

# **SAT I: Reasoning Test**

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**Saturday, November 1995**

# Section 1 1 1 1 1 1 1

Time—10 Minutes  
25 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 Although Christa Wolf was one of East Germany's most famous authors, her works were often ---- and, therefore, often unavailable.
- (A) suppressed
  - (B) revised
  - (C) imitated
  - (D) tolerated
  - (E) analyzed

- 2 A few of the people on the island may live ----, but most have no hope of ---- even the basic amenities of life.
- (A) poorly. .enjoying
  - (B) pretentiously. .yielding
  - (C) responsibly. .acquiring
  - (D) lavishly. .attaining
  - (E) simply. .missing

- 3 The new pluralism in art ---- a great variety of styles and points of view while denying ---- to any single approach.
- (A) ignores. .originality
  - (B) distorts. .probability
  - (C) espouses. .embellishment
  - (D) undermines. .secrecy
  - (E) accommodates. .dominance

- 4 Interest in the origin of life is ----; all cultures and societies have narratives about creation.
- (A) distant
  - (B) mythical
  - (C) universal
  - (D) debatable
  - (E) superficial

- 5 The number of African American inventors from the 1600's to the late 1800's will never be ----, since their work was often ---- by others.

- (A) seen. .reintegrated
- (B) determined. .expropriated
- (C) withheld. .trivialized
- (D) disclosed. .uncensored
- (E) archived. .marketed

- 6 Housewares and bookbindings by designer Josef Hoffmann exemplify a range of styles, from simple and austere to ---- and opulent.

- (A) basic
- (B) efficient
- (C) severe
- (D) florid
- (E) straightforward

- 7 Although the personality that emerges from May Sarton's autobiography seems unmistakably ----, the journals for which she became famous described her ---- life in a sparsely populated area.

- (A) complex. .intricate
- (B) celebrated. .humorous
- (C) affable. .solitary
- (D) stoic. .isolated
- (E) scholarly. .intellectual

- 8 Negotiators predicted an early end to the strike, but the reporters were ---- because both sides refused to compromise.

- (A) cordial
- (B) dubious
- (C) benevolent
- (D) biased
- (E) prophetic

- 9 He was always ---- in performing his tasks, waiting until the last moment to finish them.

- (A) dilatory
- (B) incompetent
- (C) extroverted
- (D) surreptitious
- (E) obtrusive

- 10 In effect, the Voting Rights Act of 1965 ---- African Americans in the southern United States by outlawing restrictions that had barred them from voting.

- (A) inspired
- (B) promulgated
- (C) enfranchised
- (D) preserved
- (E) proliferated

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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 one pair that expresses a relationship similar to that expressed in the original pair.

Example:  
 (A) shirt : button ::  
 (B) splinter : wood  
 (C) water : bucket  
 (D) wine : rope  
 (E) scream : butter

- 17 EMOLLIENT : SOFTEN ::  
 (A) oil : lubricate  
 (B) disinfectant : contaminate  
 (C) concrete : harden  
 (D) storm : thunder  
 (E) steam : evaporate

- 18 CAPTION : CARTOON ::  
 (A) byline : newspaper  
 (B) laughter : comedy  
 (C) subtitle : film  
 (D) translation : paraphrase  
 (E) billboard : road

- 11 DROUGHT : RAIN ::  
 (A) desert : sun  
 (B) hurricane : wind  
 (C) epidemic : disease  
 (D) volcano : lava  
 (E) famine : nourishment

- 19 BERATE : CRITICIZE ::  
 (A) goad : urge  
 (B) accuse : apologize  
 (C) regret : remember  
 (D) betray : follow  
 (E) evaluate : praise

- 12 ANTIBIOTIC : INFECTION ::  
 (A) thermometer : fever  
 (B) anesthesia : surgery  
 (C) vaccine : inoculation  
 (D) antiseptic : alcohol  
 (E) antidote : poisoning

- 20 PERCEPTIVE : DISCERN ::  
 (A) determined : hesitate  
 (B) authoritarian : heed  
 (C) persistent : persevere  
 (D) abandoned : neglect  
 (E) restrained : rebel

- 13 HUMIDIFIER : MOISTURE ::  
 (A) iron : wrinkle  
 (B) candle : wax  
 (C) tub : liquid  
 (D) furnace : heat  
 (E) chimney : smoke

