SAT Practice Test #2

Note: Section 4, the variable section, has been omitted from this practice test.
ESSAY
Time — 25 minutes

Turn to page 2 of your answer sheet to write your ESSAY.

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.

Technology promises to make our lives easier, freeing up time for leisure pursuits. But the rapid pace of technological innovation and the split second processing capabilities of computers that can work virtually nonstop have made all of us feel rushed. We have adopted the relentless pace of the very machines that were supposed to simplify our lives, with the result that, whether at work or play, people do not feel like their lives have changed for the better.

Adapted from Karen Finucan, "Life in the Fast Lane"

Assignment: Do changes that make our lives easier not necessarily make them better? 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.
SECTION 2
Time — 25 minutes
24 Questions

Turn to Section 2 (page 4) 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. To avoid being ______, composer Stephen Sondheim strives for an element of surprise in his songs.

(A) erratic (B) informal (C) elaborate (D) predictable (E) idiosyncratic

2. Because the pandas had already been weakened by disease and drought, a harsh winter would have had ______ consequences for them.

(A) preventive (B) regressive (C) catastrophic (D) unforeseen (E) moderate

3. For many of the villagers, marriage was a practical ______, one not necessarily ______ of love but nevertheless grounded largely in economic advantage.

(A) arrangement . . devoid
(B) entertainment . . disparaging
(C) attitude . . consisting
(D) bargain . . worthy
(E) misfortune . . trusting

4. Maggie is a procrastinator, naturally inclined to ______ and to ______ discussions.

(A) meddle . . scoff at
(B) temporize . . prolong
(C) misbehave . . disrupt
(D) sneer . . terminate
(E) withdraw . . intrude in

5. Just as glass windows offer buildings both light and insulation, certain atmospheric gases ______ incoming sunlight and ______ heat radiated from the ground, preventing warmth from escaping.

(A) conduct . . release
(B) deflect . . transmit
(C) admit . . contain
(D) absorb . . dispense
(E) resist . . trap

6. The speaker, praised for her style yet ridiculed for her vacuity, often moved naive listeners with ______ alone and led them to believe that her speech had ______.

(A) reason . . dalliance
(B) infelicity . . conviction
(C) rhetoric . . substance
(D) pragmatism . . futility
(E) boorishness . . integrity

7. The actor was noted for his ______ behavior: he quickly became irritated if his every whim was not immediately satisfied.

(A) fastidious (B) sedulous (C) vindictive (D) petulant (E) mercenary

8. Hayley Mills’s films have been called ______, although most of them are not so sentimental as to deserve that description.

(A) treacly (B) cursory (C) prosaic (D) meticulous (E) consecrated

GO ON TO THE NEXT PAGE
Questions 9-10 are based on the following passage.

That nineteenth-century French novelist Honoré de Balzac could be financially wise in his fiction while losing all his money in life was an irony duplicated in other matters. For instance, the very women who had been drawn to him by the penetrating intuition of the female heart that he showed in his novels were appalled to discover how insensitive and awkward the real man could be. It seems the true source of creation for Balzac was not sensitivity but imagination. Balzac’s fiction originally sprang from an intuition he first discovered as a wretched little schoolboy locked in a dark closet of his boarding school. Life is a prison, and only imagination can open its doors.

9. The example in lines 4-8 primarily suggests that
   (A) Balzac’s work was not especially popular among female readers
   (B) Balzac could not write convincingly about financial matters
   (C) Balzac’s insights into character were not evident in his everyday life
   (D) people who knew Balzac personally could not respect him as an artist
   (E) readers had unreasonable expectations of Balzac the man

10. The author mentions Balzac’s experience as a schoolboy in order to
    (A) explain why Balzac was unable to conduct his financial affairs properly
    (B) point out a possible source of Balzac’s powerful imagination
    (C) exonerate the boarding school for Balzac’s lackluster performance
    (D) foster the impression that Balzac was an unruly student
    (E) depict the conditions of boarding school life during Balzac’s youth

Questions 11-12 are based on the following passage.

Dr. Jane Wright insisted in later years that her father, surgeon Louis Wright, never pressured her to study medicine; indeed he warned her how hard becoming a doctor would be. His very fame, within and beyond the African American community, made her training harder in some ways. “His being so good really makes it very difficult,” Wright told an interviewer soon after she graduated from medical school in 1945. “Everyone knows who Papa is.”

11. The passage suggests that Jane Wright’s medical training was made more difficult because
    (A) her father warned her not to study medicine
    (B) her father flaunted his success
    (C) she did not spend adequate time studying
    (D) she shared her father’s desire for fame
    (E) she was inevitably compared to her father

12. The passage is primarily concerned with Jane Wright’s
    (A) views of the medical profession
    (B) childhood recollections
    (C) perception of her father as a role model
    (D) reluctance to collaborate with her father
    (E) gratitude for her father’s encouragement
Questions 13-24 are based on the following passages.

The following two passages consider the experiences of middle-class women in nineteenth-century England under the reign of Queen Victoria (1837-1901). Passage 1 is from a work of social history: Passage 2 is from a study of travel writing.

Passage 1

In nineteenth-century England, middle-class women were usually assigned domestic roles and faced severely limited professional career options. Of course, one can point to England’s monarch, Queen Victoria, as a famous example of a woman at work, and millions of working-class women worked for wages in factories and private homes, on farms, and in stores and markets. But aristocrats were often exempt from societal strictures that bound the middle class, and working-class women were usually looked down on as not being “respectable” for their efforts as workers. As the nineteenth century progressed, it was assumed that a woman engaged in business was a woman without either her own inheritance or a man to support her. Middle-class women already shared with upper-middle-class men the societal stumbling blocks to active pursuit of business, which included the feeling that labor was demeaning and not suitable for those with aspirations to gentility. But unlike a man, whose self-worth rose through his economic exertions, a woman who did likewise risked opprobrium for herself and possibly shame for those around her. Inequality in the working world made it exceedingly difficult for a middle-class woman to support herself on her own, let alone support dependents. Thus, at a time when occupation was becoming a core element in masculine identity, any position for middle-class women other than in relation to men was considered anomalous. In the 1851 census, the Registrar General introduced a new fifth class of workers, exclusively made up of women:

The fifth class comprises large numbers of the population that have no occupation; but it requires no argument to prove that the wife, the mother, the mistress of an English family—fills offices and discharges duties of no ordinary importance; or that children are or should be occupied in filial or household duties, and in the task of education, either at home or at school.

This conception of women had been developing over a long period. For example, in the late seventeenth century, trade tokens used by local shopkeepers and small masters in family businesses carried the initials of the man’s and the woman’s first names and the couple’s surname, but by the late eighteenth century, only the initials of the male proprietor were retained. This serves to confirm the view of one Victorian man, born in 1790, that whereas his mother had confidently joined in the family auctioneering business, the increased division of the sexes had seen the withdrawal of women from business life.

Marriage became, more than ever, the only career option offering economic prosperity for women; in business, women appear only as faint shadows behind the scenes. The absence of women in business and financial records makes our knowledge of what middle-class women actually did and how they survived economically quite fragmentary. What we do know is that women’s ability to survive economically on their own became increasingly difficult in the course of the nineteenth century.

Passage 2

In the second half of the nineteenth century in England, under the rule of Queen Victoria, because of the long peace and the increasing prosperity, more and more women found themselves able to travel to Europe unescorted. With the increase in travel came an increase in the number of guidebooks, collections of travel hints, and diaries by travelers—many of which were written by or directed to women.

Although nineteenth-century women traveled for a variety of reasons, ranging from a desire to do scientific research to involvement in missionary work, undoubtedly a major incentive was the desire to escape from domestic confinement and the social restrictions imposed on the Victorian female in Britain. As Dorothy Middleton observes, “Travel was an individual gesture of the housebound, man-dominated Victorian woman.” The “caged birds” of the Victorian parlor found their wings and often took flight in other lands. In a less constrained environment they achieved physical and psychological freedom and some measure of autonomy. In Celebrated Women Travelers of the Nineteenth Century (1883), Davenport Adams comments: “Fettered as women are in European countries by restraints, obligations, and responsibilities, which are too often arbitrary and artificial . . . it is natural enough that when the opportunity offers, they should hail even a temporary emancipation through travel.”

