

# **SAT I: Reasoning Test**

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**Saturday, November 1996**

# Section 1 1 1 1 1 1 1

Time—30 Minutes  
31 Questions

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:

Medieval kingdoms did not become constitutional republics overnight; on the contrary, the change was ----.

- (A) unpopular
- (B) unexpected
- (C) advantageous
- (D) sufficient
- (E) gradual

A  B  C  D  E

1 Many cultural historians believe that language has a ---- purpose: it serves not only as a means of communication but also as a means of defining culture.

- (A) foreign (B) literary (C) false
- (D) dual (E) direct

2 In 1859 Black pioneer Clara Brown turned the unpromising conditions that had ---- many other settlers of the mining camp into a source of ---- by starting her own business.

- (A) discouraged .. reconciliation
- (B) defeated .. prosperity
- (C) elevated .. happiness
- (D) aided .. opportunity
- (E) delayed .. unity

3 While the island country's dramatists typically use ---- settings and myths, their themes are not ---- their country alone; indeed, many plays are appreciated worldwide for their insightful treatment of common human issues.

- (A) ancient .. condescending to
- (B) modest .. concerned with
- (C) native .. limited to
- (D) ordinary .. lobbying for
- (E) cosmopolitan .. indebted to

4 Far from ---- the old social inequities, the law ---- new ones by virtue of the loopholes it left for the wealthy.

- (A) eradicating .. created
- (B) jeopardizing .. corrected
- (C) placating .. eliminated
- (D) duplicating .. avoided
- (E) corroborating .. anticipated

5 The use of gospel music in the modern production of the ancient Greek tragedy is effective, in spite of seeming ---- to critics interested only in historical accuracy.

- (A) felicitous (B) inevitable
- (C) anachronistic (D) timeless
- (E) exemplary

6 It has been suggested that the detailed listings of animals, plants, and minerals by their usefulness to humans indicate the ---- of the ancient Mesopotamians.

- (A) irrationality (B) humanity
- (C) temerity (D) serendipity
- (E) anthropocentrism

7 Buildings designed exclusively for strength and stability, structures for which only ---- considerations have been taken into account, are properly works of engineering, not true architecture.

- (A) utilitarian (B) grandiose
- (C) imaginative (D) aesthetic
- (E) external

8 Many healing practices that doctors once derided as ---- have now been sanctioned by the medical community.

- (A) benign (B) diagnostic
- (C) inefficacious (D) discretionary
- (E) therapeutic

9 Sometimes forgetting that rationality is only one part of a person's experience, Andrew takes an excessively ---- approach to life.

- (A) cerebral (B) obdurate (C) sensitive
- (D) pretentious (E) enervated

GO ON TO THE NEXT PAGE 

Each question below consists of a related pair of words or phrases, followed by five pairs of words or phrases labeled A through E. Select the pair that best expresses a relationship similar to that expressed in the original pair.

Example:

CRUMB : BREAD ::

- (A) ounce : unit
- (B) splinter : wood
- (C) water : bucket
- (D) twine : rope
- (E) cream : butter



10 BRUISE : SKIN ::

- (A) muscle : bone
- (B) smudge : blemish
- (C) rash : allergy
- (D) layer : veneer
- (E) stain : fabric

11 CARPENTER : WOODWORK ::

- (A) guitarist : pick
- (B) cook : heat
- (C) sculptor : studio
- (D) weaver : cloth
- (E) potter : shape

12 WALK : SCURRY ::

- (A) march : follow
- (B) carouse : revel
- (C) nap : sleep
- (D) impress : notice
- (E) jog : sprint

13 REGALE : ENTERTAIN ::

- (A) extol : praise
- (B) educate : learn
- (C) beautify : refresh
- (D) tempt : repel
- (E) hide : secrete

14 RECYCLE : WASTE ::

- (A) salvage : rescuer
- (B) restate : emphasis
- (C) recall : product
- (D) reclaim : land
- (E) irrigate : earth

15 FLORID : PROSE ::

- (A) detailed : sketch
- (B) melodious : music
- (C) colorful : cliché
- (D) tragic : play
- (E) ornate : building



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

Questions 16-21 are based on the following passage.

The excerpt below is from a memoir written by a Japanese American woman whose mother was born and raised in Japan. The memoir was first published in 1992.

Once, in a cross-cultural training manual, I came across a riddle. In Japan, a young man and woman meet and fall in love. They decide they would like to marry. The young man goes to his mother and describes the situation. "I will visit the girl's family," says the mother. "I will seek their approval." After some time, a meeting between mothers is arranged. The boy's mother goes to the girl's ancestral house. The girl's mother has prepared tea. The women talk about the fine spring weather: will this be a good year for cherry blossoms? The girl's mother serves a plate of fruit. Bananas are sliced and displayed in an exquisite design. Marriage never is mentioned. After the tea, the boy's mother goes home. "I am so sorry," she tells her son. "The other family has declined the match."

In the training manual, the following question was posed. How did the boy's mother know the marriage was unacceptable? That is easy, I thought when I read it. To a Japanese, the answer is obvious. Bananas do not go well with tea.

All of my life, I have been fluent in communicating through discordant fruit. The Japanese raise their daughters differently than their sons. "Gambatte!" they exhort their sons. "Have courage, be like the carp, swim upstream!" "Kiotsukete," they caution their daughters. "Be careful, be modest, keep safe."

My mother was raised in a world such as this, in a house of tradition and myth. And although she has traveled across continents, oceans, and time, although she considers herself a modern woman — a believer in the sunlight of science — it is a world that surrounds her still. Feudal Japan floats around my mother. Like an unwanted pool of ectoplasm, it quivers with supernatural might. It followed her into our American home and governed my girlhood life.

And so, I was shaped. In that feudal code, all females were silent and yielding. Even their possessions were accorded more rights than they. For, if mistreated, belongings were granted an annual holiday when they could spring into life and complain.

And so, I was haunted. If I left my clothes on the floor, or my bicycle in the rain; if I yanked on the comb with roughness; if it splintered and lost its teeth (and I did these things often and deliberately, trying to challenge their spell); then my misdeeds pursued me in dreams.

While other children were learning that in America you get what you ask for, I was being henpecked by inanimate objects. While other children were learning to speak their minds, I was locked in a losing struggle for dominance with my clothing, my toys, and my tools.

The objects meant me no harm; they meant to humble and educate me. "Ownership," they told me "means obligation, caretaking, reciprocity." And although I was a resistant student, in time I was trained. Well maintained, my possessions live long, useful, and mercifully quiet lives of service.

- 16 The "plate of fruit" (line 12) in the anecdote serves primarily as
- (A) a sign that the young woman's mother is a generous host
  - (B) an example of the family's goodwill
  - (C) a symbol of affection
  - (D) a means of communication
  - (E) an opportunity to display good taste

- 17 In line 16, "declined" most nearly means
- (A) grown less well
  - (B) refused to approve
  - (C) sloped sharply away
  - (D) fallen out of love
  - (E) been unable to understand

- 18 Which of the following most nearly expresses what the author means by being "fluent in communicating through discordant fruit" (lines 22-23) ?
- (A) She has an aversion to certain foods.
  - (B) She is able to speak her mind clearly.
  - (C) She is able to adapt to the values of cultures other than her own.
  - (D) She understands various indirect forms of expression.
  - (E) She is sensitive to the feelings of others.



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

19 The distinction between "Gambatte" (line 25) and "Kiotsukete" (line 27) is the distinction between

- (A) tradition and innovation
- (B) passion and feeling
- (C) age and youth
- (D) intuition and wisdom
- (E) perseverance and prudence

20 The carp is mentioned in line 26 as a symbol of

- (A) food that the narrator likes
- (B) the behavior expected of boys
- (C) a traditional view of nature
- (D) the link between humans and nature
- (E) certain kinds of foolish behavior

21 The author implies that she felt different from other children because

- (A) they seldom faced the hardships that she had to face every day
- (B) she did not know how to take care of things as well as they did
- (C) her mother was always criticizing her
- (D) she felt guilty about rejecting the traditions of her parents
- (E) she was discouraged from asserting herself



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Questions 22-31 are based on the following passage.

