

# 2010

# Practice with this full-length PSAT/NMSQT®

## Preliminary SAT/ National Merit Scholarship Qualifying Test

**Timing** The PSAT/NMSQT® has five sections. You will have 25 minutes each for Sections 1–4 and 30 minutes for Section 5.

**Scoring** For each correct answer, you receive one point. For questions you omit, you receive no points. For a wrong answer to a multiple-choice question, you lose a quarter ( $\frac{1}{4}$ ) of a point. For a wrong answer to a math question that is not multiple choice, you do not lose any points.

**Guessing** If you can eliminate one or more choices as wrong, you increase your chances of choosing the correct answer and earning one point. If you can't eliminate any choices, move on. You can return to the question later if there is time.

**Marking Answers** You must mark all of your answers on your answer sheet to receive credit. Make sure each mark is dark and completely fills the oval. If you erase, do so completely. You may write in the test book, but you won't receive credit for anything you write there.

**Checking Answers** You may check your work on a particular section if you finish it before time is called, but you may **not** turn to any other section.

The best way to get ready for the PSAT/NMSQT is to take the practice test. Find time!

**DO NOT OPEN THE TEST BOOK UNTIL YOU ARE TOLD TO DO SO!**

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Preliminary SAT/National Merit Scholarship Qualifying Test  
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4EPT1



## SECTION 1

Time — 25 minutes

24 Questions  
(1-24)

**Directions:** For each question in this section, select the best answer from among the choices given and fill in the corresponding oval 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

A B C D

- Determined to ----- stress in his daily life, Stephen reduced his workload and practiced relaxation techniques.  
(A) detect (B) quantify (C) anticipate  
(D) alleviate (E) perpetuate
- By appearing in many different and diverse roles last year, Perkins demonstrated her ----- as an actor.  
(A) inexperience (B) versatility (C) modesty  
(D) idealism (E) timidity
- Unlike the fused and rigid neck vertebrae of most whales, those of the white whale are -----.  
(A) flexible (B) simple (C) immobile  
(D) dense (E) hidden
- Life for physician Susan La Flesche was quite ----- when she returned to her Omaha people: she had to treat a widely dispersed population with little -----.  
(A) humdrum . . monotony  
(B) draining . . difficulty  
(C) uneventful . . consistency  
(D) challenging . . assistance  
(E) frustrating . . hardship
- Most early blues musicians, failing to achieve widespread -----, had to endure the poverty that usually attends -----.  
(A) ridicule . . notoriety  
(B) anonymity . . ignominy  
(C) recognition . . obscurity  
(D) exposure . . publicity  
(E) acclaim . . prominence
- Never -----, Raphael treated everyone he knew with respect and as an equal.  
(A) extroverted (B) magnanimous  
(C) cooperative (D) effusive  
(E) supercilious
- Many in the village regarded their chief as ----- of -----: he epitomized extreme economy.  
(A) an ambassador . . benevolence  
(B) an icon . . arrogance  
(C) a paragon . . frugality  
(D) a critic . . discretion  
(E) a symbol . . munificence
- Readers eager to understand and enjoy poetry will especially appreciate poet Nikki Giovanni's ----- insights, which are ----- by abstruse allusions.  
(A) esoteric . . unrelieved  
(B) baffling . . motivated  
(C) penetrating . . obscured  
(D) lucid . . unencumbered  
(E) prosaic . . inspired



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**

By definition, stand-up comics are supposed to stand up and be comical. There they are, on stage, pattering a string of remarks into microphones for the audience to chuckle over. I pity them for having to make such an unnatural effort. I've never found a single stand-up comedian truly funny. For a long time, I assumed I possessed a deficient sense of humor; now, I'm not so sure. Humor, at its base, is contrast: the unexpected intruding shockingly into the thrum of the mundane. We don't expect humor; humor is thrust upon us. A stand-up comic who announces to the world that humor is coming will never be funny in the most profound sense of the term.

**Passage 2**

I have, for as long as I can recall, been amazed by stand-up comics—chiefly by their courage, though effrontery may be closer to the exact word. They stand there alone and propose to make an audience of strangers forget their personal troubles and laugh. The announcing of it beforehand is where the nerve comes in. Wit, critics have observed, involves saying or doing the unanticipated. Yet in one sense, professional comics do the opposite of this: by their very presence they establish an anticipation—you will laugh at what I am about to say or do—and then boldly set out to fulfill it.

9. Both authors do which of the following in these passages?

- (A) Write in the first person.
- (B) Contrast expert opinions.
- (C) Present historical evidence.
- (D) Cite the arguments of others.
- (E) Appeal to the reader's sense of humor.

10. In line 7, "base" most nearly means

- (A) pedestal
- (B) ingredient
- (C) foundation
- (D) viewpoint
- (E) site

11. The author of Passage 1 would most likely respond to what the "critics have observed" (Passage 2, lines 18-19) with

- (A) anger
- (B) ambivalence
- (C) mild cynicism
- (D) grudging acceptance
- (E) complete agreement

12. Which best captures the attitude of each author toward stand-up comics?

- (A) The author of Passage 1 feels that they are less funny than they once were, whereas the author of Passage 2 finds them to be quite witty.
- (B) The author of Passage 1 is openly frustrated by their antics, whereas the author of Passage 2 is only slightly annoyed by their actions.
- (C) The author of Passage 1 dismisses their efforts as futile, whereas the author of Passage 2 admires their audacity.
- (D) The author of Passage 1 believes that they are insightful, whereas the author of Passage 2 considers them pedestrian.
- (E) The author of Passage 1 scorns their artificiality, whereas the author of Passage 2 is willing to tolerate their behavior.



Questions 13-24 are based on the following passage.

*This passage is adapted from a book published in 1994.*

Newspapers, magazines, brochures, advertisements, and labels surround us everywhere, turning our waking environment into a profusion of texts to be read, glanced at, or ignored. It is amusing to recall how the early-sixteenth-century philosopher Erasmus reportedly paused on a muddy thoroughfare to scrutinize a rare scrap of printed paper flickering at his feet.

As we now find ourselves at a cultural watershed—as the quantity of information we receive continually increases and as the fundamental process of transmitting information is shifting from page to screen—it may be time to ask how modifications in our way of reading may impinge upon our mental life. For how we receive information bears vitally on the ways we experience and interpret reality.

What is most conspicuous in the evolution of reading across the centuries is what I think of as the gradual displacement of the vertical by the horizontal—the sacrifice of depth to lateral range, or, in other terms, a shift from intensive to extensive reading. When books are rare, hard to obtain, and expensive, the reader must compensate through intensified focus, much like sixteenth-century thinkers who read the same passages over and over, memorizing, inscribing the words deeply on the slate of the attention, subjecting them to an interpretive pressure not unlike what students of religion practice upon their sacred texts. This is ferocious reading—“desert island” reading—and where it does not assume depth, it creates it.

In our culture, access is not a problem, but proliferation is. And the reading act is necessarily different than it was in its earliest days. Awed and intimidated by the availability of texts, faced with the all-but-impossible task of discriminating amongst them, the reader tends to move across surfaces, skimming, hastening from one site to the next without allowing the words to resonate inwardly. The inscription is light but it covers vast territories: quantity is elevated over quality. The possibility of maximum focus is undercut by the awareness of the unread texts that await.

Interestingly, this shift from vertical to horizontal parallels the overall societal shift from bounded lifetimes spent in single locales to lives lived in geographical dispersal amid streams of data. What one loses by forsaking the village and the magnification resulting from the repetition of the familiar, one may recoup by gaining a more inclusive perspective, a sense of the world picture.

