or reuse of
any part of this page is illegal.

12. Jesse Jackson's Rainbow PUSH Coalition was established to encourage diverse populations to become socially and politically active, was created in 1996 by the merging of two groups Jackson had previously founded.

(A) Coalition was established
(B) Coalition is established
(C) Coalition, establishing
(D) Coalition, which being established
(E) Coalition, established

13. In the novel, Jane Eyre must make many difficult choices, like when she forces herself to leave the house of Mr. Rochester, the married man she loves.

(A) like when she forces
(B) and, as an example, when she forces
(C) for example, by forcing
(D) as exemplified by when she forces
(E) including forcing

14. Nicknamed the supergrain of the future, quinoa is a complete protein, one that contains all the necessary amino acids and is high in fiber.

(A) protein, one that contains all the necessary amino acids and is
(B) protein, it contains all the necessary amino acids and is
(C) protein, and containing all the necessary amino acids in addition to being
(D) protein that contained all the necessary amino acids and also is
(E) protein; thus, containing all the necessary amino acids and being also

STOP

If you finish before time is called, you may check your work on this section only.
Do not turn to any other section in the test.

Correct Answers and Difficulty Levels
Form Codes AEDB, BWDB, CFDB

Critical Reading

Section 4

	COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.
1.	B	1	13.	C	3
2.	E	1	14.	B	3
3.	D	2	15.	E	3
4.	C	3	16.	E	3
5.	C	1	17.	A	4
6.	D	3	18.	D	4
7.	D	3	19.	E	4
8.	C	5	20.	D	4
9.	A	3	21.	B	4
10.	E	5	22.	B	3
11.	D	4	23.	C	3
12.	E	3	24.	A	3

Number correct

Number incorrect

Section 7

	COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.
1.	E	3	13.	E	3
2.	D	3	14.	C	2
3.	E	4	15.	C	5
4.	C	4	16.	C	1
5.	A	5	17.	E	5
6.	B	2	18.	D	1
7.	C	5	19.	B	4
8.	D	2	20.	D	3
9.	B	2	21.	E	3
10.	B	3	22.	C	3
11.	B	2	23.	B	3
12.	C	3	24.	D	4

Number correct

Number incorrect

Section 9

	COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.
1.	C	3	11.	A	3
2.	D	3	12.	C	2
3.	A	4	13.	D	1
4.	B	4	14.	C	2
5.	A	4	15.	D	1
6.	A	5	16.	A	3
7.	E	2	17.	C	2
8.	C	2	18.	E	1
9.	C	4	19.	D	2
10.	D	3			

Number correct

Number incorrect

Mathematics

Section 2

	COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.
1.	A	1	11.	E	3
2.	C	1	12.	D	3
3.	B	1	13.	D	3
4.	D	2	14.	C	3
5.	E	2	15.	A	3
6.	B	2	16.	A	4
7.	B	2	17.	C	4
8.	D	2	18.	A	4
9.	C	3	19.	C	4
10.	D	3	20.	B	5

Number correct

Number incorrect

Section 5

Multiple-Choice Questions

	COR. ANS.	DIFF. LEV.
1.	A	1
2.	B	1
3.	D	1
4.	B	1
5.	A	4
6.	E	3
7.	C	4
8.	B	5

Number correct

Number incorrect

Student-Produced Response Questions

	COR. ANS.	DIFF. LEV.
9.	93/2 or 46.5	1
10.	4	2
11.	1,2 or 4	2
12.	13	3
13.	1992	2
14.	5/4 or 1.25	3
15.	90	4
16.	67	4
17.	100	4
18.	1/2 or .5	4

Number correct (9-18)

Section 8

	COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.
1.	C	1	9.	C	3
2.	B	2	10.	E	3
3.	D	1	11.	E	3
4.	A	2	12.	B	3
5.	C	2	13.	E	4
6.	A	2	14.	D	3
7.	A	2	15.	C	4
8.	D	2	16.	D	5