How "wild" can animals be after several generations in captivity? A nature writer who has traveled to zoos around the world discusses this subject in the excerpt below.

Many zoos in the United States have undergone radical changes in philosophy and design. All possible care is taken to reduce the stress of living in captivity. Cages and grounds are landscaped to make (5) gorillas feel immersed in vegetation, as they would be in a Congo jungle. Zebras gaze across vistas arranged to appear (to zoo visitors, at least) nearly as broad as an African plain.

Yet, strolling past animals in zoo after zoo, I have (10) noticed the signs of hobbled energy that has found no release—large cats pacing in a repetitive pattern, primates rocking for hours in one corner of a cage. These truncated movements are known as cage stereotypes, and usually these movements bring (15) about no obvious physical or emotional effects in the captive animal. Many animal specialists believe they are more troubling to the people who watch than to the animals themselves. Such restlessness is an unpleasant reminder that—despite the careful (20) interior decorating and clever optical illusions—zoo animals are prisoners, being kept in elaborate cells.

The rationale for breeding endangered animals in zoos is nevertheless compelling. Once a species falls below a certain number, it is beset by inbreeding\* (25) and other processes that nudge it closer and closer to extinction. If the animal also faces the whole-scale destruction of its habitat, its one hope for survival lies in being transplanted to some haven of safety, usually a cage. In serving as trusts for rare (30) fauna, zoos have committed millions of dollars to caring for animals. Many zoo managers have given great consideration to the psychological health of the animals in their care. Yet the more I learned about animals bred in enclosures, the more I wondered (35) how their sensibilities differed from those of animals raised to roam free.

In the wild, animals exist in a world of which we have little understanding. They may communicate with their kind through "languages" that are indecipherable by humans. A few studies suggest that some species perceive landscapes much differently than people do; for example, they may be keenly attuned to movement on the faces of mountains or across the broad span of grassy plains. Also, their (40) social structures may be complex and integral to their well-being. Some scientists believe they may even develop cultural traditions that are key to the survival of populations.

But when an animal is confined, it lives within a (45) vacuum. If it is accustomed to covering long distances in its searches for food, it grows lazy or bored. It can make no decisions for itself; its intelligence and wild skills atrophy from lack of

use. It becomes, in a sense, one of society's charges, (55) completely dependent on humans for nourishment and care.

How might an animal species be changed—subtly, imperceptibly—by spending several generations in a pen? I posed that question to the curator of birds at the San Diego Wild Animal Park, which is a (60) breeding center for the endangered California condor. "I always have to chuckle when someone asks me that," the curator replied. "Evolution has shaped the behavior of the condor for hundreds of years. If (65) you think I can change it in a couple of generations, you're giving me a lot of credit."

Recently the condor was reintroduced into the California desert—only a moment after its capture, in evolutionary terms. Perhaps the curator was (70) right; perhaps the wild nature of the birds would emerge unscathed, although I was not convinced. But what of species that will spend decades or centuries in confinement before they are released?

\* Inbreeding, which refers to the mating of offspring of the same parents, often amplifies any genetic weaknesses a species may have.

22 The primary purpose of the passage is to

- (A) highlight the improvements in the conditions of American zoos
- (B) examine behavioral traits of animals living in zoos
- (C) prompt scientists to conduct more research on animal behavior
- (D) raise concerns about the confinement of wild animals in zoos
- (E) suggest alternative ways of protecting endangered species

23 On the whole, the author's attitude toward captive breeding is one of

- (A) sympathy (B) puzzlement
- (C) indifference (D) ambivalence
- (E) disgust

24 The primary function of the second paragraph (lines 9-21) is to show that

- (A) wild animals adapt to their cages by modifying their movements
- (B) improvements in zoo design have not had the intended effects
- (C) confined animals are not being seriously harmed
- (D) zoos are designed with the reactions of spectators in mind
- (E) people are overly sensitive to seeing animals in captivity

GO ON TO THE NEXT PAGE

25 One of the major implications of the passage is that

- (A) animals bred in captivity are as likely to survive in the wild as are wild animals
- (B) zoos do a disservice to animals by trying to entertain zoo visitors
- (C) animal extinctions can mainly be attributed to human activity
- (D) present methods of protecting animal populations may be flawed
- (E) public concerns about the extinction of species have been exploited by the media

26 In the fourth paragraph (lines 37-48), the author's most important point is that animals in the wild

- (A) perceive landscapes differently than do animals in captivity
- (B) have modes of communicating that are very similar to those of humans
- (C) are likely to live longer than animals kept in zoos
- (D) depend on the care and support of others of their species
- (E) may have highly developed sensibilities about which scientists know little

27 Which of the following best describes the relationship between the fourth paragraph (lines 37-48) and the fifth paragraph (lines 49-56)?

- (A) The fourth paragraph presents a question that is answered in the fifth paragraph.
- (B) The fourth paragraph contains an assertion that is evaluated in the fifth paragraph.
- (C) The fifth paragraph describes a contrast to the situation presented in the fourth paragraph.
- (D) The fifth paragraph discusses the second part of the process described in the fourth paragraph.
- (E) The fifth paragraph describes the cause of the situation discussed in the fourth paragraph.

28 In line 54, "charges" most nearly means

- (A) costs
- (B) responsibilities
- (C) demands
- (D) accusations
- (E) attacks

29 The curator's primary point in lines 62-66 is that

- (A) people's ideas about the power of humans to alter animal behavior are presumptuous
- (B) scientists should strive to mimic natural selection processes more closely
- (C) animals have little trouble adapting their behavior to captive environments
- (D) animals have been surviving for years without the intervention of humans
- (E) captive breeding is essential to the survival of animals

30 The author's attitude toward the curator's statement in lines 62-66 can best be described as

- (A) ironic
- (B) objective
- (C) hopeless
- (D) doubtful
- (E) offended

31 It can be inferred from the passage that the author believes that wild animals

- (A) should be removed from their natural habitats only in dire circumstances
- (B) suffer few long-term consequences from changes in their habitat
- (C) are pawns in a political battle over the protection of wildlife habitats
- (D) provide an inadequate source of data for the experimental designs of captive breeding habitats
- (E) fulfill the expectations of zoo visitors who hope to see animals behave as they would have before they were captured

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.

**STOP**

# Section 2

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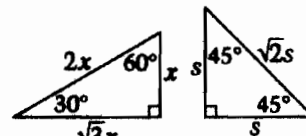
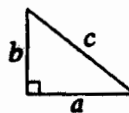
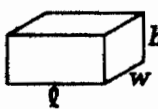
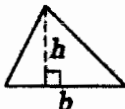
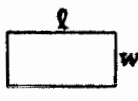
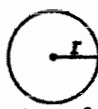
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Time—30 Minutes  
25 Questions

In this section solve each problem, using any available space on the page for scratchwork. Then decide which is the best of the choices given and fill in the corresponding oval on the answer sheet.