This larger access was once regarded as worldliness—one traveled, knew the life of cities, the ways of diverse people. . . . It has now become the birthright of anyone who owns a television set. The modern viewer is a cosmopolitan at one remove, at least potentially. He or she has a window on the whole world and is positioned, no matter how poor or well-to-do, to receive virtually the same infinite stream

of data as every other viewer. There is almost nothing in common between the villager studying holy texts by lantern-light and the contemporary apartment dweller riffling the pages of a newspaper while attending to live televised reports from a far-away country in the throes of a civil war.

How is one to assess the relative benefits and liabilities of these intrinsically different situations? How do we square the pluses and minuses of horizontal and vertical awareness? The villagers, who know every scrap of lore about their environs, are blessedly unaware of cataclysms in distant lands. News of the 1755 catastrophic earthquake in Lisbon, Portugal, took months to travel across Europe. The media-besotted urbanites, by contrast, never lose their awareness of the tremors in different parts of the world.

We may ask, clumsily, which people are happier, or have a more vital grip on experience? The villagers may have possessed their world more pungently, more sensuously; they may have found more sense in things owing both to the limited scope of their concern and the depth of their information—not to mention the villagers’ basic spiritual assumptions. But I also take seriously Marx’s\* quip about the “idiocy of rural life.” Circumscribed conditions and habit suggest greater immersion in circumstance, but also dullness and limitation. The lack of a larger perspective can hobble the mind, leading to suspiciousness and wary conservatism. But by the same token, the constant availability of data and macroperspectives has its own diminishing returns. After a while the sense of scale is attenuated and a relativism resembling cognitive and moral paralysis may result. When everything is happening everywhere, it gets harder to care about anything. How do we assign value? Where do we find the fixed context that allows us to create a narrative of sense about our lives? Ideally, I suppose, one would have the best of both worlds—the purposeful fixity of the local, fertilized by the availability of enhancing vistas: a natural ecology of information and context.

\* Karl Marx was a nineteenth-century German philosopher.

13. The first paragraph (lines 1-7) most directly focuses on the
- (A) demise of reading in modern society
  - (B) change in literary tastes since the sixteenth century
  - (C) decline in cultural values since the sixteenth century
  - (D) current abundance of printed material
  - (E) anticipated drawbacks of electronic information



14. In context, the reference to Erasmus (lines 4-7) is significant in that it
- (A) indicates how fascinated people can become with trivial matters
  - (B) highlights twentieth-century cynicism toward the media
  - (C) emphasizes the current neglect of texts that are philosophical in nature
  - (D) demonstrates the ability of contemporary thinkers to discern facts quickly
  - (E) illustrates a fundamental change in attitude toward printed texts
15. In line 8, the phrase “cultural watershed” describes the
- (A) disparity between the increasing availability of information and its diminishing value
  - (B) stage at which society begins to reap tangible benefits from having a well-read populace
  - (C) shift in cultural values that accompanies the scarcity of useful information
  - (D) changing relationship between human beings and information
  - (E) way that the print media have diminished people’s ability to think for themselves
16. In line 14, “bears . . . on” most nearly means
- (A) presses down
  - (B) pushes against
  - (C) pertains to
  - (D) carries forward
  - (E) admits to
17. In line 19, the “shift” represents a movement away from
- (A) cursory interpretations
  - (B) global awareness
  - (C) escapist literature
  - (D) careful consideration
  - (E) historical writings
18. The author mentions “thinkers” (line 23) and “students” (line 26) primarily to
- (A) explore the limitations of philosophical inquiry
  - (B) question the value of studying obscure texts
  - (C) contrast people from two different eras
  - (D) cite examples of a particular kind of reading
  - (E) emphasize the importance of reading extensively
19. In context, the phrase quoted in line 27 supports the notion that
- (A) readers do not appreciate the difficulty involved in composing literature
  - (B) it is now rare to find profound books that require close study
  - (C) people pursue reading as a way to escape from their worries
  - (D) readers usually have a greater appreciation of books when they are not plentiful
  - (E) reading is no longer a solitary activity
20. The author suggests that in “our culture” (line 29) the reader has become
- (A) empowered
  - (B) overwhelmed
  - (C) pedantic
  - (D) belligerent
  - (E) participatory
21. In lines 39-42 (“Interestingly . . . data”), the author notes a parallel between
- (A) a hunger for knowledge and a desire to travel
  - (B) the quality of writing and the quality of life
  - (C) reading trends and ethical values
  - (D) the way people read and the way they live
  - (E) the subjects people write about and the subjects they know best
22. The word “birthright” (line 48) refers to
- (A) advantages enjoyed by well-to-do students
  - (B) a worldly sophistication that can be gained only from traveling
  - (C) the opportunity to learn about the world
  - (D) the challenge of making sense of large amounts of information
  - (E) the advantages one acquires through monetary inheritance

**1****PRACTICE TEST****1**

23. The example of the “contemporary apartment dweller” (line 55) is primarily used to illustrate

- (A) urban affluence
- (B) narrow-mindedness
- (C) prolific reading
- (D) worldly awareness
- (E) social apathy

24. The primary purpose of the last paragraph (lines 68-90) is to

- (A) question why people have become apathetic about preserving their environments
- (B) analyze the relative value of two distinctive lifestyles
- (C) express a preference for a previous way of life that is no longer available
- (D) examine how two societies responded to technological advancements
- (E) argue in favor of the need for information in contemporary society

**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 2

Time — 25 minutes

20 Questions

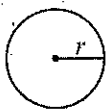
(1-20)

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

Notes

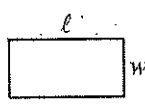
- The use of a calculator is permitted.
- All numbers used are real numbers.
- Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.
- 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

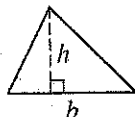


$$A = \pi r^2$$

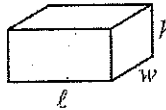
$$C = 2\pi r$$



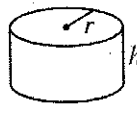
$$A = \ell w$$



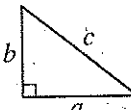
$$A = \frac{1}{2}bh$$



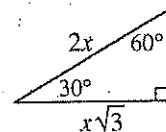
$$V = \ell wh$$



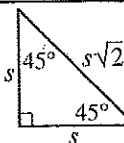
$$V = \pi r^2 h$$



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



Special Right Triangles

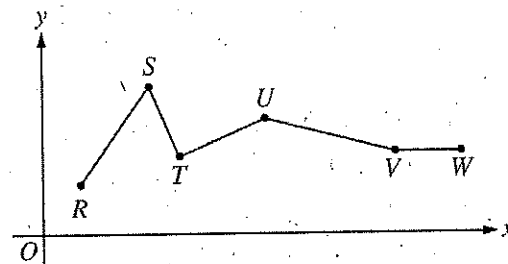


The number of degrees of arc in a circle is 360.

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

1. If  $x - 5 = 2$ , what is the value of  $3x - 5$ ?

- (A) -14  
 (B) 5  
 (C) 6  
 (D) 16  
 (E) 26



2. In the figure above, which line segment has the greatest positive slope?

- (A)  $\overline{RS}$   
 (B)  $\overline{ST}$   
 (C)  $\overline{TU}$   
 (D)  $\overline{UV}$   
 (E)  $\overline{VW}$



3. A fish tank contains 25 trout, 20 bass, 15 perch, and no other kinds of fish. If one of these fish is to be chosen at random, what is the probability that the fish chosen will be a trout?