- 21 EMULATE : PERSON ::  
 (A) admire : reputation  
 (B) obey : leader  
 (C) cooperate : partner  
 (D) mimic : gesture  
 (E) mock : sarcasm

- 14 CONDOLENCE : MOURNER ::  
 (A) secret : stranger  
 (B) loan : borrower  
 (C) rescue : knight  
 (D) congratulation : victor  
 (E) record : athlete

- 22 INCUMBENT : OFFICE ::  
 (A) politician : campaign  
 (B) tenant : dwelling  
 (C) jailer : cell  
 (D) secretary : desk  
 (E) retiree : service

- 15 PETAL : FLOWER ::  
 (A) oak : tree  
 (B) staple : paper  
 (C) sprout : seed  
 (D) tooth : comb  
 (E) tide : beach

- 23 CONUNDRUM : PERPLEX ::  
 (A) theory : refute  
 (B) explanation : suffice  
 (C) blueprint : construct  
 (D) entertainment : divert  
 (E) expedition : discover

- 16 RUTHLESS : COMPASSION ::  
 (A) theatrical : emotion  
 (B) naïve : sophistication  
 (C) scrupulous : propriety  
 (D) self-righteous : indignation  
 (E) formidable : awe

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- 24** The author uses the phrase "embarked upon" (line 1) to emphasize which of the following?
- (A) The transient nature of the fictional world  
 (B) His commitment to an exploration of the world of books  
 (C) His realization that literature can change one's outlook  
 (D) The fear he feels about leaving the familiar world of his parents  
 (E) His sense of isolation from his classmates
- 25** The author initially believed "important books" (lines 2-3) to be books that
- (A) did not contain any references to children  
 (B) had been praised by critics  
 (C) were recommended by his mother  
 (D) were directed toward a mature audience  
 (E) were written by renowned authors
- 26** The author would "literally tremble" (line 12) at the library because he
- (A) did not know which books were important  
 (B) was intimidated by the librarians  
 (C) felt a personal connection to all the authors represented there  
 (D) was worried that he would never be able to read all the books  
 (E) was excited by the idea of being allowed to borrow books
- 27** The author's purpose in mentioning that some of the librarians "frowned" (line 14) is most likely to
- (A) indicate that his reading project was met with some skepticism at first  
 (B) imply that they thought children should not check out books written for adults  
 (C) suggest that what he was doing was wrong  
 (D) explain why he was so frightened at the library  
 (E) characterize librarians who favor intellectual children
- 28** The mother's attitude toward the boy's interest in reading (lines 20-27) can be best described as
- (A) exasperation  
 (B) indignation  
 (C) perplexity  
 (D) sympathy  
 (E) admiration
- 29** In line 33, "mined" most nearly means
- (A) followed  
 (B) dug out  
 (C) entrenched  
 (D) tunneled  
 (E) blown up
- 30** The author states that he was "disheartened" (line 42) because
- (A) he was unable to find books that were of lasting value  
 (B) the tragic themes of the books he was reading were depressing to him  
 (C) his ability to write descriptions was lagging behind his reading ability  
 (D) his teachers were not giving him as much encouragement as he needed  
 (E) his desire for meaning was not being met by the themes that he wrote down
- 31** The fourth paragraph (lines 47-55) describes the author as
- (A) comfortable only in the company of fellow scholars  
 (B) dissatisfied with the rate at which his reading progressed  
 (C) happy with his books despite his isolation from others  
 (D) lonely because he often had no other children around him  
 (E) determined to get outside and enjoy nature



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- 32 The author uses the phrase "the fiction closed tight" (lines 69-70) in order to
- (A) demonstrate that the endings of the novels were not believable
  - (B) blur the distinction between fictional works and real life
  - (C) indicate how impenetrable some of the novels were
  - (D) criticize the artificiality of Dickens' characters
  - (E) show his unhappiness at having to part with a fictional world
- 33 In line 75 "sustain" most nearly means
- (A) defend
  - (B) support
  - (C) endure
  - (D) prolong
  - (E) ratify
- 34 The author uses the phrase "the breadth of my achievement" (lines 78-79) primarily in order to suggest that
- (A) he was confusing quantity with quality
  - (B) the books he had read varied widely in difficulty
  - (C) he should have been prouder of himself than he was
  - (D) he believes every child should read as much as possible
  - (E) no one else knew how much he was reading
- 35 The author implies that "a good reader" (line 85) is one who
- (A) engages in a structured reading program
  - (B) reads constantly and widely
  - (C) reads with a critical perspective
  - (D) makes lists of books to be read
  - (E) can summarize a book's theme simply and concisely