### Notes:

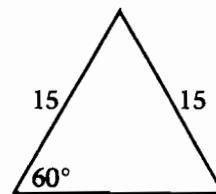
1. The use of a calculator is permitted. All numbers used are real numbers.
2. Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not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



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

1 If  $\frac{x}{9} = \frac{2}{3}$ , then  $x =$

- (A)  $\frac{8}{3}$
- (B) 3
- (C) 6
- (D) 7
- (E)  $\frac{27}{2}$













2 What is the perimeter of the triangle above?


- (A) 30
- (B) 45
- (C) 47
- (D) 50
- (E) 55

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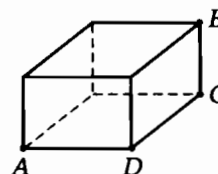
COMPACT-CAR PRODUCTION IN YEAR X

Company A	      
Company B	  

 = 200,000 compact cars

- 3 According to the chart above, Company A produced approximately how many more compact cars in year X than Company B did?
- (A) 200,000  
 (B) 250,000  
 (C) 300,000  
 (D) 400,000  
 (E) 500,000

- 1 A certain state requires that an applicant for a driver's license answer at least 80 percent of the questions on a written test correctly. If the test has 30 questions on it, at least how many of these questions must be answered correctly?
- (A) 20  
 (B) 21  
 (C) 22  
 (D) 23  
 (E) 24



- 5 In the rectangular solid above,  $AD = 6$ ,  $CD = 8$ , and  $BC = \frac{1}{2}CD$ . What is the volume of the solid?
- (A) 18  
 (B) 144  
 (C) 192  
 (D) 208  
 (E) 384

- 6 For which of the following ordered pairs  $(s, t)$  is  $s + t > 2$  and  $s - t < -3$ ?
- (A) (3, 2)  
 (B) (2, 3)  
 (C) (1, 8)  
 (D)  $(\frac{1}{2}, \frac{3}{2})$   
 (E) (0, 3)

GO ON TO THE NEXT PAGE 

**2****2****2****2****2****2****2****2**

9 If  $\frac{x}{y} = -1$ , then  $x + y =$

- (A) 0
- (B) 1
- (C)  $x$
- (D)  $y$
- (E)  $2x$

10 Yesterday Art earned \$10.00 less than Bill, and today Art earned \$7.50 more than Bill. Which of the following must be true about Art's total earnings for the two days compared to Bill's?

- (A) Art earned  $\frac{3}{4}$  of what Bill earned.
- (B) Art earned \$17.50 more than Bill.
- (C) Art earned \$2.50 more than Bill.
- (D) Art earned \$2.50 less than Bill.
- (E) Art earned \$17.50 less than Bill.

11 If  $k^2 + 5 = 22$ , then  $k^2 - 5 =$

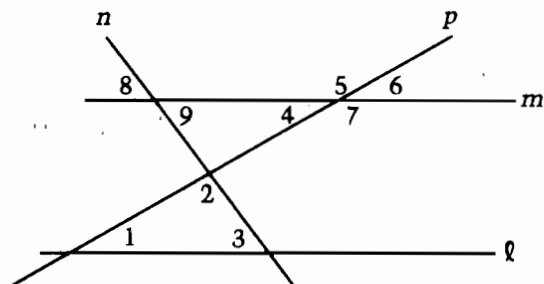
- (A) 12
- (B) 17
- (C) 39
- (D) 144
- (E) 284

12 If a line  $\ell$  is perpendicular to a segment  $AB$  at point  $E$  and  $AE = EB$ , how many points on line  $\ell$  are the same distance from point  $A$  as from point  $B$ ?

- (A) None
- (B) One
- (C) Two
- (D) Three
- (E) All points

13 If  $r$ ,  $s$ , and  $t$  are integers greater than 1, where  $rs = 15$  and  $st = 33$ , which of the following must be true?

- (A)  $t > r > s$
- (B)  $s > t > r$
- (C)  $s > r > t$
- (D)  $r > t > s$
- (E)  $r > s > t$



14 In the figure above, line  $\ell$  is parallel to line  $m$ . Which of the following pairs of angles have equal measures?

- I. 1 and 4
  - II. 3 and 8
  - III. 5 and 7
- (A) I only
  - (B) I and II only
  - (C) I and III only
  - (D) II and III only
  - (E) I, II, and III

GO ON TO THE NEXT PAGE

**2****2****2****2****2****2****2****2**

- 13** A total of 60 advertisements were sold for a school yearbook. If 20 percent of the first 20 sold were in color, 40 percent of the next 30 sold were in color, and 80 percent of the last 10 sold were in color, what percent of the 60 advertisements were in color?

- (A) 30%  
 (B)  $33\frac{1}{3}\%$   
 (C) 40%  
 (D)  $46\frac{2}{3}\%$   
 (E) 60%

- 11** Let  $\begin{array}{c} b \\ a \quad c \\ d \end{array}$  be defined for all numbers  $a$ ,

$b$ ,  $c$ , and  $d$  by  $\begin{array}{c} b \\ a \quad c \\ d \end{array} = ac - bd$ . If

$x = \begin{array}{c} 4 \\ 5 \quad 2 \\ 1 \end{array}$ , what is the value of  $\begin{array}{c} 10 \\ x \quad 2 \\ 1 \end{array}$ ?

- (A) 1  
 (B) 2  
 (C) 18  
 (D) 38  
 (E) 178

- 15** The sum of the integers  $t$  and  $w$  is 495. The units digit of  $t$  is 0. If  $t$  is divided by 10, the result is equal to  $w$ . What is the value of  $t$ ?

- (A) 40  
 (B) 45  
 (C) 245  
 (D) 250  
 (E) 450

- 16** A certain college offers students two monthly options for local telephone service.

Option A: Unlimited number of local calls for \$20.00 per month

Option B: Basic charge of \$15.00 per month plus \$0.10 charge for each local call

What is the least number of local calls in a month for which option A is less expensive than option B?

- (A) 5  
 (B) 15  
 (C) 49  
 (D) 50  
 (E) 51

- 17** Points  $X$  and  $Y$  are the endpoints of a line segment, and the length of the segment is less than 25. There are five other points on the line segment,  $R$ ,  $S$ ,  $T$ ,  $U$ , and  $V$ , which are located at distances of 1, 3, 6, 10, and 13, respectively, from point  $X$ . Which of the points could be the midpoint of  $XY$ ?

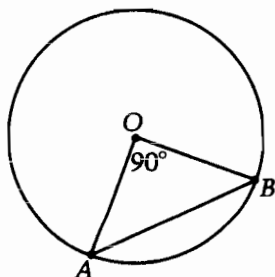
- (A)  $R$   
 (B)  $S$   
 (C)  $T$   
 (D)  $U$   
 (E)  $V$

GO ON TO THE NEXT PAGE 

**2****2****2****2****2****2****2****2**

18 The positive difference between  $k$  and  $\frac{1}{8}$  is the same as the positive difference between  $\frac{1}{2}$  and  $\frac{1}{3}$ . Which of the following could be the value of  $k$ ?

- (A)  $\frac{1}{7}$   
 (B)  $\frac{1}{6}$   
 (C)  $\frac{7}{24}$   
 (D)  $\frac{23}{24}$   
 (E)  $\frac{4}{3}$



19 In the figure above,  $O$  is the center of the circle of radius 10. What is the area of  $\triangle AOB$ ?

- (A) 25  
 (B) 50  
 (C)  $\frac{25}{2}\pi$   
 (D)  $20\pi$   
 (E)  $25\pi$

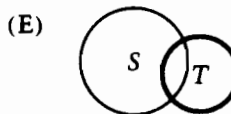
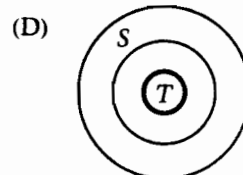
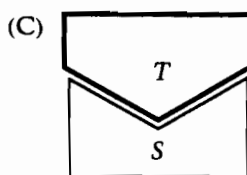
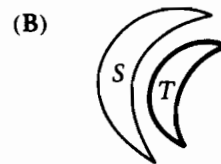
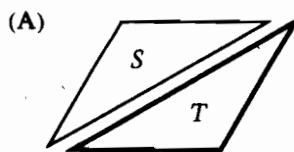
20 Five students are to be photographed for the school paper. They are to be arranged standing side by side in a single row with the tallest student in the center and the two shortest students on the ends. If no two students are the same height, how many different arrangements are possible?

- (A) Two  
 (B) Four  
 (C) Five  
 (D) Six  
 (E) Ten

21 In a plane, two regions,  $S$  and  $T$ , are called "unlinked" if

- (1)  $S$  has no points in common with  $T$ , and
- (2) any line segment that can be drawn with both endpoints in  $S$  has no points in common with any line segment that can be drawn with both endpoints in  $T$ .