- (A)  $\frac{7}{12}$   
 (B)  $\frac{1}{2}$   
 (C)  $\frac{5}{12}$   
 (D)  $\frac{1}{3}$   
 (E)  $\frac{1}{4}$

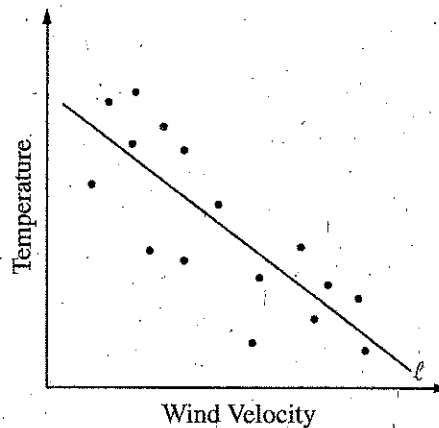
4. If  $(x-3)(x+3) = a$ , then  $(2x-6)(x+3) =$

- (A)  $2a$   
 (B)  $3a$   
 (C)  $4a$   
 (D)  $6a$   
 (E)  $9a$

5. If two lines intersect to form four angles of equal measure, what is the measure of one of these angles?

- (A)  $30^\circ$   
 (B)  $45^\circ$   
 (C)  $60^\circ$   
 (D)  $75^\circ$   
 (E)  $90^\circ$

TEMPERATURE VERSUS WIND VELOCITY



6. At 16 different times, Rodney measured the temperature and wind velocity on top of Hubb's Hill. The scatterplot above shows the temperature and the wind velocity for each of the 16 times. Line  $\ell$  is the line of best fit. For how many of the times was the actual temperature greater than what the line of best fit predicted for the corresponding wind velocity?

- (A) 7  
 (B) 8  
 (C) 9  
 (D) 11  
 (E) 12

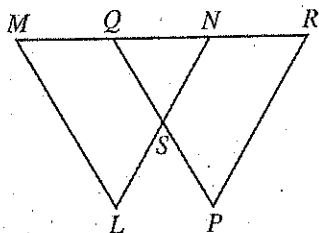
7. Which of the following could be represented by the expression  $7 - \frac{n}{2}$ ?

- (A) 7 decreased by  $\frac{1}{2}$  a number  $n$   
 (B) 7 less than  $\frac{1}{2}$  a number  $n$   
 (C) 7 more than  $\frac{1}{2}$  a number  $n$   
 (D)  $\frac{1}{2}$  of 7 less than a number  $n$   
 (E)  $\frac{1}{2}$  of 7 decreased by a number  $n$



8. If  $\frac{2+3x}{x}$  is an integer, which of the following could be the value of  $x$ ?

(A) 2  
 (B) 3  
 (C) 4  
 (D) 5  
 (E) 6



9. In the figure above,  $\triangle LMN$  and  $\triangle PQR$  are equilateral. If  $MQ = QN = NR$  and if  $LM = 12$ , what is the perimeter of quadrilateral  $PSNR$ ?

(A) 24  
 (B) 30  
 (C) 32  
 (D) 36  
 (E) 40

10. Jerry chose a four-digit number to be the personal identification number for his bank account. The first digit (leftmost digit) is prime, the greatest common factor of the middle two digits is 2, and the last digit is a divisor of 30. Which of the following numbers could be his personal identification number?

(A) 2468  
 (B) 3456  
 (C) 3863  
 (D) 5469  
 (E) 9216

11. What number is 6 more than  $\frac{1}{3}$  of itself?

(A) 2  
 (B) 3  
 (C) 4  
 (D) 9  
 (E) 12

12. If Lucia is not a member of the outdoor club, then from which of the following statements can it be determined whether or not Lucia is in the hiking club?

(A) Anyone in the outdoor club is not in the hiking club.  
 (B) No one is in both the outdoor club and the hiking club.  
 (C) Anyone who is not in the outdoor club is not in the hiking club.  
 (D) Everyone in the outdoor club is in the hiking club.  
 (E) Some people who are not in the outdoor club are not in the hiking club.

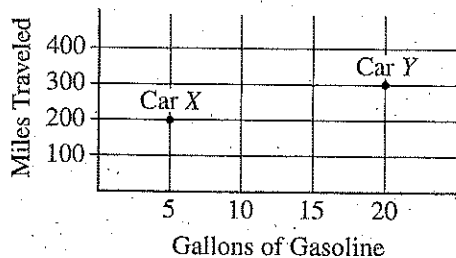
13. What is the greatest possible number of points of intersection of two circles if one has a radius that is twice the radius of the other?

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

$$\begin{aligned}x + y &= 0 \\x - y &= k\end{aligned}$$

14. If the ordered pair  $(1, p)$ , where  $x = 1$  and  $y = p$ , is a solution of both equations above, then what is the value of  $k$ ?

(A) -2  
 (B) -1  
 (C) 0  
 (D) 1  
 (E) 2



15. The graph above shows distance traveled, in miles, by two cars, X and Y, plotted against gallons of gasoline used. On average, for each gallon of gasoline used, how many more miles did car X travel than car Y?
- (A) 4  
 (B)  $6\frac{2}{3}$   
 (C) 15  
 (D) 25  
 (E) 40

16. If  $x$  is an integer and  $2x$  is divisible by 6, which of the following must be true?

- I.  $x$  is divisible by 6.  
 II.  $x$  is divisible by 3.  
 III.  $x$  is an odd number.

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

17. If  $t$  and  $w$  are positive numbers and  $\frac{t^8}{t^2} = w^{12}$ ,

then  $\frac{w^8}{w^2} =$

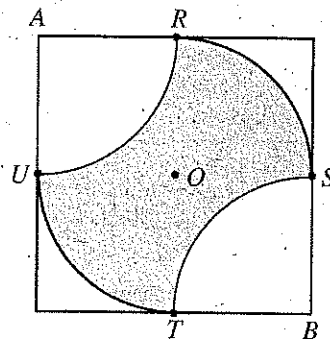
- (A)  $t^2$   
 (B)  $t^3$   
 (C)  $t^4$   
 (D)  $t^6$   
 (E)  $t^{12}$

18. If the graph of the line  $x - 2y = -1$  in the  $xy$ -plane is reflected across the  $x$ -axis, which of the following is an equation of the resulting reflection?

- (A)  $x - 2y = -1$   
 (B)  $x + 2y = -1$   
 (C)  $x - 2y = 1$   
 (D)  $x + 2y = 1$   
 (E)  $2x + y = -2$

19. How many positive three-digit integers are there such that each digit is an odd number less than 6?

- (A) 3  
 (B) 6  
 (C) 9  
 (D) 18  
 (E) 27



20. The figure above shows a square with side of length 6. The center of the square is  $O$ , and  $R$ ,  $S$ ,  $T$ , and  $U$  are the midpoints of the sides. If the arcs shown have centers at  $A$ ,  $O$ , and  $B$ , what is the area of the shaded region?

- (A) 18  
 (B)  $6\pi$   
 (C)  $9\pi - 9$   
 (D)  $9 + \frac{9\pi}{4}$   
 (E)  $36 - 6\pi$

**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 3

Time — 25 minutes

24 Questions

(25-48)

**Directions:** For each question in this section, select the best answer from among the choices given and fill in the corresponding oval 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

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

25. Though the experimental medicine effectively treated certain symptoms, its side effects were so ----- that its development was halted.  
 (A) unpleasant (B) soothing (C) appropriate  
 (D) infrequent (E) mild
26. Among the first Chinese American writers, sisters Edith and Winnifred Eaton had ----- literary approaches: Edith wrote social novels set in the United States, while Winnifred wrote romantic stories set in Japan.  
 (A) confusing (B) unpopular (C) informal  
 (D) contrasting (E) occasional

27. This talented biographer provides several family trees for reference, but the family lineage is so ----- described in the text that the charts soon become -----.