By the latter part of the nineteenth century, women travelers began to be singled out as exemplars of the new social and political freedom and prowess of women.

 Ironically, Mary Kingsley and other women travelers were opposed to or simply uninterested in the late Victorian campaigns to extend women’s political rights. Thus, when Mary Kingsley returned from West Africa in 1895, she was chagrined to discover that she was being hailed as a “new woman” because of her travels. Despite her often outspoken distaste for the “new women” agitating for greater freedom, the travel books that she and others had written still suggested, as Paul Fussell has argued, “an implicit celebration of freedom.”
13. Lines 18-21 suggest that for Victorian middle-class women, “self-worth” and “economic exertions” were thought to be
(A) mutually exclusive
(B) constantly evolving
(C) the two keys to success
(D) essential to finding a husband
(E) easy to achieve

14. In line 24, “occupation” most nearly means
(A) military conquest
(B) pleasant diversion
(C) vocation
(D) settlement
(E) political repression

15. The author of Passage 1 considers trade tokens (lines 37-38) as evidence against the prevalence of a fifth class in the seventeenth century because they
(A) served as legal currency
(B) were issued to both middle-class and working-class women
(C) helped neutralize gender stereotypes of the day
(D) failed to identify women by their names and positions
(E) identified men and women as partners in business

16. All of the following are referred to in Passage 1 as evidence of women’s diminished social status in Victorian England EXCEPT the
(A) disparity between men’s and women’s career opportunities
(B) shame risked by women who wished to enter commerce
(C) exclusion of women’s initials from trade tokens
(D) influence of the queen
(E) absence of financial records documenting women’s activity

17. Which statement about British society, if true, would most directly support the view described in lines 42-46?
(A) Seventeenth-century women workers could raise their status by assuming greater responsibilities.
(B) Women wrote more novels in the early nineteenth century than they did in the early eighteenth century.
(C) Women and girls worked in factories throughout the nineteenth century.
(D) The practice of married couples jointly running businesses died out in the early nineteenth century.
(E) In the seventeenth century, formal academic institutions were closed to women.

18. In context, “hail” (line 80) most nearly means
(A) call out to
(B) gesture to
(C) come from
(D) welcome
(E) summon

19. In Passage 2, Mary Kingsley’s attitude toward women’s rights campaigns (lines 85-90) suggests
(A) a single-minded dedication to equality between the sexes
(B) a way in which dedication to one cause can lead to antagonism toward another
(C) a striking inconsistency between her identity as a British citizen and her identity as a woman
(D) an understanding of the link between women’s struggle for freedom and the struggles of other groups
(E) a contradiction between her personal motives and the way her actions are interpreted

20. According to Passage 2, nineteenth-century British women were motivated to travel by which of the following?
I. Educational pursuits
II. Humanitarian concerns
III. Entrepreneurial interests
(A) I only
(B) III only
(C) I and II only
(D) I and III only
(E) II and III only

21. Which British traveler of the Victorian era would best illustrate the argument made in Passage 2?
(A) A middle-class woman who tours Greece and Egypt to examine ancient ruins.
(B) An aristocratic woman who lives in the Asian capital where her father is the British ambassador.
(C) A young woman and her husband, both missionaries, who relocate permanently in a distant country.
(D) A nursemaid who accompanies an aristocratic family to its new home in New York City.
(E) A young girl from a poor family who is sent by relatives to make her fortune in Australia.
22. The “fifth class” (line 29) in Passage 1 is most like which group in Passage 2?
   (A) Women who worked as missionaries
   (B) The “caged birds” (line 71)
   (C) The “new woman” (lines 89-90)
   (D) Dorothy Middleton and Mary Kingsley
   (E) Davenport Adams and Paul Fussell

23. Passage 1 and Passage 2 share a general tone of
   (A) affectionate nostalgia
   (B) analytical detachment
   (C) personal regret
   (D) righteous indignation
   (E) open hostility

24. The information in Passage 1 supports which assumption about the women described in Passage 2?
   (A) They were discouraged from pursuing careers in their native country.
   (B) They sought to establish new businesses in foreign countries.
   (C) They traveled with children and other family members.
   (D) They were universally admired by British women from every class of society.
   (E) They were committed advocates of social reform.

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
20 Questions

Turn to Section 3 (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.

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]

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 \( 3b + 1 < 10 \), which of the following CANNOT be the value of \( b \) ?
   (A) -1
   (B) 0
   (C) 1
   (D) 2
   (E) 3

2. If \( 2^{4x} = 16 \), then \( x = \)
   (A) 1
   (B) 2
   (C) 4
   (D) 8
   (E) 12

3. How much greater than \( r - 2 \) is \( r + 5 \)?
   (A) 2
   (B) 3
   (C) 5
   (D) 6
   (E) 7

GO ON TO THE NEXT PAGE
4. If the rectangular box with no lid shown above is cut along the vertical edges and flattened, which of the following figures best represents the result?

(A) 

(B) 

(C) 

(D) 

(E) 

5. In the figure above, a path from point A to point D is determined by moving upward or to the right along the grid lines. How many different paths can be drawn from A to D that do not include either B or C?

(A) Two
(B) Four
(C) Six
(D) Eight
(E) Sixteen

6. If \( \frac{3}{7} \) of \( n \) is 42, what is \( \frac{5}{7} \) of \( n \)?

(A) 70
(B) 45
(C) 30
(D) 18
(E) 10
7. The figure above shows the top view of an open square box that is divided into 6 compartments with walls of equal height. Each of the rectangles D, E, and F has twice the area of each of the equal squares A, B, and C. When a marble is dropped into the box at random, it falls into one of the compartments. What is the probability that it will fall into compartment F?

(A) $\frac{1}{12}$
(B) $\frac{1}{8}$
(C) $\frac{1}{6}$
(D) $\frac{2}{11}$
(E) $\frac{2}{9}$

8. If $a$ and $b$ are odd integers, which of the following must also be an odd integer?

I. $(a + 1)b$
II. $(a + 1) + b$
III. $(a + 1) - b$

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

9. The decimal number above consists of only 1’s and 0’s to the right of the decimal point. The first 1 is followed by one 0, the second 1 is followed by two 0’s, the third 1 is followed by three 0’s, and so on. What is the total number of 0’s between the 98th and the 101st 1 in this decimal number?

(A) 288
(B) 291
(C) 294
(D) 297
(E) 300

10. If $f(x) = \frac{3 - 2x^2}{x}$ for all nonzero $x$, then $f(2) =$

(A) $\frac{11}{2}$
(B) $\frac{7}{2}$
(C) $-\frac{1}{2}$
(D) $-\frac{5}{2}$
(E) $-7$
11. In the figure above, $\ell \perp n$ and $x > 90$. Which of the following must be true?
(A) $y < 90$
(B) $y > 90$
(C) $y = 90$
(D) $n \perp m$
(E) $\ell \parallel m$

13. The table above shows the noon temperatures for seven cities designated $A$ through $G$. If the median noon temperature of these cities is $40^\circ F$, then the noon temperature for City $D$ could be any of the following EXCEPT
(A) $29^\circ F$
(B) $35^\circ F$
(C) $39^\circ F$
(D) $40^\circ F$
(E) $42^\circ F$

12. In the $xy$-plane, the line with equation $y = 5x - 10$ crosses the $x$-axis at the point with coordinates $(a, b)$. What is the value of $a$?
(A) $-10$
(B) $-2$
(C) $0$
(D) $2$
(E) $5$

14. What is the perimeter of the figure above?
(A) $24$
(B) $25$
(C) $28$
(D) $30$
(E) $36$
15. If $m$ is the greatest prime factor of 38 and $n$ is the greatest prime factor of 100, what is the value of $m + n$?

(A) 7
(B) 12
(C) 24
(D) 29
(E) 44

17. Let the operation $\oplus$ be defined by $a \oplus b = \frac{a + b}{a - b}$ for all numbers $a$ and $b$, where $a \neq b$.
If $1 \oplus 2 = 2 \oplus x$, what is the value of $x$?