Which of the following shows a pair of regions that are unlinked?



GO ON TO THE NEXT PAGE

**22** A ball is dropped from 192 inches above level ground and after the third bounce it rises to a height of 24 inches. If the height to which the ball rises after each bounce is always the same fraction of the height reached on its previous bounce, what is this fraction?

- (A)  $\frac{1}{8}$
- (B)  $\frac{1}{4}$
- (C)  $\frac{1}{3}$
- (D)  $\frac{1}{2}$
- (E)  $\frac{2}{3}$

$$\frac{1}{x} = 0.0N$$

$$\frac{1}{y} = 0.00P$$

**23** The fractions  $\frac{1}{x}$  and  $\frac{1}{y}$  can be written as decimals as shown above, where  $N$  and  $P$  represent different digits. Which of the following is equal to  $\frac{1}{xy}$  if  $S$  equals  $N$  times  $P$  and  $S$  is a digit?

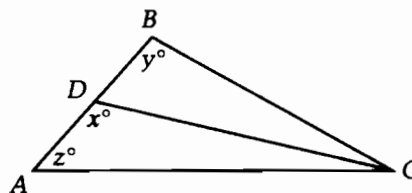
- (A) 0.0000S
- (B) 0.000S
- (C) 0.00S
- (D) 0.0S
- (E) 0.S

**CENTRAL HIGH'S  
FIELD HOCKEY RESULTS**  
Games Played in September

	Goals		Goals	Margin of Victory
Central	7	Northern	0	
Central	3	Westfield	1	
Central	3	Easton	2	
Central	5	Southern	1	
Central	2	Bayville	1	

**24** Central High's field hockey team was undefeated in September, as shown in the table above. A team's margin of victory for a single game is defined as the number of goals it made minus the number of goals made by the losing team. What is the median of the missing values in the column labeled Margin of Victory?

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

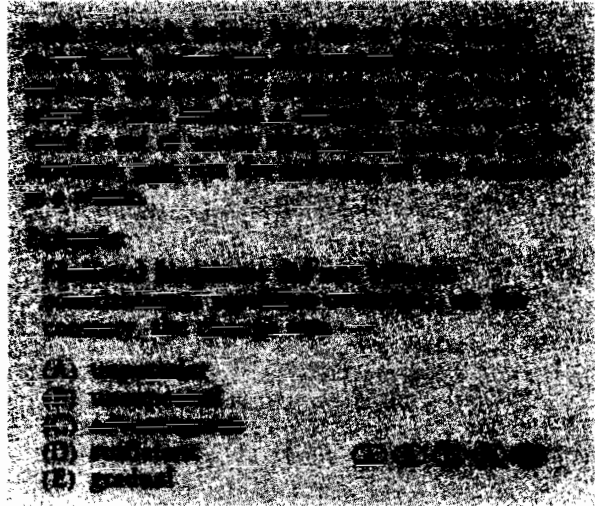


**Note:** Figure not drawn to scale.


**25** In  $\triangle ABC$  above,  $AB = BC$  and  $CD$  bisects  $\angle C$ . If  $y = \frac{1}{3}x$ , then  $z =$

- (A) 40
- (B) 60
- (C) 64
- (D) 72
- (E) 80

**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. STOP**



5. Although English philosopher Anne Conway was ---- by her seventeenth-century contemporaries, she has through oversight been nearly ---- in recent times.
- (A) revered .. forgotten  
(B) censured .. venerated  
(C) abandoned .. ignored  
(D) imitated .. emulated  
(E) pardoned .. absolved
6. While the ---- explorers faced risks courageously, they were not ----, choosing instead to avoid needless dangers.
- (A) flagrant .. punctual  
(B) intrepid .. foolhardy  
(C) genial .. clandestine  
(D) resolute .. amicable  
(E) culpable .. irresponsible
7. For centuries, the coastline of Uruguay was regarded by European mariners as a ---- place, one seemingly devoid of inhabitants.
- (A) conceivable (B) desolate (C) fallacious  
(D) prepossessing (E) discourteous
8. Chocolate connects us to the past, for despite modern ---- in food-processing technology, the steps necessary for transforming cocoa beans into chocolate have been ---- for nearly two centuries.
- (A) developments .. varied  
(B) setbacks .. constant  
(C) failures .. inconsistent  
(D) progress .. unstable  
(E) advances .. unchanged
9. The landscape was truly ----, so arid that even the hardiest plants could not survive.
- (A) lurid (B) parched (C) drubbed  
(D) verdant (E) variegated
10. Born ----, children will follow their natural inclination to explore their surroundings with a ---- that belies the random appearance of their play.
- (A) innocent .. deviousness  
(B) serious .. merriment  
(C) curious .. purposefulness  
(D) eager .. moderation  
(E) aware .. casualness
11. Maxine Hong Kingston presents universal themes in the context of Chinese American culture; this has helped her achieve a literary ---- that is ----, yet speaks to the full range of human experience.
- (A) success .. indistinct  
(B) voice .. unique  
(C) convention .. encompassing  
(D) style .. comprehensive  
(E) prominence .. general
12. The grief and sadness of parting and the sorrows that seem eternal are ---- by time, but they leave their scars.
- (A) revived (B) magnified (C) nurtured  
(D) mitigated (E) concocted
13. The traditional process of producing an oil painting requires so many steps that it seems ---- to artists who prefer to work quickly.
- (A) provocative (B) consummate  
(C) interminable (D) facile  
(E) prolific
14. Photography as an art form often seeks the ---- in its subjects, those qualities that cannot be expressed in words.
- (A) ineffable (B) mundane (C) onerous  
(D) incisive (E) auspicious

GO ON TO THE NEXT PAGE 

Each question below consists of a related pair of words or phrases, followed by five pairs of words or phrases labeled A through E. Select the pair that best expresses a relationship similar to that expressed in the original pair.

Example:

**CRUMB : BREAD ::**

- (A) cone : unit
- (B) splinter : wood
- (C) water : bucket
- (D) twine : rope
- (E) cream : butter

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

**11 STORY : BUILDING ::**

- (A) crust : sandwich
- (B) shingle : roof
- (C) data : file
- (D) layer : cake
- (E) root : plant

**12 SPROUT : SEED ::**

- (A) pollinate : bee
- (B) cure : disease
- (C) stimulate : growth
- (D) hatch : egg
- (E) filter : impurity

**13 DOORMAT : SHOES ::**

- (A) place mat : table
- (B) napkin : mouth
- (C) fork : plate
- (D) lace : boot
- (E) curtain : window

**14 ATLAS : MAPS ::**

- (A) manual : instructions
- (B) directory : pages
- (C) almanac : years
- (D) dictionary : writers
- (E) tome : books

**15 DODO : BIRD ::**

- (A) horse : mule
- (B) dinosaur : reptile
- (C) venom : snake
- (D) rooster : hen
- (E) dog : puppy

**16 PROCRASTINATE : ACTION ::**

- (A) reverse : direction
- (B) postpone : event
- (C) assign : choice
- (D) endure : patience
- (E) embezzle : fraud

**17 LUMMOX : CLUMSY ::**

- (A) boon : beneficial
- (B) egotist : conceited
- (C) rascal : predictable
- (D) maxim : hackneyed
- (E) toady : important

**18 SIREN : WARNING ::**

- (A) shovel : dirt
- (B) alarm : clock
- (C) barrier : intrusion
- (D) signal : reception
- (E) light : illumination

**19 PREAMBLE : STATUTE ::**

- (A) interlude : musical
- (B) conclusion : argument
- (C) foreword : novel
- (D) epilogue : address
- (E) premiere : performance

**20 HEDONISTIC : PLEASURE ::**

- (A) promising : achievement
- (B) vindictive : vengeance
- (C) precocious : youth
- (D) concerned : empathy
- (E) cruel : mercy

**21 TOPIC : DISCOURSE ::**

- (A) title : play
- (B) subject : digression
- (C) guideline : policy
- (D) theme : essay
- (E) footnote : text

**22 CONTEMPORARIES : AGE ::**

- (A) housemates : residence
- (B) faculty : scholarship
- (C) idols : worship
- (D) kin : reunion
- (E) authors : anthology

**23 QUERULOUS : COMPLAIN ::**

- (A) silent : talk
- (B) humorous : laugh
- (C) dangerous : risk
- (D) deceitful : cheat
- (E) gracious : accept

GO ON TO THE NEXT PAGE

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

Questions 24-35 are based on the following passage.