- (A) chaotically . . dispensable  
 (B) accurately . . essential  
 (C) precisely . . memorable  
 (D) clumsily . . redundant  
 (E) deftly . . unnecessary

28. Although Mount Saint Helens has been more ----- over the years than any other volcano in the contiguous United States, its long dormancy before its 1980 eruption ----- its destructive nature.

- (A) astounding . . diffused  
 (B) gaseous . . confirmed  
 (C) explosive . . belied  
 (D) anticipated . . predicted  
 (E) volatile . . subdued

29. The newspaper described the speaker as a ----- because he further inflamed the passions of the angry crowd.

- (A) diplomat (B) pacifist (C) backslider  
 (D) demagogue (E) prognosticator



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 30-31 are based on the following passage.

Historians' verdicts on Alexander the Great\* vary. Some view Alexander as a charismatic, visionary leader intent on constructing a fusion of East and West, while others condemn him as a cruel and unstable megalomaniac who mainly cared about consolidating control over as much territory as he could grab. A third camp credits Alexander with increasing the geographical spread of notions essential to civilization, using methods that seem brutal by today's standards but that were acceptable at the time. Perhaps historians are divided because the man himself was divided—swinging wildly from blind wrath to acts of selfless generosity. There is substantial agreement on one issue, however: Alexander's military prowess. In this arena, he earned his name.

\* King of Macedonia from 336-323 B.C.

30. The author indicates that the "others" (line 3) regard Alexander as a leader who

- (A) inspired loyalty among his followers
- (B) won military battles against all odds
- (C) hoped to unite Europe and Asia
- (D) was obsessed with his own power
- (E) undermined social stability

31. The primary purpose of the passage is to

- (A) reveal the full scope of Alexander the Great's ambitions
- (B) present divergent views of the historical figure Alexander the Great
- (C) acknowledge Alexander the Great's use of brute force to achieve his ends
- (D) question Alexander the Great's reputation as a military genius
- (E) point out Alexander the Great's achievements as a political leader

Questions 32-33 are based on the following passage.

Humans do not catch a disease like chestnut blight or sudden oak death, but they do help to spread such diseases. As people trade and travel across the globe, they serve as unwitting vehicles for all manner of arboreal pathogens—disease-causing microbes and insects that can destroy trees in epidemic proportions. Each year in the United States, federal and state inspectors intercept thousands of these pathogens—after examining no more than 2 percent of all arriving cargo and baggage. Only a tiny fraction of the pathogens that slip through will take hold, but those that do tend to be deadly.

32. The author of the passage uses the word "unwitting" (line 4) to indicate that some travelers

- (A) do not expect their luggage to be searched upon arrival in the United States
- (B) are unaware that they may have crossed international boundaries
- (C) do not realize that they are transporting potentially harmful entities
- (D) are unconcerned about legal restrictions on the importation of plants
- (E) do not appreciate the health risks that arboreal pathogens pose for humans

33. The author cites the figure of "2 percent" (line 8) in order to suggest the likelihood that

- (A) an insignificant proportion of the country's arboreal pathogens is of foreign origin
- (B) the government will increase the number of federal and state inspectors at the country's borders
- (C) most of the cargo and baggage not examined by government inspectors contains arboreal pathogens
- (D) government inspectors fail to intercept the vast majority of arboreal pathogens that arrive at the country's borders
- (E) very few of the arboreal pathogens that enter the country will actually cause damage to forests



Questions 34-39 are based on the following passages.

These two passages discuss the planet Mars. The first was published in August 2003, the second in November 2003.

### Passage 1

When Mariner 4 returned the first close-up images of the Martian surface during its brief flyby in 1965, the impact craters it revealed were a source of great despair for a generation that had been raised on science fiction. Mars, it seemed, was not the “abode of life” envisioned by amateur astronomer Percival Lowell but rather a body that bore a disappointingly familiar resemblance to Earth’s Moon—battered, dry, and lifeless.

But after nearly four decades of investigation by robotic spacecraft and laboratory studies of meteorites blasted from its surface, the Mars we know today bears only a superficial resemblance to the one glimpsed by Mariner 4. It is a planet characterized by unexpected diversity and extremes, boasting the largest impact basins, the tallest volcanoes, and the most complex canyon system found anywhere in the solar system. Arguably the greatest surprise during our recent explorations has been the discovery of water’s important role throughout Martian history. Evidence of flowing water, both past and present, is found almost everywhere—from enormous channels that disgorged their floodwaters eons ago to delicate gullies that may occasionally bear trickling streams in modern times. The presence of outflow channels—huge scoured depressions tens of kilometers wide, hundreds of kilometers long, and up to a kilometer deep—argue that an immense reservoir of water was present throughout much of Martian geologic history.

### Passage 2

Planetary scientists studying Mars could use a breakthrough. Recent evidence has shaken what has been one of the most tantalizing core beliefs about the Red Planet—that ancient Mars was much wetter and warmer than the planet is today and even harbored a planet-wide ocean.

The water conundrum intensified in August 2003, when planetary geologist Philip R. Christensen and his colleagues reported the results of a six-year study with an infrared spectrometer aboard the orbiting Mars Global Surveyor observatory. This instrument scrutinized large swaths of the Martian surface and atmosphere for carbonates, minerals associated with liquid water. On Earth, carbonates such as limestone form when carbon dioxide from the atmosphere dissolves in water, making carbonic acid. The acid eats away at rocks and the remains precipitate out as carbonate deposits. Researchers had been looking for carbonates on Mars for more than a decade, so Christensen’s team’s announcement that they had finally

found some signaled victory; however, carbonates were detected in only small amounts in the planet’s surface dust. “We believe that the relatively small amounts that we see probably did not come from oceans, but from trace amounts of water vapor in the atmosphere.” According to Christensen’s team, these data “really point to a cold, frozen Mars that has probably always been that way.”

34. In their discussion of Mars, the authors of Passage 1 and Passage 2 each make use of
- (A) a direct emotional appeal
  - (B) an extended analogy
  - (C) references to amateur astronomers
  - (D) telescopic observations from Earth
  - (E) recent findings from planetary explorations
35. The evidence from “Mariner 4” (Passage 1, line 1) and the “infrared spectrometer” (Passage 2, line 37) would best support the idea that
- (A) conditions on Mars are not conducive to life like that on Earth
  - (B) Mars’s surface is not like that of Earth’s Moon
  - (C) water was once present on Mars but has since disappeared
  - (D) huge craters distinguish Mars from other planets
  - (E) a variety of minerals has never been plentiful on Mars
36. The primary purpose of Passage 2 is to
- (A) present evidence that counters an established scientific theory
  - (B) describe how particular minerals are formed on planet surfaces
  - (C) illustrate the difficulties of planetary research
  - (D) evaluate geological similarities between Mars and Earth
  - (E) discuss the significance of a new scientific tool
37. The author of Passage 1 would most likely respond to the findings discussed in Passage 2 with
- (A) indifference, given the controversial assumptions that underlie the research
  - (B) mild disapproval, since the findings are based on research done quickly and unsystematically
  - (C) surprise, given prevailing beliefs about how the surface of Mars has been shaped
  - (D) reluctant acceptance, because the findings are related only loosely to the issue of water on Mars
  - (E) concurrence, since the findings point to a widely supported conclusion

**3****3****PRACTICE TEST****3****3**

38. If “Christensen and his colleagues” (Passage 2, lines 35-36) had discovered large amounts of carbonate, the discovery would most likely have had what effect on the author’s argument in Passage 1?
- (A) No effect at all, because the discovery would be irrelevant
  - (B) Weaken the argument by directly contradicting it
  - (C) Compromise the argument by complicating it
  - (D) Qualify the argument by pointing out its pros and cons
  - (E) Strengthen the argument by providing additional support
39. The evidence provided about Mars in Passage 1 and Passage 2, respectively, is best described as
- (A) anecdotal vs. factual
  - (B) biological vs. chemical
  - (C) visual vs. intuitive
  - (D) geographical vs. astronomical
  - (E) topographical vs. mineralogical



Questions 40-48 are based on the following passage.