Number correct

Number incorrect

Writing Multiple-Choice

Section 6

	COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.
1.	B	1	10.	A	5	19.	B	3	28.	E	4
2.	B	1	11.	B	5	20.	C	3	29.	D	5
3.	A	1	12.	D	1	21.	D	3	30.	E	3
4.	B	1	13.	D	1	22.	A	5	31.	B	3
5.	D	2	14.	A	2	23.	B	4	32.	D	3
6.	C	3	15.	A	3	24.	A	3	33.	A	4
7.	E	2	16.	D	3	25.	D	4	34.	C	4
8.	D	2	17.	C	2	26.	B	3	35.	E	3
9.	D	3	18.	E	2	27.	C	4			

Number correct

Number incorrect

Section 10

	COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.		COR. ANS.	DIFF. LEV.
1.	A	1	6.	D	2	11.	A	3
2.	B	1	7.	B	2	12.	E	5
3.	C	1	8.	C	3	13.	E	4
4.	D	2	9.	E	3	14.	A	5
5.	C	1	10.	B	3			

Number correct

Number incorrect

NOTE: Difficulty levels are estimates of question difficulty for a reference group of college-bound seniors. Difficulty levels range from 1 (easiest) to 5 (hardest).

Scoring Worksheet for Form Codes AEDB, BWDB, CFDB

From your responses on your QAS report, fill in the blanks below and do the calculations to get your mathematics, critical reading, and writing raw scores. Use the tables on the following pages to find your scaled scores.

Get Your Critical Reading Score

How many critical reading questions did you get **right**?

Section 4: Questions 1–24 _____

Section 7: Questions 1–24 + _____

Section 9: Questions 1–19 + _____

Total = _____(A)

How many critical reading questions did you get **wrong**?

Section 4: Questions 1–24 _____

Section 7: Questions 1–24 + _____

Section 9: Questions 1–19 + _____

Total = _____

× 0.25 = _____(B)

A – B = _____
Critical Reading Raw Score

Round critical reading raw score to the nearest whole number.

_____

Use the table on page 53 to find your critical reading scaled score.

_____

Get Your Mathematics Score

How many mathematics questions did you get **right**?

Section 2: Questions 1–20 _____

Section 5: Questions 1–18 + _____

Section 8: Questions 1–16 + _____

Total = _____(A)

How many multiple-choice mathematics questions did you get **wrong**?

Section 2: Questions 1–20 _____

Section 5: Questions 1–8 + _____

Section 8: Questions 1–16 + _____

Total = _____

× 0.25 = _____(B)

A – B = _____
Mathematics Raw Score

Round mathematics raw score to the nearest whole number.

_____

Use the table on page 53 to find your mathematics scaled score.

_____

Get Your Writing Score

How many multiple-choice writing questions did you get **right**?

Section 6: Questions 1–35 _____

Section 10: Questions 1–14 + _____

Total = _____(A)

How many multiple-choice writing questions did you get **wrong**?

Section 6: Questions 1–35 _____

Section 10: Questions 1–14 + _____

Total = _____

× 0.25 = _____(B)

A – B = _____
Writing Multiple-Choice Raw Score

Round writing multiple-choice raw score to the nearest whole number.

_____ (C)

Use the table on page 53 to find your writing multiple-choice scaled score.

_____

Copy your essay score from your QAS report.

_____ (D)

Use the appropriate writing composite table (pages 54–56) for your form code and look up your writing multiple-choice raw score (C) and your essay score (D) to find your writing composite scaled score.