The excerpt below is from the introduction to a catalog of a recent museum exhibit of fake artworks and other kinds of forgeries.

Why, if what we value from a work of art is the aesthetic pleasure to be gained from it, is a successfully deceptive fake inferior to the real thing?

Conscious of this problem, some have attempted to deny the importance of authorship. The great collector and scholar Richard Payne Knight, after discovering that an antique cameo\* of the Roman goddess Flora might be a modern forgery, told the dealer who had sold it to him that it did not matter whether it was old or new, since its beauty was unaffected by its age. Similarly, the purchasers of a supposedly Renaissance bust of Lucrezia Donati expressed their pleasure, on discovering that it was a fake, that an artist of such talent was still alive. Indeed, in 1869 the Victoria and Albert Museum acquired the bust as an example of a forgery of exceptional quality, and at a price comparable to that paid for genuine Renaissance pieces. But it would be unwise to expect museums, dealers, or private collectors to take that attitude today.

What most of us suspect—that aesthetic appreciation is not the only engine of the art market—becomes evident when a well-known work of art is revealed as a fake. The work may not change in appearance, but it loses its value as a relic. It no longer provides a direct link to an artist of genius; it ceases to promise either spiritual refreshment to its viewer or status to its owner. Even though the work in question remains physically unaltered, our response to it is profoundly changed. In 1937 the art historian Abraham Bredius wrote of a painting entitled *Christ at Emmaus*, which he believed to be the work of the great seventeenth-century Dutch artist Vermeer, but which was in fact a forgery by a Dutch painter named Hans van Meegeren:

It is a wonderful moment in the life of a lover of art when he finds himself suddenly confronted with a hitherto unknown painting by a great master, . . . on the original canvas, and without any restoration, just as it left the painter's studio! And what a picture! . . . What we have here is a—I am inclined to say—the masterpiece of Jan Vermeer of Delft.

After the exposure of van Meegeren, however, it became surprisingly apparent that his forgeries were grotesquely ugly and unpleasant paintings, altogether dissimilar to Vermeer's.

Van Meegeren's success seemed incredible to the experts. As one reviewer noted, "[h]ad van Meegeren been a better artist . . . he might just have succeeded in producing 'Vermeers' which would have fooled more people longer than the ones he created." Yet van Meegeren was exposed not because he ceased to fool people, but because he was forced to prove himself a forger in order to clear himself of the more serious charge of having sold a national treasure illegally.

What is extraordinary about van Meegeren's success is that the pattern revealed by his case is commonplace. The reaction of Bredius and his numerous distinguished colleagues, far from being exceptionally foolish, was normal; fakes are often greeted with rapture by well-informed experts and by the general public alike. It is generally true that forgers are known to us only because they have revealed themselves, overcoming considerable public and scholarly skepticism to prove the works in question are theirs, only to find that what was so admired as the work of another is now seen as trite and even maladroit.

It is clear that both private and public collections must contain many works by fakers more talented and fortunate than van Meegeren. And they will continue to do so. Some will be exposed by advances in scientific techniques, but many objects cannot be scientifically dated, and even where analysis is appropriate, its conclusions must be based on a control group of "genuine" objects that may itself be contaminated.

This is the main complaint against fakes. It is not that they cheat their purchasers of money, reprehensible though that is, but that they loosen our hold on reality, deform and falsify our understanding of the past. What makes them dangerous, however, also makes them valuable. The feelings of anger and shame they arouse among those who have been deceived are understandable, but the consequent tendency to dispose of or destroy fakes, once identified, is misguided. Even if the errors of the past only provided lessons for the future, they would be worthy of retention and study. But forgeries do more than that. As keys to understanding the changing nature of our vision of the past, as motors for the development of scholarly and scientific techniques of analysis, as subverters of aesthetic certainties, they deserve our closer attention. And as the most entertaining of monuments to the wayward talents of generations of gifted rogues, they certainly claim our reluctant admiration.

\* A small medallion with a profiled head carved in relief

GO ON TO THE NEXT PAGE



- 24 The example of the antique cameo (line 7) is used to demonstrate that
- (A) some collectors like to purchase forged pieces
  - (B) some collectors pay exorbitant prices for beautiful pieces
  - (C) some collectors prize beauty even more than authenticity
  - (D) most collectors refuse to buy from unscrupulous dealers
  - (E) most collectors correctly recognize forgeries

- 25 The first paragraph of the passage discusses conflict between
- (A) artists and forgers
  - (B) collectors and museums
  - (C) an art collector and an art dealer
  - (D) perceived value and authenticity in artworks
  - (E) sellers of forgeries and the dealers who buy them

- 26 In line 25, "relic" most nearly means
- (A) ancient custom
  - (B) fragile carcass
  - (C) venerated object
  - (D) remnant after decay
  - (E) souvenir of a famous place

- 27 In lines 24-25, the reference to an exposed forgery's value ("The work . . . a relic") suggests that the forgery
- (A) is a financial loss to an investor
  - (B) is no less esteemed by some collectors than a contemporary work
  - (C) ceases to be seen as a symbol of the past
  - (D) should be prized for its historical significance
  - (E) provides less pleasure when its monetary value decreases

- 28 The passage implies that a viewer of a work of art will receive "spiritual refreshment" (line 27) only if the
- (A) appearance of the work is unchanged
  - (B) experts have praised the beauty of the piece
  - (C) viewer is familiar with the artist
  - (D) work has been seen by only a few collectors
  - (E) work is considered genuine

- 29 The author quotes Bredius' opinion (lines 36-43) in order to show that
- (A) unknown paintings by many famous artists are waiting to be found
  - (B) an artwork's history affects how people judge it
  - (C) the totality of a work is what makes it valuable
  - (D) no one has found the actual *Christ at Emmaus*
  - (E) any artist's work can be easily forged

- 30 According to paragraph 4 (lines 58-70), some forgers reveal themselves in order to
- (A) avoid prosecution for forgery
  - (B) confound the art critics
  - (C) prove that forgery is commonplace
  - (D) rectify the confusion they have caused
  - (E) take credit for certain highly regarded works

- 31 The author's reference to "private and public collections" (line 71) suggests that
- (A) museums cannot prevent forgeries from entering their collections
  - (B) museums sometimes seek out forgeries for their collections
  - (C) museums that knowingly purchase forgeries are foolish
  - (D) many valuable paintings have yet to be found in museum storerooms
  - (E) many valuable paintings have been replaced with forgeries in major museums

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- 32** The purpose of the "control group" (line 78) is to
- (A) select forgeries to be tested by experts
  - (B) manage increases in market prices
  - (C) maintain a collection of forgeries in one location
  - (D) provide examples of genuine artworks
  - (E) test whether forgeries can deceive experts

- 33** Which of the following best exemplifies the "main complaint" mentioned in line 80?
- (A) A counterfeit \$1,000 bill used to pay a debt
  - (B) A crafty disguise used in a crime
  - (C) A false-bottomed trunk used to hide secret documents
  - (D) A fabricated letter from a past President
  - (E) A pseudonym used by an author

- 34** The author gives all of the following as reasons for preserving forgeries EXCEPT their ability to
- (A) amuse us with the forger's cleverness
  - (B) challenge our convictions
  - (C) temper the rising price of original art
  - (D) serve as comparisons to genuine artworks
  - (E) shed light on how we view history

- 35** According to the final paragraph, forgeries are "valuable" (line 85) because they are
- (A) artistically daring
  - (B) increasingly attempted
  - (C) rarely available
  - (D) relatively popular
  - (E) unusually instructive

"Fake? The Art of Deception," edited by Mark Jones. Copyright © 1990 by University of California Press.