*This passage is adapted from a 2003 novel set in Japan and the United States.*

Painting consumed Hana, perhaps, she was forced to admit, because a part of her always remained unsatisfied with what she did. Her dissatisfaction stemmed partly from her own inadequacies as an artist—it seemed as if she were continually cursing the clumsiness of her hands and her lack of technique and craft—but if that were her only problem, she would have been fine: whenever she was confronted with yet another dismal product of her labor, she just vowed again, with all of the fierce determination that was perhaps her defining characteristic, that she would work even harder, and that someday, somehow, her eyes would be sharper, her hands more deft, and her lines more sure. No, what proved a far more insurmountable obstacle was that while she struggled to paint pictures as Sasaki-sensei, her art instructor, said—an exact copy of nature—she never wanted to; the pictures in her head, vague and ill-defined though they were, seemed always far superior to the ones that appeared on the canvas in front of her and, more to the point, to the ones that appeared beyond it, the lake or the sunflowers or the bowl of peaches or whatever it was that Sasaki-sensei wanted her to reproduce.

But if not lakes, if not peaches, if not even sunflowers (her favorite flowers, their colors so vivid and their shapes so bold, but at the same time almost ugly, their giant heads drooping a little with their own weight), then what was it that she wanted to paint? Hana wasn't sure. She admired but at the same time had no desire to participate in the delicate, ephemeral arts of Japan, the flower arrangements and the tea ceremony and the painstakingly careful folding of origami. She herself wished to create art that would shout out she was here long after she was gone. Her wish to make art that was both substantial and strong was such that, despite her love of the limitless array of colors that could arise with the mixing of paint, she thought sometimes that what she really wanted to do was sculpture: something that would slash against the landscape, loom up and create shelter, and cast shadows in the grass.

Yet sculpture was a path that Hana would never pursue, because one day as she wandered through the galleries in Nagoya, she fell in love. The artist's name was Setsuko Migishi—a woman, and a Nagoya local too, although she had lived almost half of her adult life in France—but it was her work that captivated Hana. On canvases that were as tall as Hana, Migishi painted flowers and mountains, yet they were barely recognizable as such, constructed as they were out of triangles and rectangles that had little to do with the way that the objects actually appeared; they were, moreover, made with smears of paint, so thick that they formed clots on the canvas. If Hana peered close—and she did, for so long that her head began to feel light—she could

see the swirls of Migishi's brush stroke. While the colors were dazzling, gorgeous, and varied enough to satisfy even Hana, they were not beautiful paintings: indeed, two or three of them were just short of crude. But all of them had power, so much so that they had no need for the heft and size and extra dimension of sculpture to create the same monumental effect.

It was Hana herself who called the feelings she had about Migishi's paintings love (and later, when she told her daughters about the first time she saw Migishi's work, she would again characterize the attachment she formed in romantic terms, as a passion that developed quickly, but one that changed her for good). Hana based her self-diagnosis on the chatter of her school friends. If a racing heart, an inability to concentrate in school because of a preoccupation with the beloved, a tendency to go up and down in moods, and sleeplessness were symptoms of a crush—well, then she had a bad case of it indeed.

40. The first two paragraphs (lines 1-38) primarily suggest that Hana was

- (A) eager to banish the pictures in her mind and master her craft
- (B) frustrated in her attempts to create art
- (C) longing to study sculpture
- (D) filled with disdain for her teacher
- (E) seeking fame instead of accepting the need for instruction

41. In line 13, the word "No" is an answer to which question implied in lines 1-13?

- (A) Did painting in fact consume Hana?
- (B) Was Hana inadequate as an artist?
- (C) Was Hana accustomed to admitting failure?
- (D) Was Hana's only problem dissatisfaction with her skill?
- (E) Was Hana filled with sufficient determination to succeed?

42. The parenthetical remarks in lines 24-26 anticipate and are consistent with which of the following in the passage?

- (A) Hana's interest in the Japanese art of flower arranging
- (B) Hana's decision not to become a sculptor
- (C) Hana's eventual choice of subject matter for her paintings
- (D) Hana's appreciation of Migishi's paintings
- (E) Hana's attitude toward romantic love

**3****3**
**PRACTICE TEST**
**3****3**

43. The sentence in lines 31-32 (“She . . . gone”) indicates that Hana wanted to
- (A) produce art that embodied the artistic traditions of Japan
  - (B) create lively discussion among her contemporaries
  - (C) confirm her talent in the eyes of her instructor
  - (D) develop a style that would be imitated by subsequent generations of artists
  - (E) achieve a kind of immortality through her work
44. Lines 36-38 (“something . . . grass”) suggest which of the following about Hana?
- (A) The confidence she is gaining in her technical skill
  - (B) The extent to which she identifies with nature
  - (C) The loss she would experience if she gave up painting
  - (D) Her desire to create powerful work
  - (E) Her admiration for traditional Japanese arts
45. In line 38, “cast” most nearly means
- (A) assign
  - (B) discard
  - (C) eject
  - (D) put forth
  - (E) cause to move
46. The third paragraph (lines 39-58) primarily serves to
- (A) emphasize a character’s insecurity
  - (B) recount a regrettable incident
  - (C) celebrate an important accomplishment
  - (D) defend a puzzling decision
  - (E) describe a transformative experience
47. What Hana found most appealing about Migishi’s work was its
- (A) stark realism
  - (B) European subject matter
  - (C) technical refinement
  - (D) traditional beauty
  - (E) stylistic vitality
48. The final paragraph most directly elaborates on which point made earlier by the narrator?
- (A) “Hana wasn’t sure” (line 27)
  - (B) “She herself wished to create art that would shout out she was here long after she was gone” (lines 31-32)
  - (C) “she thought sometimes that what she really wanted to do was sculpture” (lines 35-36)
  - (D) “Yet sculpture was a path that Hana would never pursue” (line 39)
  - (E) “she fell in love” (line 41)

**S T O P**

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

18 Questions

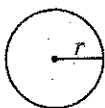
(21-38)

**Directions:** This section contains two types of questions. You have 25 minutes to complete both types. For questions 21-28, solve each problem and decide which is the best of the choices given. Fill in the corresponding oval on the answer sheet. You may use any available space for scratch work.

Notes

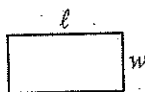
- The use of a calculator is permitted.
- All numbers used are real numbers.
- Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not drawn to scale. All figures lie in a plane unless otherwise indicated.
- 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

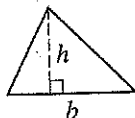


$$A = \pi r^2$$

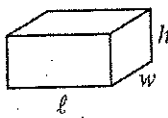
$$C = 2\pi r$$



$$A = \ell w$$



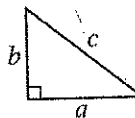
$$A = \frac{1}{2}bh$$



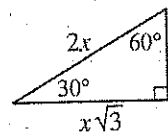
$$V = \ell wh$$



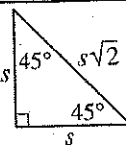
$$V = \pi r^2 h$$



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



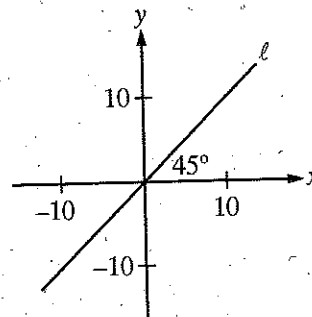
Special Right Triangles



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.