(A) 4
(B) 3
(C) 2
(D) 1
(E) 0

16. Line $\ell$ has a positive slope and passes through the point $(0, 0)$. If line $k$ is perpendicular to line $\ell$, which of the following must be true?

(A) Line $k$ passes through the point $(0, 0)$.
(B) Line $k$ has a positive slope.
(C) Line $k$ has a negative slope.
(D) Line $k$ has a positive $x$-intercept.
(E) Line $k$ has a negative $y$-intercept.

18. During a sale, a customer can buy one shirt for $x$ dollars. Each additional shirt the customer buys costs $z$ dollars less than the first shirt. For example, the cost of the second shirt is $x - z$ dollars. Which of the following represents the customer’s cost, in dollars, for $n$ shirts bought during this sale?

(A) $x + (n - 1)(x - z)$
(B) $x + n(x - z)$
(C) $n(x - z)$
(D) $\frac{x + (x - z)}{n}$
(E) $(x - z) + \frac{(x - z)}{n}$
19. In the figure above, \( QR \) is the arc of a circle with center \( P \). If the length of arc \( QR \) is \( 6\pi \), what is the area of sector \( PQR \)?

(A) \( 108\pi \)
(B) \( 72\pi \)
(C) \( 54\pi \)
(D) \( 36\pi \)
(E) \( 9\pi \)

20. There are 75 more women than men enrolled in Linden College. If there are \( n \) men enrolled, then, in terms of \( n \), what percent of those enrolled are men?

(A) \( \frac{n}{n + 75} \) %
(B) \( \frac{n}{2n + 75} \) %
(C) \( \frac{n}{100(2n + 75)} \) %
(D) \( \frac{100n}{n + 75} \) %
(E) \( \frac{100n}{2n + 75} \) %
SECTION 5
Time — 25 minutes
24 Questions

Turn to Section 5 (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:
Hopeing 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. Predictably, detail-oriented workers are ______ keeping track of the myriad particulars of a situation.

(A) remiss in  (B) adept at
(C) humorous about  (D) hesitant about
(E) contemptuous of

2. The controversial tax fueled a sustained ______ that could not be ______ by the Prime Minister’s impassioned speeches.

(A) rebellion . . . challenged
(B) interrogation . . . fortified
(C) conflagration . . . fostered
(D) denial . . . restrained
(E) uprising . . . quelled

3. Inbreeding can promote the expression of ______ genes, those that make an animal subject to disease or impair reproductive efficiency.

(A) ineffable  (B) articulated  (C) consummate
(D) presumptive  (E) deleterious

4. The doctor ______ so frequently on disease-prevention techniques that his colleagues accused him of ______.

(A) vacillated . . . inconsistency
(B) sermonized . . . fidelity
(C) wavered . . . steadfastness
(D) experimented . . . inflexibility
(E) relied . . . negligence

5. A judicious biography must be ______ representation that depicts both the strengths and the weaknesses of the subject, avoiding the two extremes of ______ and indictment.

(A) a polarized . . . vindication
(B) an imaginative . . . discernment
(C) a holistic . . . censure
(D) a complimentary . . . animosity
(E) an equitable . . . eulogy

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 6-9 are based on the following passages.

Passage 1

Farm families are able to achieve efficiency only through a brutal work schedule that few people could tolerate. "The farm family does physically demanding work and highly stressful work at least 14 hours a day, 7 days a week, 365 days a year, without a scheduled vacation or weekends off," wrote Minnesota politician and farm alumnus Darrell McKigney. "The farmer must endure all of this without . . . any of the benefits that most United States labor unions demand." A dairy farmer, for instance, cannot just take off for a two-week vacation and not milk the cows. "Farmers lose perspective on the other things in life," one psychologist has written. "The farm literally consumes them."

Passage 2

Americans have distanced themselves from the ethics and morals of food production, except where it serves them to think nostalgically about family farms as the source of our better values. Little wonder that a poll taken by The New York Times finds a majority of Americans seeing farm life as superior to any other kind of life in this country. As consumers, Americans have enjoyed relatively inexpensive food. What will happen if family farms disappear? What will we do without family farmers to watch over the system for us, to be our dupes, and to create that pleasant situation through their own great discomfort?

6. Unlike Passage 2, Passage 1 is primarily concerned with the
   (A) ethical implications of food production
   (B) harsh working conditions on many farms
   (C) need for farmers to form a labor union
   (D) plentiful and varied food available in the United States
   (E) beliefs of many Americans regarding farm life

7. Both passages serve to discourage the
   (A) reliance on polls for accurate information
   (B) desire of many farmers to take annual vacations
   (C) tendency of Americans to buy inexpensive foods
   (D) romanticization of farm life by nonfarmers
   (E) rise in price of home-grown produce

8. The author of Passage 1 would most likely assert which of the following about the "majority" line 19, Passage 2)?
   (A) They would be bored by the routine chores that are performed on a farm.
   (B) They have little understanding of the realities of farm life.
   (C) They admire the efficiency of the average family farm.
   (D) They wish to improve the arduous life of many farmers.
   (E) They are impressed by the current research on economical food production.

9. Unlike the author of Passage 2, the author of Passage 1 does which of the following?
   (A) Explains a study.
   (B) Offers a solution.
   (C) Argues a position.
   (D) Discusses a phenomenon.
   (E) Quotes an authority.
Questions 10-15 are based on the following passage.

This excerpt from a novel by a Chinese American author is about a Chinese American woman named June. During a family dinner party attended by some of June's Chinese American friends, Waverly, a tax attorney, discusses an advertisement that June wrote for her.

Waverly laughed in a lighthearted way. "I mean, really, June." And then she started in a deep television-announcer voice: "Three benefits, three needs, three reasons to buy ... Satisfaction guaranteed ..."

She said this in such a funny way that everybody thought it was a good joke and laughed. And then, to make matters worse, I heard my mother saying to Waverly: "True, one can't teach style. June is not sophisticated like you. She must have been born this way."

I was surprised at myself, how humiliated I felt. I had been outsmarted by Waverly once again, and now betrayed by my own mother.

Five months ago, some time after the dinner, my mother gave me my "life's importance." a jade pendant on a gold chain. The pendant was not a piece of jewelry I would have chosen for myself. It was almost the size of my little finger, a mottled green and white color, intricately carved. To me, the whole effect looked wrong: too large, too green, too garishly ornate. I studded the necklace in my lacquer box and forgot about it.

But these days, I think about my life's importance. I wonder what it means, because my mother died three months ago, six days before my thirty-sixth birthday. And she's the only person I could have asked to tell me about life's importance, to help me understand my grief.

I now wear that pendant every day. I think the carvings mean something, because shapes and details, which I never seem to notice until after they're pointed out to me, always mean something to Chinese people. I know I could ask Auntie Linda, Auntie An-mei, or other Chinese friends, but I also know they would tell me a meaning that is different from what my mother intended. What if they tell me this curving line branching into three oval shapes is a pomegranate and that my mother was wishing me fertility and posterity? What if my mother really meant the carvings were a branch of pears to give me purity and honesty?

And because I think about this all the time, I always notice other people wearing these same jade pendants—not the flat rectangular medallions or the round white ones with holes in the middle but ones like mine, a two-inch oblong of bright apple green. It's as though we were all sworn to the same secret covenant, so secret we don't even know what we belong to. Last weekend, for example, I saw a bartender wearing one. As I fingered mine, I asked him, "Where'd you get yours?"

"My mother gave it to me," he said.
I asked him why, which is a nosy question that only one Chinese person can ask another; in a crowd of Caucasians, two Chinese people are already like family.

"She gave it to me after I got divorced. I guess my mother's telling me I'm still worth something."

And I knew by the wonder in his voice that he had no idea what the pendant really meant.