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.

**STOP**

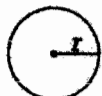
# Section 4 4 4 4 4

**Time—30 Minutes**  
**25 Questions**

This section contains two types of questions. You have 30 minutes to complete both types. You may use any available space for scratchwork.

**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.

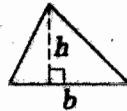


$$A = \pi r^2$$

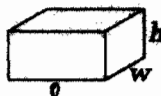
$$C = 2\pi r$$



$$A = lw$$



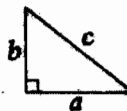
$$A = \frac{1}{2}bh$$



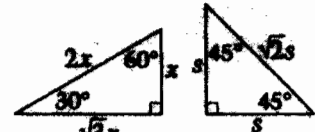
$$V = lwh$$



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



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



Special Right Triangles

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

The measure in degrees of a straight angle is 180.

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

## Directions for Quantitative Comparison Questions

Questions 1-15 each consist of two quantities in boxes, one in Column A and one in Column B. You are to compare the two quantities and on the answer sheet fill in oval

- A if the quantity in Column A is greater;  
B if the quantity in Column B is greater;  
C if the two quantities are equal;  
D if the relationship cannot be determined from the information given.

**AN E RESPONSE WILL NOT BE SCORED.**

**Notes:**

- In some questions, information is given about one or both of the quantities to be compared. In such cases, the given information is centered above the two columns and is not boxed.
- In a given question, a symbol that appears in both columns represents the same thing in Column A as it does in Column B.
- Letters such as  $x$ ,  $n$ , and  $k$  stand for real numbers.

### EXAMPLES

Column A

Column B

Answers

1 1

$$5^2$$

$$20$$

A  B  C  D  E

1 2

$$x$$

$$30$$

A  B  C  D  E

1 3

$$r + 1$$

$$s - 1$$

A  B  C  D  E

GO ON TO THE NEXT PAGE

SUMMARY DIRECTIONS FOR COMPARISON QUESTIONS

**Answer:** A if the quantity in Column A is greater;  
 B if the quantity in Column B is greater;  
 C if the two quantities are equal;  
 D if the relationship cannot be determined from the information given.

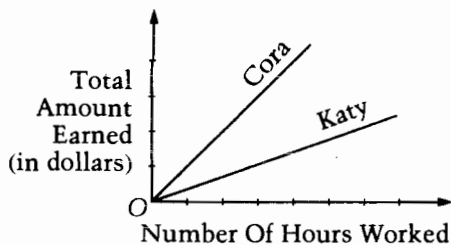
	Column A	Column B
1	The value of $x$ when $3x + 6 = 15$	The value of $y$ when $3(y + 2) = 15$

	Column A	Column B
5	The length of a side of a square whose perimeter is 12	The length of one side of a rectangle whose perimeter is 12

One package of muffin mix makes 8 large muffins or 12 small muffins.

2	The maximum number of small muffins that can be made with 3 packages of mix	The maximum number of large muffins that can be made with 4 packages of mix
---	---	---

	Column A	Column B
	$\frac{42 \times k}{21} = 0$	
6	$\frac{42 \times k}{7}$	6



3	The amount earned per hour by Cora	The amount earned per hour by Katy
---	------------------------------------	------------------------------------

	Column A	Column B
	Twice $n$ equals 4 more than $n$ .	
7	$n$	4

The 15th day of a certain 30-day month falls on a Wednesday.

8	The number of Thursdays in that month <u>before</u> the 15th	The number of Thursdays in that month <u>after</u> the 15th
---	--	---

	Column A	Column B
	$a + b = 0$	
4	$a \cdot a \cdot a$	$b \cdot b \cdot b$



**SUMMARY DIRECTIONS FOR COMPARISON QUESTIONS**

**Answer:** A if the quantity in Column A is greater,  
 B if the quantity in Column B is greater,  
 C if the two quantities are equal,  
 D if the relationship cannot be determined from the information given.

Column A

Column B

$$r = 2s$$

$$r > 0$$

9 60% of  $r$

30% of  $s$

10 The total surface area of a box with dimensions 3 inches by 3 inches by 6 inches

The sum of the total surface areas of two cubes, each with dimensions 3 inches by 3 inches by 3 inches

$$a > 0$$

11  $\sqrt{\frac{a+1}{a+1}}$

$\sqrt{\frac{a}{a}} + \sqrt{\frac{1}{1}}$

$$S = \{-3, -2, 2, 3\}$$

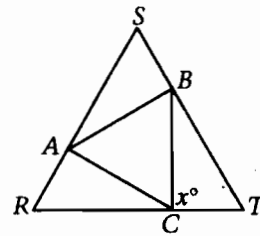
The members of a set  $T$  are the squares of numbers in set  $S$ .

12 The number of members of  $S$

The number of members of  $T$

Column A

Column B



Note: Figure not drawn to scale.

Triangles  $ABC$  and  $RST$  are each equilateral.

13  $x$

90

$$n + p + v = 50$$

$$n + p - v = 20$$

11  $v$

15

In  $\triangle ABC$ ,  $AB = 3$ ,  $BC = 4$ , and  $AC = 6$ .

15 The length of the altitude to base  $AB$

The length of the altitude to base  $AC$

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### 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.

Answer:  $\frac{7}{12}$  or  $7/12$       Answer: 2.5      Answer: 201  
Either position is correct.

Write answer in boxes.      ← Fraction line      ← Decimal point

Grid in result.      ← Grid in result.

**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  $2\frac{1}{2}$  must be gridded as 2.5 or  $5/2$ . (If  $\frac{21}{2}$  is gridded, it will be interpreted as  $\frac{21}{2}$ , not  $2\frac{1}{2}$ .)
  - **Decimal Accuracy:** If you obtain a decimal answer, enter the most accurate value the grid will accommodate. For example, if you obtain an answer such as  $0.6666\dots$ , you should record the result as .666 or .667. Less accurate values such as .66 or .67 are not acceptable.
- Acceptable ways to grid  $\frac{2}{3} = .666\dots$
- 

16 Four lines intersect in one point, forming 8 equal angles that are nonoverlapping. What is the measure, in degrees, of one of these angles?

17 The ratio of 1.5 to 32 is the same as the ratio of 0.15 to  $x$ . What is the value of  $x$ ?

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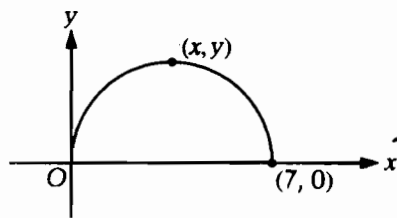
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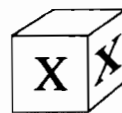
$$\begin{aligned} 8 < x < 12 \\ 12 < y < 15 \end{aligned}$$

- 18 If  $x$  and  $y$  are integers that satisfy the conditions above, what is one possible value of  $xy$ ?

- 19 If  $(3x^2 + 4x + 5)(3x + 6) = ax^3 + bx^2 + cx + d$  for all values of  $x$ , what is the value of  $c$ ?



- 20 In the figure above, what is the  $y$ -coordinate of the point on the semicircle that is the farthest from the  $x$ -axis?



- 21 A plain white cube is marked with an "X" on exactly two adjacent faces as shown above. If the cube is tossed on a flat surface and the cube lands so that an "X" appears on the top face, what is the probability that the bottom face does not have an "X" on it?