21. If  $b$  is an integer and  $3.2 \times 10^b$  is a number between 500 and 5,000, what is the value of  $b$ ?

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

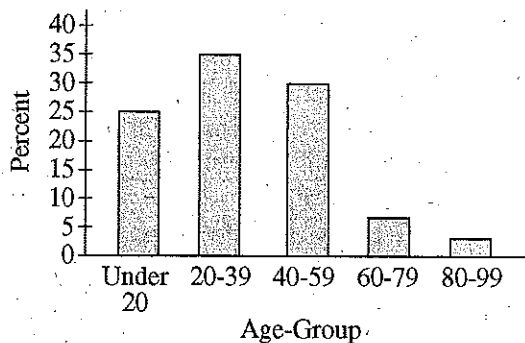


22. Which of the following are the coordinates of a point on line  $\ell$  in the  $xy$ -plane above?

- (A) (1, 1)  
(B) (1, 0)  
(C) (0, 1)  
(D) (0, -1)  
(E) (-1, 1)



PEOPLE LIVING IN TOWN P, BY AGE-GROUP



23. A total of 28,000 people are represented in the graph above. Approximately how many of these people are 20 years old or older?

(A) 7,000  
 (B) 14,000  
 (C) 18,000  
 (D) 21,000  
 (E) 24,000

1, 9, 25, 49, ...

24. The sequence above is formed by squaring the odd positive integers, beginning with 1. What is the difference between the 8th and 9th terms of this sequence?

(A) 1  
 (B) 17  
 (C) 23  
 (D) 52  
 (E) 64

25. Each time Sue rents a bicycle, she pays a fixed base cost plus an hourly rate for the time the bicycle is rented. Last Saturday she paid \$12.00 to rent a bicycle for 6 hours, and yesterday she paid \$9.50 to rent a bicycle for 4 hours. Which of the following equations shows the total cost  $C$ , in dollars, for Sue to rent a bicycle for  $n$  hours?

(A)  $C = 1.25n$   
 (B)  $C = 1.25n + 4.50$   
 (C)  $C = 2.00n + 2.50$   
 (D)  $C = 2.50n + 2.00$   
 (E)  $C = 4.50n + 1.25$

26. The function  $f$  is defined by  $f(x) = 3x - 40$ . If  $f(a) = 8$ , what is the value of  $a$ ?

(A) -96  
 (B) -16  
 (C) 16  
 (D)  $-\frac{32}{3}$   
 (E)  $\frac{32}{3}$

27. In  $\triangle ABC$ , if  $AB = 1$  and  $BC = 100$ , which of the following must be true about the angles?

(A) The measure of  $\angle A$  is greatest.  
 (B) The measure of  $\angle B$  is greatest.  
 (C) The measures of  $\angle A$  and  $\angle B$  are equal.  
 (D) The measure of  $\angle C$  is greatest.  
 (E) The measure of  $\angle C$  is least.

28. The ratio of  $x$  to  $y$  is 3 to 2, and the ratio of  $y$  to  $z$  is 4 to 3. If  $x$ ,  $y$ , and  $z$  are positive numbers, what is the ratio of  $x$  to  $(y + z)$ ?

(A) 2 to 7  
 (B) 3 to 5  
 (C) 6 to 7  
 (D) 7 to 2  
 (E) 7 to 5



### Directions for Student-Produced Response Questions

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

Write answer in boxes. →

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

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← Fraction line

Grid in result. →

Answer: 2.5

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← Decimal point

Answer: 201

Either position is correct.

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

- Mark no more than one oval in any column.
- Because the answer sheet will be machine-scored, you will receive credit only if the ovals 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 ovals 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  $\frac{31}{2}$  is gridded, it will be interpreted as  $\frac{31}{2}$ , not  $3\frac{1}{2}$ .)

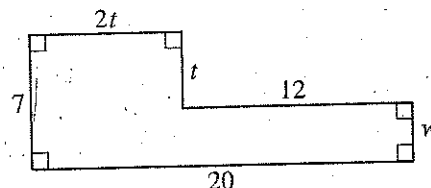
- **Decimal Answers:** If you obtain a decimal answer with more digits than the grid can accommodate, it may be either rounded or truncated, but it must fill the entire grid. For example, if you obtain an answer such as 0.6666..., you should record your result as .666 or .667. A less accurate value such as .66 or .67 will be scored as incorrect.
- Acceptable ways to grid  $\frac{2}{3}$  are:

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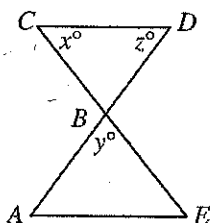
29. The 12 students in a history class each completed the 3 required reports. In addition, 2 of the students each completed exactly 2 extra reports, and 4 of the students each completed exactly 1 extra report. What is the total number of reports completed by these 12 students?



30. In the figure above, what is the value of  $w$ ?

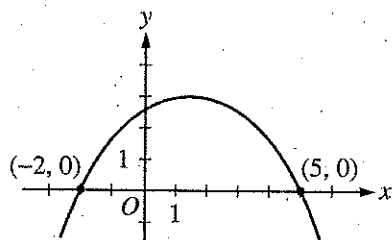


31. In 1954 the record time for running a mile was 4 minutes, and by 1975 the record had fallen to 3 minutes and 50 seconds. If the record had fallen at a constant rate during that time and continued to do so, in what year can it be expected that the record time for running a mile will be  $3\frac{1}{2}$  minutes?



Note: Figure not drawn to scale.

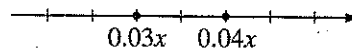
32. In the figure above,  $\overline{AE} \parallel \overline{CD}$  and  $\overline{AB}$  and  $\overline{BE}$  have equal length. If  $y = 81$ , what is the value of  $x$ ?



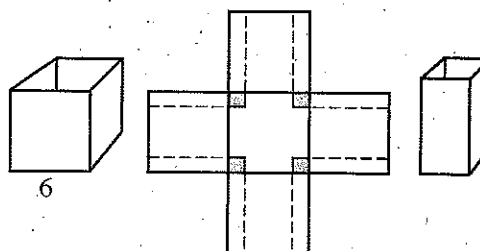
33. The graph of a quadratic function  $f$  is shown above. For what value of  $x$  does  $f$  attain its greatest value?

11, 2,  $x$ , 7, 12

34. The average (arithmetic mean) of the five numbers above is the same as the median of these numbers. What is one possible value of  $x$ ?



35. On the number line above, the coordinates of two points are shown. If the distance between the points is 2, what is the value of  $x$ ?
36. A list consists of 1000 consecutive even integers. What is the difference between the greatest number in the list and the least number in the list?



37. A cube-shaped cardboard box with no top had edges that were each 6 inches long, as shown in the figure on the left. All of the upright edges of the box were cut so that the cardboard could lie flat, as shown in the center figure. Then, 1-inch-wide strips and 1-inch squares were cut away from the cardboard, as indicated by the dotted lines and by the shaded squares. The remaining cardboard was refolded into a new rectangular box and taped together without overlap, as shown on the right. What is the volume, in cubic inches, of the new box?