10. In lines 1-4, Waverly characterizes June's advertisement as being
(A) unsophisticated and heavy-handed
(B) somber and convoluted
(C) clear and concise
(D) humorous and effective
(E) clever and lively

11. In the context of the passage, the statement "I was surprised at myself" (line 10) suggests that June
(A) had been unaware of the extent of her emotional vulnerability
(B) was exasperated that she allowed Waverly to embarrass her in public
(C) was amazed that she could dislike anyone so much
(D) had not realized that her mother admired her friend Waverly
(E) felt guilty about how much she resented her own mother

12. June's observation in lines 10-11 ("I had ... again") suggests that
(A) June had expected Waverly to insult her
(B) June had hoped to embarrass Waverly this time
(C) Waverly had a private understanding with June's mother
(D) Waverly had made June feel inadequate on previous occasions
(E) Waverly was a more talented writer than June was

13. For June, a significant aspect of what happened at the dinner party is that
(A) her mother had taken great pains to make Waverly feel welcome
(B) her mother had criticized her for arguing with Waverly
(C) her mother had sided against her in front of family and friends
(D) Waverly had angered June's mother
(E) Waverly had lied to June's mother
14. The description of June’s encounter with the bartender primarily serves to suggest that
   (A) the relationship of mother and son is different from that of mother and daughter
   (B) June is not the only one who ponders the meaning of a jade pendant
   (C) a jade pendant symbolizes the mystery of life and death
   (D) June finally understands the true meaning of her jade pendant
   (E) strangers are easier to talk to than family members and friends

15. The passage indicates that the act of giving a jade pendant can best be described as
   (A) a widely observed tradition
   (B) a mother’s plea for forgiveness
   (C) an example of a mother’s extravagance
   (D) an unprecedented act of generosity
   (E) an unremarkable event in June’s life
Questions 16-24 are based on the following passage.

This passage is from a book of nature writing published in 1991.

In North America, bats fall into mainly predictable categories: they are nocturnal, eat insects, and are rather small. But winging through their lush, green-black world, tropical bats are more numerous and have more exotic habits than do temperate species. Some of them feed on nectar that bat-pollinated trees have evolved to profit from their visits. Carnivorous bats like nothing better than a local frog, lizard, fish, or bird, which they pluck from the foliage or a moonlit pond. Of course, some bats are vampires and dine on blood. In the movies, vampires are rather showy, theatrical types, but vampire bats rely on stealth and small, pinprick incisions made by razorly, triangular front teeth. Sleeping livestock are their usual victims, and they take care not to wake them. First, they make the classic incisions shaped like quotation marks; then, with saliva full of anticoagulants so that the victim’s blood will flow nicely, they quietly lap their fill. Because this anticoagulant is not toxic to humans, vampire bats may one day play an important role in the treatment of heart patients—that is, if we can just get over our phobia about them. Having studied them intimately, I now know that bats are sweet-tempered, useful, and fascinating creatures. The long-standing fear that many people have about bats tells us less about bats than about human fear.

Things that live by night live outside the realm of “normal” time. Chauvinistic about our human need to wake by day and sleep by night, we come to associate night dwellers with people up to no good, people who have the jump on the rest of us and are defying nature, defying their circadian rhythms.* Also, night is when we dream, and so we picture the bats moving through a dreamtime, in which reality is warped. After all, we do not see very well at night; we do not need to. But that makes us nearly defenseless after dark. Although we are accustomed to mastering our world by day, in the night we become vulnerable as prey. Thinking of bats as masters of the night threatens the safety we daily take for granted. Though we are at the top of our food chain, if we had to live alone in the rain forest, say, and protect ourselves against roaming predators, we would live partly in terror, as our ancestors did. Our sense of safety depends on predictability, so anything living outside the usual rules we suspect to be an outlaw, a ghouls.

Bats have always figured as frightening or supernatural creatures in the mythology, religion, and superstition of peoples everywhere. Finnish peasants once believed that their souls rose from their bodies while they slept and flew around the countryside as bats, then returned to them by morning. Ancient Egyptians prized bat parts as medicine for a variety of diseases. Perhaps the most mystical, ghoulish, and intimate relationship between bats and humans occurred among the Maya about two thousand years ago.

Zotzilaha Chamalcán, their bat god, had a human body but the stylized head and wings of a bat. His image appears often on their altars, pottery, gold ornaments, and stone pillars. One especially frightening engraving shows the bat god with outstretched wings and a question-mark nose, its tongue wagging with hunger, as it holds a human corpse in one hand and the human’s heart in the other. A number of other Central American cultures raised the bat to the ultimate height: as god of death and the underworld. But it was Bram Stoker’s riveting novel Dracula that turned small, furry mammals into huge, bloodsucking monsters in the minds of English-speaking people. If vampires were semihuman, then they could fascinate with their conniving cruelty, and thus a spill of horror books began to appear about the human passions of vampires.

* Circadian rhythms are patterns of daily change within one’s body that are determined by the time of day or night.

16. The author’s main point in the passage is that
(A) there are only a few kinds of bats
(B) humans are especially vulnerable to nocturnal predators
(C) bat saliva may have medicinal uses
(D) only myth and literature have depicted the true nature of the bat
(E) our perception of bats has its basis in human psychology

17. As used in line 14, “classic” most nearly means
(A) literary
(B) enduring
(C) elegant
(D) well-known
(E) significant

18. The discussion of vampire bats in the first paragraph (lines 1-24) primarily suggests that
(A) vampire bats are potentially useful creatures
(B) movies about vampires are based only on North American bats
(C) most tropical bats are not carnivorous
(D) the saliva of vampire bats is more toxic than commonly supposed
(E) scientists know very little about the behavior of most bats
19. In line 26, the quotation marks around the word “normal” serve to
   (A) emphasize the individuality of the author’s writing
   (B) criticize the human obsession with time
   (C) emphasize the limitations of a point of view
   (D) demonstrate the author’s agreement with the common use of the word
   (E) indicate that this word would be stressed if it were spoken out loud

20. Which of the following assertions detracts LEAST from the author’s argument in the second paragraph (lines 25-42)?
   (A) Many people work at night and sleep during the day.
   (B) Owls, which hunt at night, do not arouse our fear.
   (C) Most dangerous predators hunt during the day.
   (D) Some cultures associate bats with positive qualities.
   (E) Some dream imagery has its source in the dreamer’s personal life.

21. The examples cited in the third paragraph (lines 43-66) are primarily drawn from
   (A) anthropology
   (B) autobiography
   (C) fiction
   (D) psychiatry
   (E) biology

22. The author develops the third paragraph (lines 43-66) by presenting
   (A) different sides of a single issue
   (B) details that culminate in truth
   (C) a thesis followed by specific illustrations
   (D) a common argument followed by a refutation of it
   (E) a common opinion and the reasons it is held

23. The practices of which group mentioned in the last paragraph best substantiate the claim that bats are "useful" (line 21)?
   (A) Finnish peasants
   (B) Ancient Egyptians
   (C) Ancient Maya
   (D) A number of Central American cultures
   (E) English-speaking people

24. The reference to Stoker’s work in lines 60-66 extends the author’s idea that
   (A) bats are sweet-tempered creatures
   (B) our fear of bats reveals more about us than about bats
   (C) humans have always been curious about nocturnal creatures
   (D) bats can see better than humans at night
   (E) bats appear as supernatural creatures even in the folklore of distant nations

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 6
Time — 25 minutes
18 Questions

Turn to Section 6 (page 6) 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.

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.