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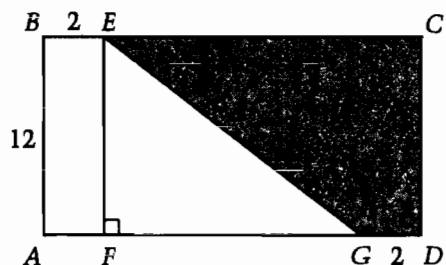
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Note: Figure not drawn to scale.

- 22 If the area of the shaded region in rectangle  $ABCD$  above is 90, what is the area of  $\triangle EFG$ ?

$$(T \times 3^3) + (U \times 3^2) + (V \times 3) + W = 50$$

- 23 Each letter in the equation above represents a digit that is less than or equal to 2. What four-digit number does  $TUVW$  represent?

- 24 A teacher is to be assigned to teach 5 different courses in 5 different class periods on Mondays. If exactly one course meets each period, how many different assignments of courses to these class periods are possible for Mondays?

- 25 If the average (arithmetic mean) of three different positive integers is 70, what is the greatest possible value of one of the integers?

~~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.~~

**STOP**



Time—15 Minutes  
12 Questions

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 two passages below are followed by questions based on their content and on the relationship between the two 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 1-12 are based on the following passages.

The following adaptations from recent books discuss aspects of television news reportage. Both passages refer to English author George Orwell (1903-1950), whose 1949 novel entitled *1984* warned against a totalitarian government that controlled all media and thus all "news" that was reported.

Passage 1

Relaying information and images instantly, television newscasts have allowed viewers to form their own opinions about various political events and political leaders. In many instances, television newscasts have even fostered active dissent from established governmental policies. It is no coincidence that, in the 1960's, the civil rights movement took hold in the United States with the advent of television, which was able to convey both factual information and such visceral elements as outrage and determination. Only when all of America could see, on the nightly newscasts, the civil disobedience occurring in places like Selma and Montgomery did the issue of civil rights become a national concern rather than a series of isolated local events. By relaying reports from cities involved to an entire nation of watchers, television showed viewers the scope of the discontent and informed the disenfranchised that they were not alone.

The ability of television news to foster dissent has also been affected by increasingly widespread access to video cameras, so that the news presented on television now comes from the bottom up as well as from the top down. Across the world, dissidents have used video equipment to gather visual evidence of human rights abuses. Uncensored images and information have then been transmitted across otherwise closed borders by television newscasts.

One professor of popular culture, Jack Nachbar, views the personal video camera as a "truth-telling device that can cut through lies." That claim presumes, though, that the television viewer can believe what he or she sees. But the motivation of the photographer must always be taken into account, and the videotape that appears on television can, like still photography, be staged and even faked. When and if propagandists for some government utilize computer-

generated effects, viewers will have more trouble believing what they see. However, even if seeing is not automatically believing, at least seeing is seeing — and in some repressive regimes, seeing is the fastest road to freedom.

"George Orwell was wrong," writes television newscaster Ted Koppel. Koppel's reasoning is persuasive: "The media, which Orwell predicted would become the instrument of totalitarian control, [have] become, instead, its nemesis."

Passage 2

"Now . . . this" is a phrase commonly used on television newscasts to indicate that what one has just heard or seen has no relevance to what one is about to hear or see, or possibly to anything one is ever likely to hear or see. The phrase acknowledges that the world as mapped by television news has no order or meaning and is not to be taken seriously. No earthquake is so devastating, no political blunder so costly, that it cannot be erased from our minds by a newscaster saying, "Now . . . this." Interrupted by commercials, presented by newscasters with celebrity status, and advertised like any other product, television newscasts transmit news without context, without consequences, without values, and therefore without essential seriousness; in short, news as pure entertainment. The resulting trivialization of information leaves television viewers well entertained, but not well informed or well prepared to respond to events.

The species of information created by television is, in fact, "disinformation." Disinformation does not mean false information, but misleading information — misplaced, irrelevant, fragmented, or superficial information — that creates the illusion of knowing something, but that actually leads one away from any true understanding. In the United States, television news does not deliberately aim to deprive viewers of a coherent understanding of their world. But when news is packaged as entertainment, no such understanding is possible. The problem is not that television viewers lack authentic information, but that they are losing their sense of what a complete body of information should include.

People are by now so thoroughly adjusted to the world of television news — a world of fragments,

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where events stand alone, stripped of any connection to the past, future, or other events — that all principles of coherence have vanished. And so has the notion of holding leaders accountable for contradictions in their policies. What possible interest could there be in comparing what the President says now and what the President said in the past? Such a comparison would merely rehash old news and could hardly be interesting or entertaining.

For all his perspicacity, George Orwell did not predict this situation; it is not "Orwellian." The government does not control the newscasts. Lies have not been defined as truth, nor truth as lies. All that has happened is that the public has adjusted to incoherence and has been entertained into indifference. The current situation fits the predictions of Aldous Huxley,\* rather than those of Orwell:

Huxley realized that the government need not conceal anything from a public that has become insensible to contradiction, that has lost any perspective from which to scrutinize government critically, and that has been rendered passive by technological diversions.

\* English novelist and essayist (1894-1963)

- 1** Both passages are primarily concerned with ways in which
- (A) television newscasts deliberately distort information
  - (B) television affects viewers by its presentation of news
  - (C) truth frustrates efforts by the media to constrain it
  - (D) viewers of television newscasts can sort out fact from fiction
  - (E) governments manage to control television newscasts

- 2** Which of the following, if true, would most clearly strengthen the assertion in Passage 1 about television and the civil rights movement (lines 11-15) ?
- (A) Many filmed reports of civil disobedience were censored by television executives during the 1960's.
  - (B) Recent studies have questioned the objectivity with which television newscasts presented reports of civil disobedience during the 1960's.
  - (C) A biography of a major civil rights leader describes in detail the occasions on which the leader was featured in television newscasts of the 1960's.
  - (D) A 1960's poll shows that those Americans who considered civil rights a national priority had seen television newscasts of civil disobedience.
  - (E) Many of the reporting techniques used today originated in newscasts covering the 1960's civil rights movement.

- 3** In the context of lines 29-42, the reference to "still photography" (lines 35-36) serves to
- (A) illustrate the accuracy with which current events can be documented
  - (B) develop a claim about the trustworthiness of television presentations
  - (C) demonstrate the progress that has been made in using computer-generated effects
  - (D) refute the argument that viewers are deceived by computer-generated effects
  - (E) emphasize that videotaped images have comparatively greater impact

- 4** The word "instrument" is used in line 46 to signify
- (A) a gimmick
  - (B) an agent
  - (C) a navigational aid
  - (D) a musical device
  - (E) a legal document

GO ON TO THE NEXT PAGE 

- 5 The use of the quotation in lines 43-47 can be considered a weakness of the argument in Passage 1 because
- (A) an irrelevant reason is cited as evidence that television news is beneficial
  - (B) an attribute of the media that is labeled as beneficial is in fact destructive
  - (C) a work of fiction is cited as though it were scientific research
  - (D) a negative assessment of television news is left unchallenged
  - (E) a defense of television news is presented by a television newscaster
- 6 According to Passage 2, television news is presented in a manner that serves to
- (A) hold leaders accountable for their policies
  - (B) entertain viewers
  - (C) define lies as truth
  - (D) make complex issues accessible
  - (E) exaggerate minor political blunders
- 7 The word "mapped" in line 53 most nearly means
- (A) plotted on a chart
  - (B) planned in detail
  - (C) measured
  - (D) defined
  - (E) verified
- 8 According to Passage 2, the "disinformation" mentioned in line 68 affects television viewers by
- (A) leading them to act on false information
  - (B) causing them to become skeptical about television news
  - (C) giving them the mistaken impression that they are knowledgeable
  - (D) making them susceptible to the commercials that accompany the news
  - (E) turning them against certain political leaders
- 9 Which of the following most accurately describes the organization of the last paragraph of Passage 2?
- (A) One view of a situation is refuted and an alternative view is substituted.
  - (B) An assertion is made and is supported by means of historical evidence.
  - (C) Two authors with contrasting views are introduced and their views are reconciled.
  - (D) An argument in favor of one interpretation is set forth and an opposing interpretation is explained.
  - (E) A situation is described and a prediction about related future events is offered.