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

2

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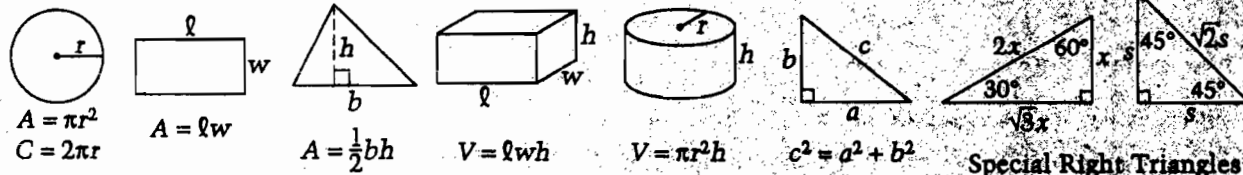
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Time—30 Minutes  
25 Questions

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:**

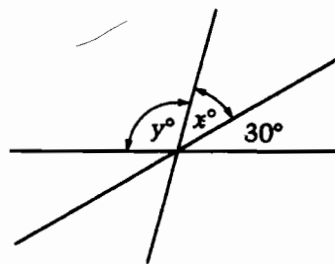
- The use of a calculator is permitted. All numbers used are real numbers.
- Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not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



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  $2x + y = 7$  and  $y = 5x$ , then  $x =$

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



2 Three lines intersect in the figure above. What is the value of  $x + y$ ?

- (A) 170
- (B) 160
- (C) 150
- (D) 140
- (E) 120

3 If it takes Sam 6 hours working at a constant rate to complete his science project, what part of the project is completed in 2 hours?

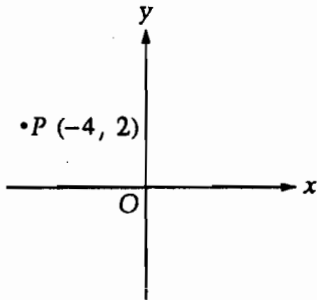
- (A)  $\frac{1}{12}$
- (B)  $\frac{1}{8}$
- (C)  $\frac{1}{6}$
- (D)  $\frac{1}{4}$
- (E)  $\frac{1}{3}$

GO ON TO THE NEXT PAGE

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

1 If  $2p + 5 = 20$ , then  $2p - 5 =$

- (A) 0
- (B) 5
- (C) 10
- (D) 15
- (E) 25



5 In the figure above, a line is to be drawn through point  $P$  so that it never crosses the  $x$ -axis. Through which of the following points must the line pass?

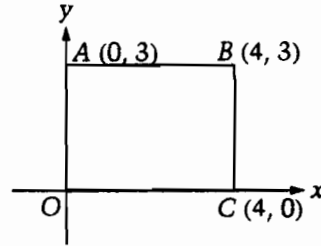
- (A) (4, 2)
- (B) (4, -2)
- (C) (2, 4)
- (D) (2, -4)
- (E) (-4, -2)

6 The ratio of 8 to 3 is equal to the ratio of 24 to what number?

- (A) 8
- (B) 9
- (C) 19
- (D) 29
- (E) 64

7 What number decreased by 6 equals 3 times the number?

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



8 What is the area of rectangle  $OABC$  in the figure above?

- (A) 7
- (B) 9
- (C) 12
- (D) 14
- (E) 16

9 The distance from Town A to Town B is 5 miles and the distance from Town B to Town C is 4 miles. Which of the following could NOT be the distance, in miles, from Town A to Town C?

- (A) 1
- (B) 4
- (C) 8
- (D) 9
- (E) 10

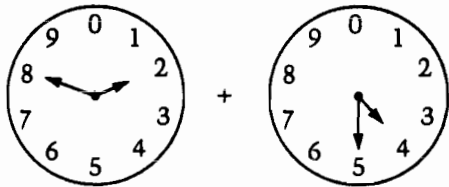
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Questions 10-12 refer to the following information.

Alissa makes a number wheel to represent the integers from 0 through 99, inclusive. The short hand points to the tens digit, and the long hand points to the units digit.



For example, the number wheel above shows 07, which we would write as 7.