**Notes**

\[
\frac{3 + \bigcirc}{2} = \frac{7 + \frac{1}{2}}{2}
\]

1. What number, when used in place of \( \bigcirc \) above, makes the statement true?
   (A) 4
   (B) 5
   (C) 9
   (D) 12
   (E) 15

2. In the figure above, if \( \ell \parallel m \), then the sum of the measures of angles 2 and 4 must equal the sum of the measures of which of the following pairs of angles?
   (A) 5 and 6
   (B) 5 and 7
   (C) 6 and 7
   (D) 6 and 8
   (E) 7 and 8

**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.
3. The table above, describing the Preston City workforce, is partially filled in. Based on the information in the table, how many women in the Preston City workforce are unemployed?
(A) 500
(B) 1,000
(C) 1,500
(D) 2,000
(E) 2,500

4. A group of students washed cars to raise money. The net amount $A$, in dollars, raised by washing $k$ cars is given by the function $A(k) = 4k - 30$. If the group washed 15 cars, what is the net amount they raised?
(A) $10
(B) $15
(C) $20
(D) $25
(E) $30

5. If $rv = v$, $v = kr$, and $rv \neq 0$, which of the following is equal to $k$?
(A) 1
(B) $\frac{1}{x}$
(C) $x - 1$
(D) $x$
(E) $x + 1$

6. The eggs in a certain basket are either white or brown. If the ratio of the number of white eggs to the number of brown eggs is $\frac{2}{3}$, each of the following could be the number of eggs in the basket EXCEPT
(A) 10
(B) 12
(C) 15
(D) 30
(E) 60
7. If $18\sqrt{18} = r\sqrt{t}$, where $r$ and $t$ are positive integers and $r > t$, which of the following could be the value of $rt$?
   (A) 18
   (B) 36
   (C) 108
   (D) 162
   (E) 324

8. In the figure above, what is the value of $c$ in terms of $a$ and $b$?
   (A) $a + 3b - 180$
   (B) $2a + 2b - 180$
   (C) $180 - a - b$
   (D) $360 - a - b$
   (E) $360 - 2a - 3b$
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.

- 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 $3\frac{1}{1/2}$ is gridded, it will be interpreted as $3\frac{1}{2}$, not $3\frac{1}{2}$.)

### Question 9
If $r^3 = 351$, what is the value of $4r^3$?

### Question 10
What is the coordinate of the point on a number line that is exactly halfway between the points with coordinates 53 and 62?
11. A certain triangle has two angles that have the same measure. If the lengths of two of the sides of the triangle are 50 and 30, what is the least possible value for the perimeter of the triangle?

12. If \( x^2 - y^2 = 77 \) and \( x + y = 11 \), what is the value of \( x \) ?

13. Tameka cut a circular pizza into wedge-shaped pieces, one of which is shown above. The tip of each piece is at the center of the pizza and the angle at the tip is always greater than 20°, but less than 30°. What is one possible value for the number of pieces into which the pizza is cut?

14. The first term in the sequence above is \( a \), and each term after the first is 3 times the preceding term. If the sum of the first 5 terms is 605, what is the value of \( a \) ?

15. In \( \triangle PQR \) above, \( \frac{QS}{QV} = \frac{1}{3} \) and \( \frac{PT}{PR} = \frac{3}{4} \).

What is the value of the fraction \( \frac{\text{area } \triangle PST}{\text{area } \triangle PQR} \)?

16. Let the function \( h \) be defined by \( h(x) = 14 + \frac{x^2}{4} \).

If \( h(2m) = 9m \), what is one possible value of \( m \) ?
INVENTORY OF CLOCKS AND FREQUENCY OF CHIMES

<table>
<thead>
<tr>
<th>Number of Clocks</th>
<th>Chimes (n) Times on the (n)th Hour</th>
<th>Chimes Once on the Hour</th>
<th>Chimes Once on the Half Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>10</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Type B</td>
<td>5</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Type C</td>
<td>3</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

17. A merchant sells three types of clocks that chime as indicated by the check marks in the table above. What is the total number of chimes of the inventory of clocks in the 90-minute period from 7:15 to 8:45?

18. If the 5 cards shown above are placed in a row so that is never at either end, how many different arrangements are possible?

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.
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

1. In a recent year, more tourists from the United States visited museums in Great Britain than Canada.
(A) Canada
(B) Canada did
(C) compared to Canada’s
(D) Canadian ones
(E) in Canada

2. Connors, a publishing and media services company, is acquiring Dispatch Education, it manufactures school uniforms.
(A) Dispatch Education, it manufactures
(B) Dispatch Education, which manufactures
(C) Dispatch Education, manufacturing
(D) Dispatch Education; it is manufacturing
(E) Dispatch Education; for the manufacturing of

3. The campus newspaper does not print as much world news as does my hometown.
(A) as does my hometown
(B) as does my hometown newspaper
(C) compared to what my hometown does
(D) like my hometown newspaper does
(E) like the one in my hometown does

4. During the labor dispute, barrels of potatoes were emptied across the highway, and they thereby blocked it to all traffic.
(A) highway, and they thereby blocked it to all traffic
(B) highway and therefore blocking it to all traffic
(C) highway, by which all traffic was therefore blocked
(D) highway, and therefore this had all traffic blocked
(E) highway, thereby blocking all traffic

5. Having thought the problem through with some care, that the committee did not understand her solution frustrated the chairperson extremely.
(A) that the committee did not understand her solution frustrated the chairperson extremely
(B) the chairperson’s extreme frustration resulted from the committee not understanding her solution
(C) the chairperson’s frustration at the committee’s failing to understand her solution was extreme
(D) the chairperson was extremely frustrated by the committee’s failure to understand her solution
(E) the committee’s failure to understand her solution was an extreme frustration to the chairperson
6. The main reasons students give for failing to participate in the political process is that they have demanding assignments and work at part-time jobs.

(A) is that they have demanding assignments and work at 
(B) are demanding assignments and they work at 
(C) are that they have demanding assignments and that they work at 
(D) is having demanding assignments and having to work at 
(E) are demanding assignments, in addition to working at

7. Archaeologists say that the Pueblo village of Acoma, which is 7,500 feet above sea level and 400 feet above the valley floor, is the oldest continuously inhabited spot in the United States.

(A) which is 7,500 feet above sea level and 400 feet above 
(B) located 7,500 feet high above sea level while having measured 400 feet above 
(C) with a height 7,500 feet above sea level as well as 400 feet above that of 
(D) 7,500 feet higher than sea level, and it ascends 400 feet above 
(E) being 7,500 feet above sea level and 400 feet high measured from that of

8. Returning to Dayville after ten years, the small town seemed much livelier to Margo than it had been when she was growing up there.

(A) Returning to Dayville after ten years, the small town seemed much livelier to Margo
(B) Having returned to Dayville after ten years, it seemed a much livelier town to Margo
(C) After Margo returned to Dayville in ten years, the small town seems much livelier
(D) Margo returned to Dayville after ten years, the small town was seemingly much livelier
(E) When Margo returned to Dayville after ten years, the small town seemed much livelier to her

9. Having command of pathos, tragedy, as well as humor. George Eliot is considered to be a great English novelist.

(A) Having command of pathos, tragedy, as well as humor
(B) Having command of pathos, tragedy, and her humorous side
(C) By being in command of both pathos and tragedy and also humor
(D) With her command of pathos and tragedy and being humorous
(E) Because of her command of pathos, tragedy, and humor

10. Richard Wright moved many times in his life, moving from the South first he went to the North, then eventually to France from the United States.

(A) moving from the South first he went to the North, then eventually to France from the United States
(B) the first move he made was from the South to the North and eventually from the United States to France
(C) first from the South to the North and eventually from the United States to France
(D) moving first from the South, he came to the North and eventually to France
(E) first from the South he moved to the North and ended up in France after leaving the United States

11. Though heavily dependent on the government for business and information while universities supply the space research center with talent, as a corporation it remains independent of both.