- 10 In each passage, the author assumes that viewers of television news tend to
- (A) read about news events as well as watch them
  - (B) watch television programs other than newscasts
  - (C) lack a coherent understanding of their world
  - (D) follow only important events
  - (E) accept most of what they see as factual.
- 11 The passages differ in their evaluations of television newscasts in that Passage 1 claims that
- (A) newscasts seek mainly to criticize established governments, whereas Passage 2 warns that newscasts usually strengthen established governments
  - (B) television news inflames viewers' emotions, whereas Passage 2 warns that television news provides false information
  - (C) propagandists could falsify the news, whereas Passage 2 warns that television trivializes the news
  - (D) television news causes viewers to form hasty opinions, whereas Passage 2 warns that newscasts cause viewers to understand issues simplistically
  - (E) repressive governments are using television news as a means of control, whereas Passage 2 warns that commercial sponsorship biases the newscasts
- 12 Both passages refer to George Orwell's predictions in order to
- (A) emphasize that the presentation of news has changed since Orwell's time
  - (B) show how aspects of Orwell's conception of the future have become reality
  - (C) point out that the government does not control television news
  - (D) warn against the control of news media exercised by governments worldwide
  - (E) illustrate public concerns that television newscasters themselves have begun to address

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.

**STOP**

# Section 7

# 7

**Time—15 Minutes**  
**10 Questions**

**In this section solve each problem, using any available space on the page for scratchwork. Then decide which is the best of the choices given and fill in the corresponding oval on the answer sheet.**

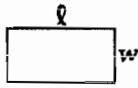
**Notes:**

- 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.

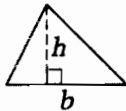


$$A = \pi r^2$$

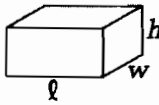
$$C = 2\pi r$$



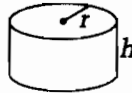
$$A = lw$$



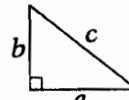
$$A = \frac{1}{2}bh$$



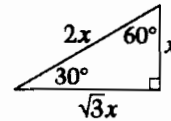
$$V = lwh$$



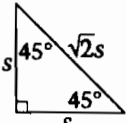
$$V = \pi r^2 h$$



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



Special Right Triangles



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

- 1** In Italy, when one dollar was approximately equal to 1,900 lire, a certain pair of shoes cost 60,000 lire. Of the following, which is the best approximation of the cost of these shoes, in dollars?

- (A) \$20
- (B) \$30
- (C) \$60
- (D) \$120
- (E) \$300



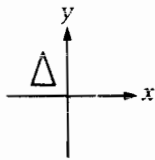
- 2** In the figure above, any path from  $A$  to  $B$  must follow the connected line segments in the direction shown by the arrows. How many different paths are there from  $A$  to  $B$ ?

- (A) Five
- (B) Six
- (C) Seven
- (D) Eight
- (E) Nine

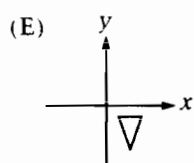
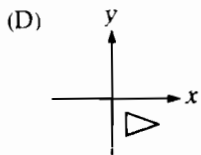
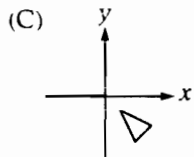
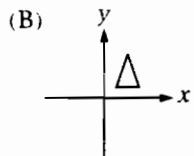
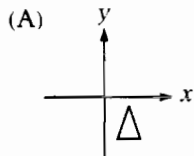
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- 3 What is the least number of 2's that can be multiplied together to yield a number greater than 50?

(A) 4  
 (B) 5  
 (C) 6  
 (D) 7  
 (E) 10

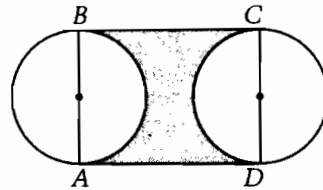


- 4 The triangle in the figure above is to be reflected across the  $x$ -axis and then reflected across the  $y$ -axis. Which of the following shows the resulting position of the triangle?



- 5 If  $e$ ,  $f$ ,  $g$ , and  $h$  are consecutive odd integers and  $e < f < g < h$ , then  $g + h$  is how much greater than  $e + f$ ?

(A) 2  
 (B) 3  
 (C) 4  
 (D) 5  
 (E) 8



- 6 In rectangle  $ABCD$  shown above, sides  $AB$  and  $CD$  pass through the centers of the two circles. If  $AB = 12$  and  $AD = 16$ , what is the area of the shaded region?

(A) 120  
 (B) 156  
 (C) 192  
 (D)  $192 - 36\pi$   
 (E)  $192 - 72\pi$

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	Column 1	Column 2	Total
Row 1			53
Row 2			26
Row 3			21
Total	36	64	100

- In the table above, each of the six empty boxes should contain a number entry so that the column and row totals are as given. Juan wants to complete the table. What is the least number of entries that he must ask for in order to complete the table?

- (A) One
- (B) Two
- (C) Three
- (D) Four
- (E) Six

- Ms. Clark drove from her home to the museum at an average speed of 40 miles per hour and returned home along the same route at an average speed of 35 miles per hour. If her total driving time for the trip was 2 hours, how many minutes did it take Ms. Clark to drive from her home to the museum?

- (A) 70
- (B) 60
- (C) 56
- (D) 45
- (E) 40

GO ON TO THE NEXT PAGE 

- 9 Two cities  $n$  miles apart are located  $s$  inches apart on a certain map that is drawn to scale. What is the distance, in inches, on the map between two cities that are  $n + 1$  miles apart?

- (A)  $\frac{n}{s}$   
(B)  $\frac{(n + 1)}{s}$   
(C)  $\frac{s}{(n + 1)}$   
(D)  $\frac{s(n + 1)}{n}$   
(E)  $\frac{n}{s(n + 1)}$

- 10 If  $3^x = y$ , which of the following equals  $9y$  in terms of  $x$ ?

- (A)  $3^{\frac{x}{2}}$   
(B)  $3^{2x}$   
(C)  $3^{2+x}$   
(D)  $3^{x^2}$   
(E)  $27^x$

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. **STOP**





**Score Conversion Table**  
**SAT 1: Reasoning Test**  
**Saturday, November 1996**  
**Recentered Scale**

Raw Score	Verbal Scaled Score	Math Scaled Score	Raw Score	Verbal Scaled Score	Math Scaled Score
78	800		37	510	570
77	800		36	510	560
76	800		35	500	550
75	800		34	500	540
74	800		33	490	540
73	800		32	480	530
72	790		31	480	520
71	770		30	470	510
70	760		29	470	510
69	740		28	460	500
68	730		27	450	490
67	720		26	450	490
66	710		25	440	480
65	700		24	440	470
64	690		23	430	470
63	680		22	420	460
62	670		21	420	450
61	670		20	410	450
60	660	800	19	410	440
59	650	800	18	400	430
58	640	790	17	390	430
57	640	770	16	390	420
56	630	750	15	380	410
55	620	740	14	370	410
54	620	720	13	370	400
53	610	710	12	360	390
52	600	700	11	350	380
51	600	690	10	340	380
50	590	680	9	330	370
49	580	670	8	330	360
48	580	660	7	320	350
47	570	650	6	310	340
46	570	640	5	300	330
45	560	630	4	280	330
44	550	620	3	270	310
43	550	620	2	260	290
42	540	610	1	240	280
41	540	600	0	230	260
40	530	590	-1	210	250
39	520	580	-2	200	230
38	520	570	-3	200	200
			and below		

This table is for use only with this test.