10. Which of the following represents the sum of the two integers represented on the two number wheels above?

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



11. Which of the following is the next greater prime number after the prime number represented above?

- (A) 15
- (B) 17
- (C) 33
- (D) 37
- (E) 41

12. Exactly how many integers can be represented on this number wheel?

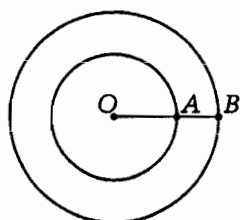
- (A) 91
- (B) 98
- (C) 99
- (D) 100
- (E) 101

13. Exactly  $\frac{1}{2}$  yard of ribbon is needed to make a certain bow. Which of the following lengths of ribbon could be used to make the bow with the least amount remaining?

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

GO ON TO THE NEXT PAGE



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

- 14** In the figure above, both circles have their centers at point  $O$ , and point  $A$  lies on segment  $OB$ . If  $OA = 3$  and  $AB = 2$ , what is the ratio of the circumference of the smaller circle to the circumference of the larger circle?

- (A)  $\frac{2}{3}$   
 (B)  $\frac{3}{5}$   
 (C)  $\frac{9}{16}$   
 (D)  $\frac{1}{2}$   
 (E)  $\frac{4}{9}$

- 15** The total weight of Bill and his son Tommy is 250 pounds. If Bill's weight is 10 pounds more than 3 times Tommy's, what is Tommy's weight in pounds?

- (A) 40  
 (B) 50  
 (C) 60  
 (D) 80  
 (E) 90

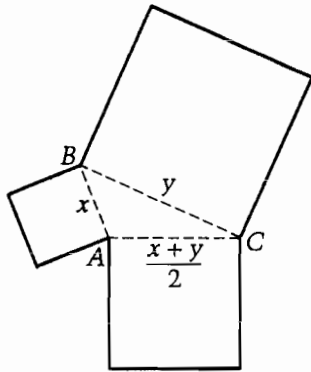
- 16** Set  $I$  contains six consecutive integers. Set  $J$  contains all integers that result from adding 3 to each of the integers in set  $I$  and also contains all integers that result from subtracting 3 from each of the integers in set  $I$ . How many more integers are there in set  $J$  than in set  $I$ ?

- (A) 0  
 (B) 2  
 (C) 3  
 (D) 6  
 (E) 9

- 17** If  $s \neq 0$ , then  $\frac{1}{\frac{6}{2s}} =$

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

GO ON TO THE NEXT PAGE

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

- 18** In the figure above, triangle  $ABC$  has sides of lengths  $x$ ,  $y$ , and  $\frac{x+y}{2}$ . On each side, a square is constructed as shown. What is the sum of the lengths of the sides of the resulting 9-sided figure, in terms of  $x$  and  $y$ ?

- (A)  $\frac{9x+9y}{2}$   
 (B)  $\frac{7x+7y}{2}$   
 (C)  $\frac{3x+3y}{2}$   
 (D)  $5x+5y$   
 (E)  $4x+4y$

- 19** If  $x$  is an integer and  $\frac{x+7}{2}$  is an integer, which of the following must be true?

- I.  $x$  is odd.  
 II.  $x$  is a multiple of 7.  
 III.  $\frac{x+5}{2}$  is an integer.
- (A) I only  
 (B) II only  
 (C) III only  
 (D) I and II  
 (E) I and III



Note: Figure not drawn to scale.

- 20** If the area of the triangle in the figure above is 100, what is the length of side  $AB$ ?

- (A)  $10\sqrt{3}$  (approximately 17.32)  
 (B)  $10\sqrt{5}$  (approximately 22.36)  
 (C) 20  
 (D) 24  
 (E) 25

- 21** If  $(x+3)(x+5) - (x-4)(x-2) = 0$ , then  $x =$

- (A) -2  
 (B)  $-\frac{1}{2}$   
 (C) 0  
 (D)  $\frac{1}{2}$   
 (E) 2

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

**22** If  $x < y$ , which of the following must be true?

- (A)  $x^2 < y^2$
- (B)  $-y < -x$
- (C)  $x^2 < xy$
- (D)  $xy < y^2$
- (E)  $2x < y$

**21** In a certain club, the median age of the members is 11. Which of the following must be true?

- I. The oldest member in the club is at least 1 year older than the youngest.
- II. If there is a 10 year old in the club, there is also a 12 year old.
- III. The mode of the members' ages is 11.