38. If  $75 < \frac{x-2}{3} < 76$ , what is one possible value of  $\frac{x-2}{6}$ ?

**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 5

Time — 30 minutes

39 Questions

(1-39)

**Directions:** For each question in this section, select the best answer from among the choices given and fill in the corresponding oval 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 and she was sixty-five years old then.

- (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

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

1. One striking feature of Akira Kurosawa's later films is he uses vibrant colors.
  - (A) he uses
  - (B) how it uses
  - (C) when they use
  - (D) the use of
  - (E) by using
2. The DVD is a recent invention, while it may soon make videotapes obsolete.
  - (A) The DVD is a recent invention, while it
  - (B) Being that it is a recent invention, the DVD
  - (C) The DVD is a recent invention that
  - (D) The DVD, although a recent invention, they
  - (E) Because the DVD is new, and, as such, it
3. The homesteaders having come as far as the Great Salt Lake, and they did not want to turn back without establishing land claims, even though winter was approaching.
  - (A) The homesteaders having come as far as the Great Salt Lake, and they
  - (B) Coming as far as the Great Salt Lake, the homesteaders they
  - (C) Having come as far as the Great Salt Lake, the homesteaders
  - (D) To come as far as the Great Salt Lake, the homesteaders
  - (E) When the homesteaders came as far as the Great Salt Lake, so they
4. Most people prefer the abridged version of Boswell's *Life of Johnson* for the simple reason that it is much shorter in length than the original work he wrote.
  - (A) that it is much shorter in length than the original work he wrote
  - (B) that it is much shorter than the original work
  - (C) because the original work is much longer
  - (D) of it being much shorter than the original work
  - (E) being that the original work is much longer
5. In 1968 the singer Eartha Kitt spoke out against the Vietnam War, offending powerful entertainment-industry figures, many of whom blacklisted her for several years.
  - (A) many of whom
  - (B) many of them
  - (C) many of these people
  - (D) and many which
  - (E) that, out of many,
6. Of the many deserts in the United States, Arizona's strangely beautiful Painted Desert is more colorful.
  - (A) strangely beautiful Painted Desert is more
  - (B) Painted Desert, which is strangely beautiful, is the more
  - (C) strangely beautiful Painted Desert is the most
  - (D) strange, beautiful Painted Desert is more
  - (E) Painted Desert is strangely beautiful, plus most



7. It was more likely a physical illness than a sudden loss of inspiration that prevented Schubert to complete his Eighth Symphony.
- (A) Schubert to complete his Eighth Symphony  
 (B) Schubert's having completed of his Eighth Symphony  
 (C) Schubert from completing his Eighth Symphony  
 (D) the completing of his Eighth Symphony by Schubert  
 (E) his Eighth Symphony being completed by Schubert
8. In 1905, while still a clerk at the Swiss Patent Office, four articles written by Albert Einstein laid the foundation of modern physics.
- (A) four articles written by Albert Einstein laid  
 (B) four articles were written by Albert Einstein, laying  
 (C) four articles that Albert Einstein wrote laid  
 (D) Albert Einstein wrote four articles that laid  
 (E) Albert Einstein wrote four articles, they laid
9. If you had kept your experiences in mind, they will often help you to make better-informed decisions.
- (A) had kept your experiences  
 (B) could have kept your experiences  
 (C) keep your experiences  
 (D) can keep what you experience  
 (E) could keep what you experience
10. Constrained by the small amounts typically available to them for study, the analysis of pheromones in the laboratory attempted by scientists is often frustrated.
- (A) the analysis of pheromones in the laboratory attempted by scientists is often frustrated  
 (B) analyzing pheromones in the laboratory, this often frustrates the attempts of scientists  
 (C) scientists are often frustrated in their attempts to analyze pheromones in the laboratory  
 (D) scientists attempting to analyze pheromones, they are often frustrating  
 (E) scientists who attempt to analyze pheromones in the laboratory often becoming frustrated
11. The wings of birds and bats are modified front limbs, but being unlike birds, bat wings do not contain hollow bones.
- (A) being unlike birds, bat wings  
 (B) by being unlike birds, bats' wings  
 (C) bats' wings, unlike birds' wings,  
 (D) bats' wings; and unlike birds' wings,  
 (E) bat wings are unlike bird wings,
12. The blue whale has a long, streamlined body and its head making up almost one-fourth of their total body length.
- (A) its head making up almost one-fourth of their total body length  
 (B) almost one-fourth of their total body length being made up by their heads  
 (C) almost one-fourth of the total length of its body is its head  
 (D) a head that makes up almost one-fourth of its total body length  
 (E) a head making up almost one-fourth of the total length of their bodies
13. The National Academy of Sciences undertook its first rigorous study of global warming in the late 1970s, this was a time when climate modeling was still in its infancy.
- (A) this was a time  
 (B) it was a time  
 (C) a time  
 (D) it being a time  
 (E) being
14. Although she never learned to read or write, Sojourner Truth was a charismatic speaker who advocated both the abolition of slavery and the advancement of women's rights.
- (A) Truth was a charismatic speaker who advocated both  
 (B) Truth was a charismatic speaker and both an advocate of  
 (C) Truth was a charismatic speaker, both advocating  
 (D) Truth, a charismatic speaker who advocated both  
 (E) Truth, who was a charismatic speaker and advocated both



15. Some African plants that have been treatment for centuries for common ailments locally are now used in Western medicine as well.
- (A) plants that have been treatment for centuries for common ailments locally.
- (B) plants, by which common ailments were treated locally for centuries,
- (C) plants, while for centuries treating common ailments locally,
- (D) plants used locally for centuries to treat common ailments
- (E) plants, which has been used locally in treating common ailments for centuries,
16. Restaurant patrons in the 1990s ordered more vegetarian dishes than the 1970s and 1980s.
- (A) ordered more vegetarian dishes than
- (B) have ordered vegetarian dishes more than did
- (C) ordered vegetarian dishes more than the foods of
- (D) ordered more vegetarian dishes than with the restaurant patrons in
- (E) ordered more vegetarian dishes than did restaurant patrons in
17. No one will diminish the reputation of our school like Mr. Bruce's departure.
- (A) No one will diminish the reputation of our school like Mr. Bruce's departure.
- (B) No one will diminish the reputation of our school like Mr. Bruce's departure will.
- (C) Mr. Bruce's departure will diminish the reputation of our school like none other.
- (D) The reputation of our school will be diminished by Mr. Bruce's departure more than any.
- (E) Nothing will diminish the reputation of our school as much as Mr. Bruce's departure will.
18. Every building within a twenty-mile radius of the downtown business district had an interruption in their electric service during the ice storm.
- (A) had an interruption in their electric service
- (B) had its electric service interrupted
- (C) had their electric service interrupted
- (D) that interrupted the electric service
- (E) that had its electric service interrupted
19. These days, business and social life are conducted at a pace that prompts people to send e-mails or make phone calls to colleagues and friends rather than letters.
- (A) rather than
- (B) instead of
- (C) rather than write
- (D) instead of to write
- (E) rather than written
20. Although far more eloquent a speaker, the incumbent made fewer concrete proposals in his campaign speech than the challenger did in hers.
- (A) Although far more eloquent a speaker
- (B) He was a far more eloquent speaker
- (C) In contrast to being far more eloquent as a speaker
- (D) Despite him being a far more eloquent speaker
- (E) As a speaker he was more eloquent



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:

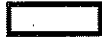
The other delegates and him immediately  
 A B C  
 accepted the resolution drafted by the  
 D  
 neutral states. No error  
 E