_____

SAT Score Conversion Table
Form Codes AEDB, BWDB, CFDB

Raw Score	Critical Reading Scaled Score	Math Scaled Score	Writing Multiple-Choice Scaled Score	Raw Score	Critical Reading Scaled Score	Math Scaled Score	Writing Multiple-Choice Scaled Score
67	800			31	500	540	55
66	800			30	490	530	54
65	800			29	490	520	53
64	780			28	480	510	52
63	760			27	480	500	52
62	740			26	470	490	51
61	730			25	470	490	50
60	720			24	460	480	49
59	700			23	450	470	48
58	690			22	450	460	47
57	680			21	440	450	46
56	670			20	440	450	45
55	660			19	430	440	45
54	650	800		18	420	430	44
53	640	800		17	420	420	43
52	630	770		16	410	410	42
51	630	750		15	400	410	41
50	620	730		14	400	400	40
49	610	720	80	13	390	390	39
48	600	700	78	12	380	380	38
47	600	690	75	11	370	370	37
46	590	680	73	10	370	360	36
45	580	670	71	9	360	350	35
44	580	660	69	8	350	340	34
43	570	650	68	7	340	330	33
42	560	640	66	6	330	320	32
41	560	630	65	5	320	310	31
40	550	620	64	4	310	300	30
39	550	610	63	3	300	280	29
38	540	600	62	2	290	260	27
37	530	590	61	1	270	250	25
36	530	580	60	0	260	230	24
35	520	570	59	-1	240	210	22
34	520	570	58	-2	220	200	20
33	510	560	57	-3	200	200	20
32	510	550	56	and below			

This table is for use only with the test in this booklet.

SAT Writing Composite Score Conversion Table
Form Code AEDB

Writing MC Raw Score	Essay Raw Score											
	12	11	10	9	8	7	6	5	4	3	2	0
49	800	800	800	800	790	770	750	740	730	710	700	680
48	800	800	790	770	750	730	710	700	690	670	660	640
47	790	780	760	750	720	700	690	670	660	650	630	620
46	770	760	740	730	710	680	670	650	640	630	620	600
45	760	750	730	710	690	670	650	640	630	610	600	580
44	750	730	710	700	680	660	640	620	610	600	590	570
43	730	720	700	680	660	640	630	610	600	590	570	560
42	720	710	690	670	650	630	620	600	590	580	560	540
41	710	700	680	660	640	620	600	590	580	570	550	530
40	700	690	670	650	630	610	590	580	570	560	540	520
39	690	680	660	640	620	600	590	570	560	550	530	510
38	680	670	650	630	610	590	580	560	550	540	520	510
37	670	660	640	630	600	580	570	550	540	530	510	500
36	670	650	630	620	600	580	560	540	530	520	510	490
35	660	640	630	610	590	570	550	540	530	510	500	480
34	650	640	620	600	580	560	540	530	520	500	490	470
33	640	630	610	590	570	550	540	520	510	500	480	460
32	630	620	600	590	560	540	530	510	500	490	480	460
31	630	610	590	580	560	540	520	510	500	480	470	450
30	620	610	590	570	550	530	510	500	490	480	460	440
29	610	600	580	560	540	520	510	490	480	470	450	440
28	600	590	570	560	540	510	500	480	470	460	450	430
27	600	580	570	550	530	510	490	480	470	450	440	420
26	590	580	560	540	520	500	480	470	460	450	430	410
25	580	570	550	530	510	490	480	460	450	440	420	410
24	580	560	540	530	510	490	470	450	440	430	420	400
23	570	550	540	520	500	480	460	450	440	420	410	390
22	560	550	530	510	490	470	460	440	430	420	400	380
21	550	540	520	510	480	460	450	430	420	410	400	380
20	550	530	510	500	480	460	440	430	420	400	390	370
19	540	530	510	490	470	450	430	420	410	400	380	360
18	530	520	500	480	460	440	430	410	400	390	370	360
17	520	510	490	480	460	430	420	400	390	380	370	350
16	520	500	490	470	450	430	410	400	390	370	360	340
15	510	500	480	460	440	420	400	390	380	370	350	330
14	500	490	470	450	430	410	400	380	370	360	340	330
13	500	480	460	450	430	410	390	370	360	350	340	320
12	490	470	460	440	420	400	380	370	360	340	330	310
11	480	470	450	430	410	390	370	360	350	340	320	300
10	470	460	440	420	400	380	370	350	340	330	310	300
9	460	450	430	420	390	370	360	340	330	320	310	290
8	460	440	420	410	390	370	350	330	320	310	300	280
7	450	430	420	400	380	360	340	330	320	300	290	270
6	440	420	410	390	370	350	330	320	310	290	280	260
5	430	420	400	380	360	340	320	310	300	280	270	250
4	420	400	390	370	350	330	310	300	290	270	260	240
3	410	390	380	360	340	320	300	290	280	260	250	230
2	400	380	360	350	330	310	290	270	260	250	240	220
1	380	370	350	330	310	290	280	260	250	240	220	200
0	370	350	330	320	300	280	260	240	230	220	210	200
-1	350	330	320	300	280	260	240	230	220	200	200	200
-2	330	320	300	280	260	240	230	210	200	200	200	200
-3 and below	310	300	280	260	240	220	210	200	200	200	200	200