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

**23** The first term of a sequence is  $-3$  and every term after the first is 5 more than the term immediately preceding it. What is the value of the 101st term?

- (A) 505
- (B) 502
- (C) 500
- (D) 497
- (E) 492

**24** In a certain shop, items were put in a showcase and assigned prices for January. Each month after that, the price was 10 percent less than the price for the previous month. If the price of an item was  $p$  dollars for January, what was the price for April?

- (A)  $0.4p$
- (B)  $0.6p$
- (C)  $0.6561p$
- (D)  $0.7p$
- (E)  $0.729p$

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 3 3 3 3 3 3 3

Time—30 Minutes  
30 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.

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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 The usually ---- Mr. Henderson shocked his associates by reacting violently to the insignificant and moderate comments of his critic.
- (A) demanding
  - (B) inarticulate
  - (C) aggressive
  - (D) persuasive
  - (E) composed

- 2 Disappointingly, the researchers' failure was a direct result of their ----; we had not expected that their focus would be so indistinct.
- (A) egoism
  - (B) irreverence
  - (C) relevance
  - (D) vagueness
  - (E) hindsight

- 3 Although her restaurant already has a large and devoted following, Magda tries to expand her ---- by offering special promotions.
- (A) clientele
  - (B) investments
  - (C) coverage
  - (D) staffing
  - (E) liability

- 4 By showing such a large shaded area, this map of wildlife distribution encourages the ---- that certain species living in isolated spots are actually ----.
- (A) misconception. .widespread
  - (B) impression. .remote
  - (C) illusion. .extant
  - (D) notion. .carnivorous
  - (E) sense. .feral

- 5 The author portrays research psychologists not as disruptive ---- in the field of psychotherapy, but as effective ---- working ultimately toward the same ends as the psychotherapists.

- (A) proponents. .opponents
- (B) antagonists. .pundits
- (C) interlocutors. .surrogates
- (D) meddlers. .usurpers
- (E) intruders. .collaborators

- 6 Despite their ---- backgrounds, those who fought for women's right to vote successfully overcame their differences in a ---- effort.

- (A) incompatible. .divisive
- (B) disparate. .united
- (C) distinguished. .futile
- (D) eccentric. .prosaic
- (E) comparable. .joint

- 7 The candidate recognized that his attempt to build a broad base of support had been ----, but he was still ---- by the magnitude of his defeat.

- (A) obstinate. .elated
- (B) insightful. .impenitent
- (C) persuasive. .exultant
- (D) thwarted. .discomfited
- (E) successful. .satisfied

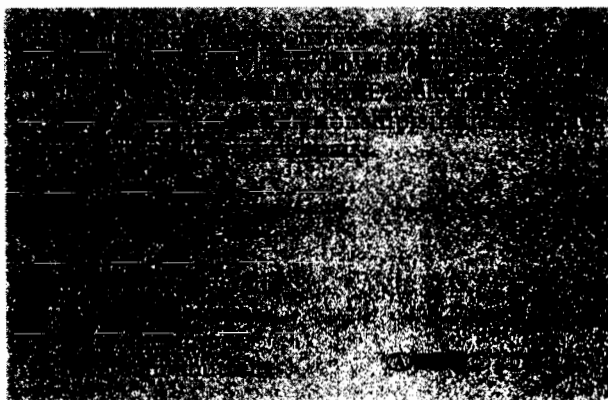
- 8 Although it is not ----, Clara Rodriguez' book on Puerto Rican life is especially useful because the supply of books on the subject is so ----.

- (A) intense. .vast
- (B) obsolete. .outdated
- (C) ostentatious. .varied
- (D) comprehensive. .meager
- (E) contemporary. .plentiful

- 9 Wave direction, apparently the primary ---- used by young turtles to navigate in water, is later ---- by their orientation to magnetic fields.