(A) information while universities supply the space research center with talent, as a corporation it remains
(B) information and on talent by universities, the space research center, a corporation
(C) information and on universities for talent, the space research center is a corporation
(D) information, universities supply the space research center with talent, but it is a corporation
(E) information, universities supply the space research center with talent, while it remains a corporation
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 accepted the resolution **drafted by the** neutral states. No error E

**12.** Fourteen years after the Galileo space probe was **launched from the space shuttle Atlantis, the mission** was purposely ended **when the Galileo disintegrates** in the dense atmosphere of the planet Jupiter. No error E

**13.** The labor union is negotiating a contract with **the hospital** that **will satisfy** the demands of the workers and **be acceptable to all levels of management.** No error E

**14.** Many professional athletes are **motivated by either** personal pride and love of their sport, but **some seem interested only in money.** No error E

**15.** Even though **only parts of clay vessels may be recovered, these pottery shards are invaluable to the archaeologist** because **it is virtually indestructible.** No error E

**16.** Along the curve of islands known as the Florida Keys lies a reef of living coral, the only one of a kind in **the continental United States.** No error E

**17.** Paule Marshall, whose Barbadian background has influenced her writing, describes many details of life in the Caribbean Islands **vividly in her novels and short stories.** No error E

**18.** Because he is absent when his rivals voted against his proposal, Selby is worried about missing future meetings of the board of directors. No error E

**19.** In **those cities in which public transportation is adequate, fewer traffic problems occur and pedestrians are rarely involved in accidents.** No error E

**GO ON TO THE NEXT PAGE**
20. Social scientists agree that a system for exchanging goods and services is not only present but also of necessity in all societies. No error

21. The report Alexander is discussing, a report prepared jointly by he and the committee, does not take into account the socioeconomic status of those interviewed. No error

22. It is far easier to ride a bicycle than explaining in words exactly how a bicycle is ridden. No error

23. Jorge wanted, for the most part, to travel around the world after graduation, but sometimes he thought about taking a job at his mother's company instead. No error

24. Since some people are convinced that dowsing, a method of finding underground water with a Y-shaped stick, is effective, but others condemn the procedure as mere superstition. No error

25. Intense preoccupation on technique appears to be the one trait that great pianists have in common. No error

26. Apparently impressed with our plans, the foundation awarded Carlos and I a grant to establish a network of community centers throughout the city. No error

27. Also supported by the commission was the proposed health clinics and the proposed center to distribute information on job-training opportunities. No error

28. The quality of multivitamin tablets is determined by how long its potency can be protected by the manufacturer's coating material. No error

29. The research study reveals startling proof of a constant changing seafloor that comprises the major part of the underwater landscape. No error
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 are based on following passage.

(1) Employers must be aware of their employees and the variety of situations that arise in the workplace. (2) Employers should become familiar with the demands a worker faces. (3) But he or she too should also assume responsibility. (4) Some workplace problems are caused by the employer’s insufficient attention to the needs of the workers. (5) One familiar situation is the concern of the boss for the customer’s satisfaction above all else. (6) Often unreasonable demands are made on an employee to satisfy the customers. (7) This results from an employer’s lack of consideration for employees. (8) Workers often become resentful of an employer who is unconcerned about their needs. (9) Sometimes the employer does not listen fully to suggestions from employees this can make workers feel undervalued. (10) Many times employers must deal with an employee who ties up the phone for hours or has friends who continually drop by during working hours. (11) If workers would take more responsibility, then maybe an employer would be a little more easily tempted to promote them. (12) There are many problems to be solved in the workplace. (13) In order to achieve a happy balance between boss and employee, the job of a worker should be clearly defined. (14) Employers should listen to workers’ ideas about improving working conditions.

30. Which of the following, if inserted before sentence 1, would make a good introduction to the essay?
(A) To avoid problems in the workplace, one must first recognize the variety of workplaces that exist.
(B) Many employees do not feel free to communicate with their employers, which can cause difficulties.
(C) Some employers have tried to respect their employees.
(D) Communication between an employer and employees is necessary for maintaining good working conditions.
(E) In the future, relations between employers and employees will be different from what they are now.

31. In context, which of the following is the best way to revise and combine sentences 2 and 3 (reproduced below)?

Employers should become familiar with the demands a worker faces. But he or she too should also assume responsibility.

(A) When employers become familiar with the demands placed on their workers, they would also assume responsibility.
(B) Employers ought to become familiar with the demands their workers face, but workers, too, must assume responsibility for their jobs.
(C) Employers who have familiarity with the demands their workers face also need to take responsibility for them.
(D) Those employees whose employers are familiar with their demands need to take responsibility for their jobs.
(E) Employees and employers, familiar with the demands of the workplace, must also assume responsibility for them.
32. In context, the underlined portion of sentence 7 (reproduced below) could best be revised in which of the following ways?

*This results from an employer’s lack of consideration for employees.*

(A) In contrast is
(B) With unreasonable demands, they show
(C) This concern illustrates
(D) Such a distorted view shows
(E) Such treatment demonstrates

33. Which of the following is the best version of the underlined portion of sentence 9 (reproduced below) ?

*Sometimes the employer does not listen fully to suggestions of employees this can make workers feel undervalued.*

(A) (As it is now)
(B) When sometimes they do not listen fully to suggestions from employees, this can make
(C) Because the employers had not listened fully to suggestions from employees, they made
(D) An employer who does not listen closely to suggestions of employees, making
(E) Sometimes an employer does not listen closely to suggestions from employees, making

34. Which of the following sentences, if inserted before sentence 10, would best improve the third paragraph?

(A) The role of technology in the workplace is also important.
(B) The success of any business depends on effective communication with customers.
(C) Sometimes employers have legitimate complaints about their employees.
(D) It is difficult to tell whether certain problems are caused by employees or employers.
(E) Employees rarely complain without good reason.

35. Which of the following would make the most logical final sentence for the essay?

(A) Responsibility for removal of safety hazards from the workplace lies with the employer.
(B) For most employers, open communication with employees seems somewhat difficult.
(C) The challenge of technology offers new opportunities for opening up communication in the workplace.
(D) Without clearly assigned duties, workers tend to lose their motivation.
(E) Employers and employees should work together to improve conditions in the workplace.

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 8
Time — 20 minutes
19 Questions

Turn to Section 8 (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. Though Luis eagerly sought her -------, he subsequently chose not to heed that advice.
(A) secretiveness  (B) cooperation
   (C) understanding  (D) counsel
   (E) concord

2. As a young physics instructor, Richard Feynman discovered that he had the gift of sharing his ------- subject and making that excitement -------.
(A) passion for . . contagious
(B) knowledge of . . inaudible
(C) contempt for . . praiseworthy
(D) propensity for . . futile
(E) commitment to . . impersonal

3. As ------- as the disintegration of the Roman Empire must have seemed, that disaster nevertheless presented some ------- aspects.
   (A) momentous . . formidable
   (B) decisive . . unavoidable
   (C) unexpected . . ambiguous
   (D) advantageous . . beneficial
   (E) catastrophic . . constructive

4. The beauty of Mount McKinley is usually cloaked: clouds ------- the summit nine days out of ten.
   (A) release  (B) elevate  (C) entangle
   (D) shroud  (E) attain

5. Madame C. J. Walker introduced her first hair-care product just as demand was reaching its peak; this ------- marketing made her a millionaire.
   (A) opportune  (B) instantaneous
   (C) intermittent  (D) dubious
   (E) extravagant

6. A scientist should not automatically reject folkways that might at first seem silly or superstitious; scientific qualifications are not a license for -------, nor do they ------- prejudice or bias.
   (A) experimentation . . eliminate
   (B) arrogance . . pursue
   (C) humility . . advocate
   (D) smugness . . legitimate
   (E) rigidity . . console
Questions 7-19 are based on the following passage.

Since the advent of television, social commentators have been evaluating its role in a modern society. In the following excerpt from an essay published in 1992, a German social commentator offers a pointed evaluation of the evaluators.

"Television makes you stupid."

Virtually all current theories of the medium come down to this simple statement. As a rule, this conclusion is delivered with a melancholy undertone. Four principal theories can be distinguished.

The manipulation thesis points to an ideological dimension. It sees in television above all an instrument of political domination. The medium is understood as a neutral vessel, which pours out opinions over a public thought of as passive. Seduced, unsuspecting viewers are won over by the wire-pullers, without ever realizing what is happening to them.

The imitation thesis argues primarily in moral terms. According to it, television consumption leads above all to moral dangers. Anyone who is exposed to the medium becomes habituated to libertinism, irresponsibility, crime, and violence. The private consequences are blunted, callous, and obscene individuals; the public consequences are the loss of social virtues and general moral decline.

This form of critique draws, as is obvious at first glance, on traditional, bourgeois sources. The motifs that recur in this thesis can be identified as far back as the eighteenth century in the vain warnings that early cultural criticism sounded against the dangers of reading novels.

More recent is the simulation thesis. According to it, the viewer is rendered incapable of distinguishing between reality and fiction. The primary reality is rendered unrecognizable or replaced by a secondary, phantomlike reality.