This table is for use only with the test in this booklet.

SAT Writing Composite Score Conversion Table
Form Code BWDB

Writing MC Raw Score	Essay Raw Score											
	12	11	10	9	8	7	6	5	4	3	2	0
49	800	800	800	800	790	770	750	740	720	710	700	680
48	800	800	780	770	750	730	710	700	680	670	660	640
47	790	780	760	740	720	700	690	670	660	650	630	620
46	770	760	740	720	700	680	670	650	640	630	610	600
45	760	740	720	710	690	670	650	640	620	610	600	580
44	740	730	710	690	670	650	640	620	610	600	580	570
43	730	710	700	680	660	640	620	610	600	590	570	560
42	720	700	690	670	650	630	610	600	590	570	560	540
41	710	690	680	660	640	620	600	590	580	560	550	530
40	700	680	670	650	630	610	590	580	570	550	540	520
39	690	670	660	640	620	600	580	570	560	540	530	510
38	680	660	650	630	610	590	570	560	550	540	520	510
37	670	660	640	620	600	580	570	550	540	530	510	500
36	660	650	630	610	590	570	560	540	530	520	500	490
35	650	640	620	610	580	570	550	530	520	510	490	480
34	650	630	610	600	580	560	540	530	510	500	490	470
33	640	620	610	590	570	550	530	520	510	490	480	460
32	630	620	600	580	560	540	530	510	500	490	470	460
31	620	610	590	580	550	540	520	500	490	480	460	450
30	620	600	580	570	550	530	510	500	480	470	460	440
29	610	590	580	560	540	520	500	490	480	470	450	440
28	600	590	570	550	530	510	500	480	470	460	440	430
27	590	580	560	550	520	510	490	470	460	450	430	420
26	590	570	550	540	520	500	480	470	460	440	430	410
25	580	560	550	530	510	490	480	460	450	440	420	410
24	570	560	540	520	500	480	470	450	440	430	410	400
23	570	550	530	520	500	480	460	450	430	420	400	390
22	560	540	530	510	490	470	450	440	430	410	400	380
21	550	540	520	500	480	460	450	430	420	410	390	380
20	540	530	510	500	470	460	440	420	410	400	380	370
19	540	520	500	490	470	450	430	420	400	390	380	360
18	530	510	500	480	460	440	420	410	400	390	370	360
17	520	510	490	470	450	430	420	400	390	380	360	350
16	510	500	480	470	440	430	410	390	380	370	350	340
15	510	490	470	460	440	420	400	390	380	360	350	330
14	500	480	470	450	430	410	390	380	370	360	340	330
13	490	480	460	440	420	400	390	370	360	350	330	320
12	490	470	450	440	410	400	380	360	350	340	320	310
11	480	460	440	430	410	390	370	360	350	330	320	300
10	470	450	440	420	400	380	360	350	340	330	310	300
9	460	450	430	410	390	370	360	340	330	320	300	290
8	450	440	420	410	380	370	350	330	320	310	290	280
7	450	430	410	400	380	360	340	320	310	300	280	270
6	440	420	400	390	370	350	330	320	300	290	280	260
5	430	410	390	380	360	340	320	310	290	280	270	250
4	420	400	380	370	350	330	310	300	280	270	260	240
3	410	390	370	360	330	320	300	280	270	260	240	230
2	390	380	360	340	320	300	290	270	260	250	230	220
1	380	360	350	330	310	290	270	260	250	230	220	200
0	360	350	330	310	290	270	260	240	230	220	200	200
-1	350	330	310	300	280	260	240	230	210	200	200	200
-2	330	310	300	280	260	240	220	210	200	200	200	200
-3 and below	310	290	280	260	240	220	200	200	200	200	200	200

This table is for use only with the test in this booklet.