- (A) mechanism. .confused
- (B) vestige. .propagated
- (C) restraint. .complemented
- (D) agent. .propelled
- (E) cue. .supplanted

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- 10** MUSEUM : EXHIBIT ::  
 (A) studio : painter  
 (B) library : research  
 (C) theater : performance  
 (D) picture : frame  
 (E) orchestra : conductor

- 11** LENS : GLASS ::  
 (A) well : water  
 (B) saw : wood  
 (C) sweater : wool  
 (D) fuel : fire  
 (E) ink : paper

- 12** ARENA : CONFLICT ::  
 (A) mirage : reality  
 (B) forum : discussion  
 (C) asylum : pursuit  
 (D) utopia : place  
 (E) amphitheater : stage

- 13** ARABLE : CULTIVATION ::  
 (A) exploited : protection  
 (B) healthy : medication  
 (C) insular : discovery  
 (D) productive : surplus  
 (E) navigable : sailing

- 14** REFURBISH : WORN ::  
 (A) revive : exhausted  
 (B) reward : outstanding  
 (C) resume : interrupted  
 (D) replace : stolen  
 (E) repaint : glossy

- 15** DEFEND : UNTENABLE ::  
 (A) escape : unfettered  
 (B) judge : punitive  
 (C) modify : invariable  
 (D) flourish : vigorous  
 (E) protect : dangerous

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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 16-20 are based on the following passage.

The following passage is adapted from an essay on women and writing by a noted contemporary American poet.

As I tried to understand my dual roles of writer and mother, I realized that most, if not all, human lives are full of fantasy—passive daydreaming that need not be acted on. But to write poetry or fiction, or even to think well, is not to fantasize, or even to put fantasies on paper. For a poem to coalesce, for a character or an action to take shape, there has to be an imaginative transformation of reality that is in no way passive. And a certain freedom of the mind is needed—freedom to press on, to enter the currents of your thought like a glider pilot, knowing that your motion can be sustained, that the buoyancy of your attention will not be suddenly snatched away. Moreover, if the imagination is to transcend and transform experience, it has to question, to challenge, to conceive of alternatives, perhaps to the very life you are living at that moment. You have to be free to play around with the notion that day might be night, love might be hate, nothing can be too sacred for the imagination to turn into its opposite or to call experimentally by another name. For writing is renaming. Now, to be maternally with small children all day in the old way, to be with a man in the old way of marriage, requires a holding back, a putting aside of that imaginative activity, and demands instead a kind of conservatism. I want to make it clear that I am not saying that in order to write well, or think well, it is necessary to become unavailable to others, or to become a devouring ego. This has been the myth of the masculine artist and thinker, and I do not accept it. But to be a female human being trying to fulfill traditional female functions in a traditional way is in direct conflict with the subversive function of the imagination. The word "traditional" is important here. There must be ways, and we will be finding out more and more about them, in which the energy of creation and the energy of relation can be united. But in those years I always felt the conflict as a failure of love in myself. I had thought I was choosing a full life: the life available to most men, in which sexuality, work, and parenthood could coexist. But I felt, at twenty-nine, guilt toward the people closest to me, and guilty toward my own being. I wanted, then, more than anything, the one thing of which there was never enough: time to think, time to write.

- 16 The passage is primarily concerned with the
- (A) different ways a writer uses imagination
  - (B) variety of roles a woman has during her lifetime
  - (C) contrasting theories of writing that are held today
  - (D) tendency for authors to confuse the real and the imaginary
  - (E) tension between traditional female roles and a writer's needs
- 17 The author's statement that "writing is renaming" (line 22) suggests a conviction that writing involves
- (A) gaining a large vocabulary of traditional definitions
  - (B) safeguarding language from change through misuse
  - (C) realizing that definitions are more important than perceptions
  - (D) transforming ideas in an active and creative manner
  - (E) overcoming the desire to use contradictory examples
- 18 The author's attitude toward those who believe a writer must become a "devouring ego" (line 30) in order to write well is one of
- (A) reluctant agreement
  - (B) confused ambivalence
  - (C) casual indifference
  - (D) emphatic disapproval
  - (E) personal abhorrence

GO ON TO THE NEXT PAGE

**3****3****3****3****3****3****3****3****3**

- 19** The author suggests that, in the future, women writers who are caring for small children will have the opportunity to
- (A) join two tasks into a single effort that requires little attention
  - (B) integrate two pursuits in a way that enhances both experiences
  - (C) identify two roles as a means of choosing one role over the other
  - (D) articulate two impulses that have become indistinguishable
  - (E) obtain the formal training necessary to accomplish two goals
- 20** According to the passage, which of the following is a necessary prerequisite to writing well?
- (A) Opportunities for the imagination to function actively
  - (B) Freedom to read widely among great writers of the past
  - (C) Shaping thoughts through disciplined study
  - (D) Complete withdrawal into the self
  - (E) Desire for literary continuity



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Questions 21-30 are based on the following passage.