All of these converge in the stupefaction thesis. According to it, watching television not only undermines the viewers' ability to criticize and differentiate, along with the moral and political fiber of their being, but also impairs their overall ability to perceive. Television produces, therefore, a new type of human being, who can, according to taste, be imagined as a zombie or a mutant.

All these theories are rather unconvincing. Their authors consider proof to be superfluous. Even the minimal criterion of plausibility does not worry them at all. To mention just one example, no one has yet succeeded in putting before us even a single viewer who was incapable of telling the difference between a family quarrel in the current soap opera and one at his or her family's breakfast table. This doesn't seem to bother the advocates of the simulation thesis.

Another common feature of the theories is just as curious but has even more serious consequences. Basically, the viewers appear as defenseless victims, the programmers as crafty criminals. This polarity is maintained with great seriousness: manipulators and manipulated, actors and imitators, simulants and simulated, stupefiers and stupefied face one another in a fine symmetry.

The relationship of the theorists themselves to television raises some important questions. Either the theorists make no use of television at all (in which case they do not know what they are talking about) or they subject themselves to it, and then the question raises—through what miracle is the theorist able to escape the alleged effects of television? Unlike everyone else, the theorist has remained completely intact morally, can distinguish in a sovereign manner between deception and reality, and enjoys complete immunity in the face of the idiocy that he or she sorrowfully diagnoses in the rest of us. Or could—fatal loophole in the dilemma—the theories themselves be symptoms of a universal stupefaction?

One can hardly say that these theorists have failed to have any effect. It is true that their influence on what is actually broadcast is severely limited, which may be considered distressing or noted with gratitude, depending on one's mood. On the other hand, they have found ready listeners among politicians. That is not surprising, for the conviction that one is dealing with millions of idiots "out there in the country" is part of the basic psychological equipment of the professional politician. One might have second thoughts about the theorists' influence when one watches how the veterans of televised election campaigns fight each other for every single minute when it comes to displaying their limousine, their historic appearance before the guard of honor, their hairstyle on the platform, and above all their speech organs. The number of broadcast minutes, the camera angles, and the level of applause are registered with a touching enthusiasm. The politicians have been particularly taken by the good old manipulation thesis.

7. In line 11, the term "wire-pullers" refers to the
   (A) bland technicians who staff television studios
   (B) shadowy molders of public opinion
   (C) self-serving critics of television
   (D) hack writers who recycle old concepts
   (E) slick advertisers of consumer goods
8. As used in line 14, “consumption” most nearly means  
   (A) destruction  
   (B) viewing  
   (C) erosion  
   (D) purchasing  
   (E) obsession  

9. The reference to the eighteenth century in lines 21-24 conveys what impression about cultural critiques based on moral grounds?  
   (A) They are part of a tradition dating back to early civilization.  
   (B) They were the main preoccupation of that era’s social commentators.  
   (C) They were once persuasive but now go mostly unheeded.  
   (D) They are no more valid today than they were in those years.  
   (E) They continue to appeal to people having no real understanding of art.  

10. The author makes the comparison to the novel in lines 21-24 in order to  
    (A) point out television’s literary origins  
    (B) underscore the general decline of culture  
    (C) emphasize television’s reliance on visual imagery  
    (D) expose narrow-minded resistance to new forms of expression  
    (E) attack the cultural shortcomings of television producers  

11. The terms “primary” (line 27) and “secondary” (line 28) are used to refer to the distinction between  
    (A) an ideal democracy and our political system  
    (B) natural objects and human artifacts  
    (C) the everyday world and its fictional counterpart  
    (D) the morality of the elite and that of the populace  
    (E) the world view of scientists and that of mystics  

12. Advocates of the simulation thesis might best respond to the criticism in lines 37-44 by pointing out that the author  
    (A) trivializes their theory by applying it too literally  
    (B) concentrates excessively on a relatively insignificant point  
    (C) is not a psychologist and so cannot properly evaluate their argument  
    (D) attacks their theory in order to bolster one of the other three theories  
    (E) fails to consider the impact of television on popular culture  

13. The author’s attitude toward the evaluators of television can be best described as  
    (A) intrigued  
    (B) scornful  
    (C) equivocal  
    (D) indulgent  
    (E) nonchalant  

14. The author responds to the four theories of television primarily by  
    (A) offering contrary evidence  
    (B) invoking diverse authorities  
    (C) adding historical perspective  
    (D) blurring the line between the manipulator and the manipulated  
    (E) implying that no reasonable person could take them seriously  

15. According to the passage, most current evaluations of television are based on which of the following assumptions about viewers?  
    I. Viewers are mostly interested in comedy programs.  
    II. Viewers never engage their analytical faculties.  
    III. Viewers see political content where there is none.  
    (A) I only  
    (B) II only  
    (C) I and II only  
    (D) II and III only  
    (E) I, II, and III  

16. In mapping out categories of theories about television, the author uses which of the following?  
    (A) Earnest reevaluation  
    (B) Incredulous analysis of academic documentation  
    (C) Somber warnings about the future  
    (D) Intentional falsification of data  
    (E) Description tinged with irony  

17. In line 59, “sovereign” is best understood to mean  
    (A) excellent  
    (B) opulent  
    (C) elitist  
    (D) absolute  
    (E) oppressive
18. The “fatal loophole” (line 62) is best summarized by which of the following statements?

(A) Theorists are conspiring with the politicians.
(B) Theorists are themselves victims of television.
(C) All human beings occasionally behave like zombies and mutants.
(D) Even serious thinkers need mindless entertainment occasionally.
(E) Theorists have disregarded the enjoyment that television provides.

19. In the last paragraph, the author’s attitude toward politicians is primarily one of

(A) humorous contempt
(B) outraged embarrassment
(C) worried puzzlement
(D) relieved resignation
(E) begrudging sympathy

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 9
Time — 20 minutes
16 Questions

Turn to Section 9 (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

<table>
<thead>
<tr>
<th>Figure</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle</td>
<td>( A = \pi r^2 )</td>
</tr>
<tr>
<td>Circle</td>
<td>( C = 2\pi r )</td>
</tr>
<tr>
<td>Triangle</td>
<td>( A = \frac{1}{2}bh )</td>
</tr>
<tr>
<td>Cylinder</td>
<td>( V = \pi r^2h )</td>
</tr>
<tr>
<td>Special Right Triangles</td>
<td>( c^2 = a^2 + b^2 )</td>
</tr>
</tbody>
</table>

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. There is the same number of boys and girls on a school bus when it departs from school. At the first stop, 4 boys get off the bus and nobody gets on. After the first stop, there are twice as many girls as boys on the bus. How many girls are on the bus?
   (A) 4
   (B) 6
   (C) 8
   (D) 12
   (E) 16

2. Which of the following is the graph of a linear function with a negative slope and a positive \( y \)-intercept?
   (A) ![Graph A](image)
   (B) ![Graph B](image)
   (C) ![Graph C](image)
   (D) ![Graph D](image)
   (E) ![Graph E](image)
Questions 3-4 refer to the following price list.

<table>
<thead>
<tr>
<th>Number of Donuts</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$0.40</td>
</tr>
<tr>
<td>Box of 6</td>
<td>$1.89</td>
</tr>
<tr>
<td>Box of 12</td>
<td>$3.59</td>
</tr>
</tbody>
</table>

3. Of the following, which is the closest approximation of the cost per donut when one purchases a box of 6?
   (A) $0.20
   (B) $0.30
   (C) $0.40
   (D) $0.50
   (E) $0.60

4. What would be the least amount of money needed to purchase exactly 21 donuts?
   (A) $5.88
   (B) $6.68
   (C) $7.19
   (D) $7.38
   (E) $8.40

5. The figure above shows the graph of the function $h$. Which of the following is closest to $h(5)$?
   (A) 1
   (B) 2
   (C) 3
   (D) 4
   (E) 5

Note: Figure not drawn to scale.

6. In the figure above, three line segments meet at a point to form three angles. What is the value of $x$?
   (A) 20
   (B) 36
   (C) 40
   (D) 45
   (E) 60
7. Positive integers $x, y,$ and $z$ satisfy the equations
\[ \frac{1}{x^2} = \frac{1}{3} \quad \text{and} \quad y^z = 16. \] If $z > y$, what is the value of $x + z$?