SAT Writing Composite Score Conversion Table
Form Code CFDB

Writing MC Raw Score	Essay Raw Score											
	12	11	10	9	8	7	6	5	4	3	2	0
49	800	800	800	800	780	770	750	730	720	710	690	680
48	800	800	780	770	750	730	710	690	680	670	650	640
47	790	770	760	740	720	700	680	670	660	640	620	620
46	770	760	740	720	700	680	670	650	640	620	610	600
45	760	740	720	710	690	670	650	630	620	610	590	580
44	740	730	710	690	670	650	640	620	610	590	580	570
43	730	710	700	680	660	640	620	610	600	580	560	560
42	720	700	690	670	650	630	610	600	580	570	550	540
41	710	690	670	660	640	620	600	590	570	560	540	530
40	700	680	670	650	630	610	590	580	560	550	530	520
39	690	670	660	640	620	600	580	570	550	540	520	510
38	680	660	650	630	610	590	570	560	550	530	510	510
37	670	650	640	620	600	580	570	550	540	520	510	500
36	660	650	630	610	590	570	560	540	530	510	500	490
35	650	640	620	610	580	570	550	530	520	510	490	480
34	650	630	610	600	580	560	540	530	510	500	480	470
33	640	620	610	590	570	550	530	520	510	490	470	470
32	630	620	600	580	560	540	530	510	500	480	470	460
31	620	610	590	580	550	530	520	500	490	470	460	450
30	620	600	580	570	550	530	510	500	480	470	450	440
29	610	590	580	560	540	520	500	490	480	460	440	440
28	600	590	570	550	530	510	500	480	470	450	440	430
27	590	580	560	550	520	510	490	470	460	450	430	420
26	590	570	560	540	520	500	480	470	450	440	420	410
25	580	560	550	530	510	490	480	460	450	430	420	410
24	570	560	540	520	500	480	470	450	440	420	410	400
23	570	550	530	520	500	480	460	440	430	420	400	390
22	560	540	530	510	490	470	450	440	430	410	390	390
21	550	540	520	500	480	460	450	430	420	400	390	380
20	540	530	510	500	470	460	440	420	410	400	380	370
19	540	520	500	490	470	450	430	420	400	390	370	360
18	530	510	500	480	460	440	420	410	400	380	360	360
17	520	510	490	470	450	430	420	400	390	370	360	350
16	510	500	480	470	440	430	410	390	380	370	350	340
15	510	490	480	460	440	420	400	390	370	360	340	330
14	500	480	470	450	430	410	400	380	370	350	340	330
13	490	480	460	440	420	400	390	370	360	340	330	320
12	490	470	450	440	420	400	380	360	350	340	320	310
11	480	460	450	430	410	390	370	360	340	330	310	300
10	470	450	440	420	400	380	370	350	340	320	300	300
9	460	450	430	410	390	370	360	340	330	310	300	290
8	450	440	420	410	380	370	350	330	320	310	290	280
7	450	430	410	400	380	360	340	320	310	300	280	270
6	440	420	400	390	370	350	330	320	300	290	270	260
5	430	410	390	380	360	340	320	310	290	280	260	250
4	420	400	380	370	350	330	310	300	280	270	250	240
3	410	390	370	360	340	320	300	280	270	260	240	230
2	390	380	360	340	320	300	290	270	260	240	230	220
1	380	360	350	330	310	290	270	260	250	230	210	210
0	360	350	330	320	290	280	260	240	230	220	200	200
-1	350	330	320	300	280	260	240	230	210	200	200	200
-2	330	310	300	280	260	240	220	210	200	200	200	200
-3	310	290	280	260	240	220	210	200	200	200	200	200
-4 and below	310	290	280	260	240	220	200	200	200	200	200	200

This table is for use only with the test in this booklet.