The following passage was adapted from an account by two scientists about the emergence of genetics, the science of inherited traits.

You have seen them in movies: scientists who are infallible and coldly objective—little more than animated computers in white lab coats. They take measurements and record results as if the collection of data were the sole object of their lives. The assumption: If one gathers enough facts about something, the relationships between those facts will spontaneously reveal themselves.

Nonsense!

The myth of the infallible scientist evaporates when one thinks of the number of great ideas in science whose originators were correct in general but wrong in detail. The English physicist John Dalton (1766-1844) gets credit for modern atomic theory, but his mathematical formulas for calculating atomic weights were incorrect. The Polish astronomer Copernicus, who corrected Ptolemy's ancient concept of an Earth-centered universe, nevertheless was mistaken in the particulars of the planets' orbits.

Luck, too, has played a determining role in scientific discovery. The French chemist Pasteur demonstrated that life does not arise spontaneously from air. But it may have been luck that he happened to use an easy-to-kill yeast and not the hay bacillus that another, long-forgotten, investigator had chosen for the same experiment. We now know that hay bacillus is heat-resistant and grows even after the boiling that killed Pasteur's yeast. If Pasteur had used the hay bacillus, his "proof" would not have materialized.

Gregor Mendel, the founder of modern genetics, epitomizes the humanness of the scientist. Plant hybridization intrigued and puzzled Mendel, an Augustinian monk with some training in mathematics and the natural sciences. He had read in the professional literature that crosses between certain species regularly yielded many hybrids with identical traits; but when hybrids were crossed, all kinds of strange new combinations of traits cropped up. The principle of inheritance, if there was one, was elusive.

Mendel had the basic idea that there might be simple mathematical relationships among plants in different generations. To pursue this hypothesis, he decided to establish experimental plots in the monastery garden at Brunn, raise a number of varieties of peas, interbreed them, count and classify the offspring of each generation, and see whether any reliable mathematical ratios could be deduced.

After many years of meticulously growing, harvesting, and counting pea plants, Mendel thought

he had something worth talking about. So, in 1865, he appeared before the Brunn Society for the Study of Natural Science, reported on his research, and postulated what have since come to be called the Mendelian laws. Society members listened politely but, insofar as anybody knows, asked few questions and engaged in little discussion. It may even be that, as he proceeded, a certain suspicion emerged out of the embarrassed silence. After all, Mendel lacked a degree and had published no research. Now, if Pasteur had advanced this idea . . .

Mendel's assertion that separate and distinct "elements" of inheritance must exist, despite the fact that he couldn't produce any, was close to asking the society to accept something on faith. There was no evidence for Mendel's hypothesis other than his computations, and his wildly unconventional application of algebra to botany made it difficult for his listeners to understand that those computations were the evidence.

Mendel undoubtedly died without knowing that his findings on peas had indeed illuminated a well-nigh universal pattern. Luck had been with him in his choice of which particular traits to study. We now know that groups of genes do not always act independently. Often they are linked, their effect being to transmit a "package" of traits. Knowing nothing about genes, let alone the phenomenon of linkage, Mendel was spared failure because the traits that he chose to follow were each controlled separately. \* The probability of making such a happy choice in random picks is only about 1 in 163!

\* Some scientists believe that Mendel actually did have some idea of linkage and did choose traits purposefully.

21 The word "Nonsense!" (line 9) conveys the extent to which the authors

- (A) object to the tendency of scientists to rely on existing data
- (B) reject the way in which scientists are portrayed in the media
- (C) are amused at the accidental nature of some scientific findings
- (D) oppose the glorification of certain scientists at the expense of others
- (E) realize the necessity of objectivity in research