(A) 5  
(B) 7  
(C) 11  
(D) 13  
(E) 15

8. In the semicircle above, the center is at (4, 0). Which of the following are $x$-coordinates of two points on this semicircle whose $y$-coordinates are equal?

(A) 1 and 6  
(B) 1 and 8  
(C) 2 and 6  
(D) 2 and 8  
(E) 3 and 6

9. If $p$ is an integer and 3 is the remainder when $2p + 7$ is divided by 5, then $p$ could be

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

10. Stacy noted that she is both the 12th tallest and the 12th shortest student in her class. If everyone in the class is of a different height, how many students are in the class?

(A) 22  
(B) 23  
(C) 24  
(D) 25  
(E) 34
11. The quadratic function \( g \) is given by
\[
g(x) = ax^2 + bx + c,
\]
where \( a \) and \( c \) are negative constants. Which of the following could be the graph of \( g \)?

(A) \[ 
\begin{array}{c}
\text{graph 1} \\
\end{array}
\]

(B) \[ 
\begin{array}{c}
\text{graph 2} \\
\end{array}
\]

(C) \[ 
\begin{array}{c}
\text{graph 3} \\
\end{array}
\]

(D) \[ 
\begin{array}{c}
\text{graph 4} \\
\end{array}
\]

(E) \[ 
\begin{array}{c}
\text{graph 5} \\
\end{array}
\]

Note: Figure not drawn to scale.

12. In the figure above, \( ABCD \) is a rectangle with \( BC = 4 \) and \( AB = 6 \). Points \( P \), \( Q \), and \( R \) are different points on a line (not shown) that is parallel to \( AD \). Points \( P \) and \( Q \) are symmetric about line \( AB \) and points \( Q \) and \( R \) are symmetric about line \( CD \). What is the length of \( PR \)?

(A) 6
(B) 8
(C) 10
(D) 12
(E) 20
13. The price of a telephone was first increased by 10 percent and then the new price was decreased by 25 percent. The final price was what percent of the initial price?

(A) 78%
(B) 80%
(C) 82.5%
(D) 85%
(E) 87.5%

15. The lengths of the sides of a right triangle are consecutive even integers, and the length of the shortest side is $x$. Which of the following equations could be used to find $x$?

(A) $x + x + 1 = x + 2$
(B) $x^2 + (x + 1)^2 = (x + 2)^2$
(C) $x^2 + (x + 2)^2 = (x + 4)^2$
(D) $x + x + 2 = x + 4$
(E) $x^2 = (x + 2)(x + 4)$

14. When the number $w$ is multiplied by 4, the result is the same as when 4 is added to $w$. What is the value of $3w$?

(A) $\frac{3}{4}$
(B) 1
(C) $\frac{4}{3}$
(D) 3
(E) 4

16. If $x$ is an integer greater than 1 and if $y = x + \frac{1}{x}$, which of the following must be true?

I. $y \neq x$
II. $y$ is an integer.
III. $xy > x^2$

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

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 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 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

2. H. Ford Douglas, one of the few Black soldiers in White regiments during the early part of the Civil War, and eventually to recruit and command his own unit.
(A) and eventually to recruit and command his own unit
(B) eventually recruited and commanded his own unit
(C) he eventually recruited and commanded his own unit
(D) he eventually had his own unit that he recruited and commanded
(E) having eventually recruited and commanded his own unit

3. Ignorance is not equivalent to stupidity. for ignorance can often be corrected while stupidity cannot.
(A) for ignorance can often be corrected while stupidity cannot
(B) since you can often correct ignorance while the same is not true about stupidity
(C) because it can be corrected and the other cannot
(D) because of its correctible nature
(E) because the two differ regarding correctibility

4. Journalists should present a balanced view of the news but with their goal to stir discussion and unsettle complacent thinkers.
(A) with their goal to stir
(B) should also stir
(C) aiming at the same time to stir
(D) also trying to stir
(E) its goal should also be in stirring
5. The ancient Spartans tested the endurance of potential warriors, devised various ordeals, including one that required them to run bare-legged through fields of stinging nettles.
   (A) warriors, devised
   (B) warriors devising
   (C) warriors; and devised
   (D) warriors by devising
   (E) warriors with the devising of

6. The lawyers representing the parking-lot operators asserted as to the defensibility of their practices as legal and ethical.
   (A) as to the defensibility of their practices as legal and ethical
   (B) as to their practices and their defensibility on legal and ethical grounds
   (C) that their practices, that is the operators, are defensible in legal terms as well as ethics
   (D) that in regards to defensibility their practices are legally and ethically defensible
   (E) that the practices of the operators are legally and ethically defensible

7. Toni Morrison was honored by Harvard University not only as a great novelist but also she wrote eloquently of the history of African American culture.
   (A) she wrote eloquently of the history
   (B) having written an eloquent history
   (C) writing eloquently about the history
   (D) being an eloquent historian
   (E) as an eloquent historian

8. Although Central Park in Manhattan is better known than Prospect Park in Brooklyn, the designer of both parks, Frederick Law Olmsted, preferred Prospect Park.
   (A) Although Central Park in Manhattan is better known than Prospect Park in Brooklyn, the designer of both parks, Frederick Law Olmsted, preferred Prospect Park.
   (B) Central Park in Manhattan being better known than Prospect Park in Brooklyn, the designer of both, Frederick Law Olmsted, preferred the latter.
   (C) Although not as well known as Central Park, Frederick Law Olmsted, he designed both parks, preferred Prospect Park.
   (D) The designer of both Central Park and Prospect Park was Frederick Law Olmsted, he preferred Prospect Park.
   (E) Although more people know about Manhattan’s Central Park than Prospect Park in Brooklyn, Frederick Law Olmsted, having designed both, has preferred the latter.

9. Because Uranus is nearly three billion kilometers from the Sun and is enveloped by a thick methane cloud layer, this blocks almost all solar radiation.
   (A) layer, this blocks almost all solar radiation
   (B) layer, this accounts for its receiving almost no solar radiation
   (C) layer is the reason why it receives almost no solar radiation
   (D) layer, almost no solar radiation reaches the planet
   (E) layer, it blocks almost all solar radiation from reaching the planet
10. Lacking good instruction, my mistakes in creating a graph to illustrate historical trends were numerous.
   (A) my mistakes in creating a graph to illustrate historical trends were numerous
   (B) I made numerous mistakes in creating a graph to illustrate historical trends
   (C) there were numerous mistakes in the graph I created to illustrate historical trends
   (D) I created a graph to illustrate historical trends with numerous mistakes
   (E) the graph I made for illustrating historical trends had numerous mistakes

11. It is a myth that mathematicians are so absorbed with abstractions and thus have no practical interests.
   (A) so absorbed with abstractions and thus have no practical interests.
   (B) absorbed by abstractions and therefore
   (C) so absorbed in abstractions that they
   (D) absorbed in so much abstraction that they
   (E) too abstract, and so they

12. By simply entering an Internet website or calling a toll-free number, a catalog order can be placed for almost anything from cheesecakes to fully equipped desktop computers.
   (A) a catalog order can be placed
   (B) by placing a catalog order
   (C) they will place your catalog order
   (D) you can place a catalog order
   (E) your catalog order can be placed

13. Some people believe that one day we will establish not only bases on the Moon, but also a landing on Neptune will occur.
   (A) we will establish not only bases on the Moon, but also a landing on Neptune will occur
   (B) not only bases on the Moon will be established, but also a landing on Neptune will be made
   (C) we will not only establish bases on the Moon but also land on Neptune
   (D) we will not only establish bases on the Moon, but we will land on Neptune in addition
   (E) we will not only establish bases on the Moon, but we will land on Neptune

14. The city is populated by many people who, although their common language is English, the languages at home range from speaking Armenian to Zapotec.
   (A) the languages at home range from speaking Armenian to Zapotec
   (B) speaking at home is in languages ranging from Armenian to Zapotec
   (C) the languages range from Armenian to Zapotec at home
   (D) speak languages at home that range from Armenian to Zapotec
   (E) they are speaking languages at home ranging from Armenian to Zapotec

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.