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

21. After she earned her pilot's license in 1921,  
 Bessie Coleman is traveling from Paris to the  
 A  
 United States, where she performed as a stunt  
 B C  
 pilot before large crowds of admirers. No error  
 D E
22. Much of the success of Anthony Mann and John Ford  
 A  
as a director of Westerns has been attributed to  
 B C  
 their knowledge of the technical work necessary  
to make such films. No error  
 D E
23. Customer surveys revealing that a major concern of  
 A  
 airline passengers, almost as important as arriving  
 B  
safely and on time, is receiving accurate information  
 C D  
 from the airlines. No error  
 E
24. Calcium, whose role in metabolism is not yet fully  
 A B  
 understood by nutritionists, appear to stoke the body's  
 C  
 fat-burning furnace when consumed daily in  
 D  
 recommended amounts. No error  
 E
25. Neither the catalog of the exhibit nor the museum  
 A  
 guide explained the technical aspects of Picasso's  
 B  
 paintings thoroughly enough to satisfy inquisitive  
 C D  
 art students. No error  
 E
26. Because the Silver Key restaurant draws such large  
 A  
 crowds, employees there are extremely busy and  
 B  
 seldom have a chance to sit and rest his or her feet.  
 C D  
No error  
 E



27. Political leadership in many countries have had an A  
 impact in some nonpolitical areas, such as the arts,  
B C  
 and even influences everyday language. No error  
D E
28. Unlike the case with Andrea, who was tired after  
A B  
 working all weekend, I wanted to go to the state  
C  
 capitol building to hear the governor's speech.  
D  
No error  
E
29. Members of the debate team, determined to hone their  
A  
 skills in argumentation, have been practicing each  
B C  
 day and competing on every possible occasion.  
D  
No error  
E
30. Not carefully watching the clock, there was not  
A  
enough time for the teacher to explain clearly  
B C D  
 the assignment for the following week. No error  
E
31. Even though comedy can convey profound messages  
A  
 about humankind, tragedy has usually been taken  
B  
more serious than comedy. No error  
C D E
32. Although the work schedule had been as meticulously  
A  
 prepared as it was suppose to be, the completion of  
B C  
 the job was delayed by the unexpected resignations  
D  
 of several workers. No error  
E
33. In the Indian Ocean off the eastern coast of Africa  
A  
lies Madagascar and the Seychelles, which were  
B  
created and preserved by continental shifts. No error  
C D E
34. Although there seems to be many ways to solve  
A B  
 the puzzle, only one method will bring about the  
C  
desired result. No error  
D 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 35-39 refer to the following passage.

(1) *The Interesting Narrative of the Life of Olaudah Equiano, or Gustavus Vassa, the African*, published in England in 1789, is important for historical and literary reasons. (2) It is an eighteenth-century travelogue. (3) The narrative vividly describes the author's adventures in the British Royal Navy, and on merchant ships. (4) The book is equally important, however, because it combines spiritual autobiography, which they were reading widely at the time, and slave narrative, which some say Equiano invented.

(5) In this book, Equiano traces his spiritual growth from his kidnapping at age 12 to his work with abolitionists. (6) His religious faith figures prominently in his autobiography. (7) For instance, after his capture, Equiano found himself in an often unjust and cruel world. (8) Many would have become corrupted. (9) He sought to become a man of virtue instead of that.

(10) As a slave narrative, Equiano's book moves from slavery to escape to freedom. (11) At first, Equiano accepted slavery, though not its cruelty and injustice. (12) He simply accepted the views of the time. (13) However, as he traveled and observed the world, Equiano learned to criticize slavery.

35. In context, sentence 2 (reproduced below) should begin with which of the following?

*It is an eighteenth-century travelogue.*

- (A) The book based on history,
- (B) The book being historical,
- (C) It should be noted that the book, of historical import,
- (D) The book is of historical importance because
- (E) In other words, historians like the book because

36. In context, which of the following revisions is necessary in sentence 4 (reproduced below)?

*The book is equally important, however, because it combines spiritual autobiography, which they were reading widely at the time, and slave narrative, which some say Equiano invented.*

- (A) Change "however" to "that is".
- (B) Delete ", however,".
- (C) Change "they were reading widely" to "was popular".
- (D) Change "at the time" to "then".
- (E) Delete "which some say Equiano invented".

37. In context, which of the following is the best way to revise and combine sentences 8 and 9 (reproduced below)?

*Many would have become corrupted. He sought to become a man of virtue instead of that.*

- (A) Many become corrupted; however, he seeks to become a man of virtue.
- (B) Many would have become corrupted, but Equiano became a man of virtue instead.
- (C) Seeking to become a virtuous man instead of becoming corrupted, Equiano does what many would not.
- (D) A virtuous man was what Equiano sought to become instead; many become corrupted.
- (E) Becoming a man of virtue was what he was seeking; although, many other people would become corrupted.

5


**PRACTICE TEST**


5

38. In order to develop the final paragraph (sentences 10-13), the writer should
- (A) elaborate on Equiano's changing views on slavery
  - (B) quote an expert on the differences between the slave trade in England and that in other countries
  - (C) provide details of the various places to which Equiano traveled
  - (D) discuss other examples of travel writing in the eighteenth century
  - (E) explain what conditions were on board British ships when Equiano was a seaman

39. Where should the following sentence be added?

*In general, spiritual autobiographies describe how individuals achieve a sort of moral awakening.*

- (A) Before sentence 1
- (B) Before sentence 5
- (C) Before sentence 8
- (D) After sentence 10
- (E) After sentence 13

**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** Black letter after answer indicates difficulty level (e = easy, m = medium, h = hard).

### CRITICAL READING SECTIONS

Section 1			9. A e	18. D h	Section 3			33. D m	42. D h
1. D e	10. C e	19. D h	25. A e	34. E m	43. E m				
2. B e	11. E h	20. B m	26. D e	35. A m	44. D m				
3. A e	12. C e	21. D m	27. E m	36. A m	45. D m				
4. D e	13. D m	22. C m	28. C h	37. C h	46. E m				
5. C m	14. E m	23. D h	29. D h	38. E m	47. E m				
6. E h	15. D h	24. B m	30. D e	39. E m	48. E m				
7. C h	16. C m		31. B e	40. B e					
8. D h	17. D m		32. C e	41. D m					

### MATHEMATICS SECTIONS

Section 2			8. A m	16. B m	Section 4			28. C h	36. 1998 h
1. D e	9. B m	17. B h	21. C e	29. 44 e	37. 112 h				
2. A e	10. C m	18. B h	22. A e	30. 3 m	38. $75/2 < x < 38/1$ h				
3. C e	11. D m	19. E h	23. D m	31. 2017 m					
4. A m	12. C m	20. A h	24. E m	32. $99/2$ or $49.5$ m					
5. E e	13. B m		25. B m	33. $3/2$ or $1.5$ h					
6. C e	14. E m		26. C m	34. 3, 8, or 23 m					
7. A m	15. D m		27. E h	35. 200 h					

### WRITING SKILLS SECTION

Section 5			8. D e	16. E m	24. C m	32. C m
1. D e	9. C e	17. E m	25. E e	33. B h		
2. C e	10. C e	18. B m	26. D m	34. A h		
3. C e	11. C e	19. C m	27. A m	35. D m		
4. B m	12. D m	20. A h	28. A m	36. C m		
5. A e	13. C m	21. A e	29. E m	37. B m		
6. C e	14. A m	22. B e	30. A m	38. A e		
7. C e	15. D m	23. A e	31. C m	39. B m		