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- 22** The authors cite the example of Copernicus (lines 16-20) to substantiate which of the following claims?
- (A) The achievements of scientists are not always recognized.  
 (B) Scientific progress depends on a variety of factors.  
 (C) Scientists often suffer from professional jealousy and competition.  
 (D) Noted scientists are not always wholly accurate in their theories.  
 (E) A scientist may stumble on an important truth accidentally.
- 23** The term "humanness" (line 33) as it is applied to Mendel refers to
- (A) the tendency to rely excessively on emotion  
 (B) an interest in improving the human condition through scientific research  
 (C) an attitude of forgiveness toward those who underrated him  
 (D) a combination of intellect, intuition, and good fortune  
 (E) a talent for persevering in the face of opposition
- 24** In the passage, Pasteur's use of a certain yeast is comparable to
- (A) a previous investigator's use of the hay bacillus  
 (B) Dalton's discovery of atomic weights  
 (C) Mendel's choice of traits to study  
 (D) Copernicus' study of the universe  
 (E) Mendel's use of mathematical ratios
- 25** In lines 61-63, the authors imply that in comparison to Mendel, Pasteur
- (A) was a more proficient researcher  
 (B) based his theories on more extensive investigations  
 (C) possessed a more impressive professional reputation  
 (D) was more meticulous in his observations  
 (E) devoted more energy to promoting his scientific ideas
- 26** The "universal pattern" (line 75) refers to
- (A) the initial skepticism with which new ideas are received  
 (B) a tendency of botanists to resist purely theoretical proof  
 (C) the way peas tend to exhibit the quality of linked traits  
 (D) the way traits usually reappear in succeeding generations  
 (E) a similarity between Mendel's experiments and those of succeeding geneticists
- 27** The word "happy" (line 84) most nearly means
- (A) joyful  
 (B) fortunate  
 (C) willing  
 (D) dazed  
 (E) pleasing
- 28** The passage suggests that Mendel's contemporaries assumed that valid biological theories
- (A) are often proposed by inexperienced researchers  
 (B) cannot be based on mathematical proof alone  
 (C) must be supported by years of careful research  
 (D) often represent a departure from established practice  
 (E) must be circulated to a wide audience
- 29** The passage suggests that Mendel's experiments succeeded because
- (A) Mendel was able to convince his colleagues to support his research  
 (B) Mendel discovered flaws in his research design and corrected them  
 (C) Mendel had a thorough understanding of the concept of linked traits  
 (D) the scientific community finally understood the connection between mathematical computations and heredity  
 (E) the traits in peas happen to reappear in a distinct and predictable way
- 30** As described in the passage, the experiences of Mendel are most like those of
- (A) Albert Einstein, who fled Nazi Germany to become the most famous physicist of this century  
 (B) Pierre Curie, whose career as a chemist was cut short by a tragic accident  
 (C) Barbara McClintock, whose theories about inherited traits in corn were not understood or accepted until long after she had advanced them  
 (D) Leonardo da Vinci, whose numerous attempts to make a successful flying machine resulted in failure  
 (E) James Watson and Francis Crick, who competed with other teams of scientists in the race to unravel the genetic code

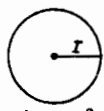
# Section 4 4 4 4 4

**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.

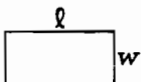
**Notes:**

- 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.

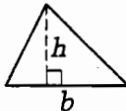


$$A = \pi r^2$$

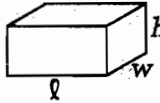
$$C = 2\pi r$$



$$A = lw$$



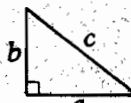
$$A = \frac{1}{2}bh$$



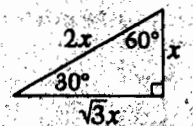
$$V = lwh$$



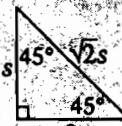
$$V = \pi r^2 h$$



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



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
	<input type="text" value="5&lt;sup&gt;2&lt;/sup&gt;"/>	<input type="text" value="20"/>	<input checked="" type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
$150^\circ$	<input type="text" value="x"/>	<input type="text" value="30"/>	<input type="radio"/> A <input type="radio"/> B <input checked="" type="radio"/> C <input type="radio"/> D <input type="radio"/> E
$r$ and $s$ are integers.	<input type="text" value="r + 1"/>	<input type="text" value="s - 1"/>	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input checked="" type="radio"/> D <input type="radio"/> 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.

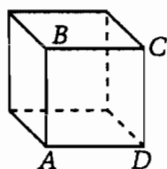
Column A

Column B

A \$100 coat was bought on sale for \$85.

1 The percent reduction on the price of the coat for the sale

A percent reduction of 85%



$ABCD$  is a face of a cube.

2 The number of faces of the cube perpendicular to face  $ABCD$

3

When Gina was 10 years old, the price of a certain item was \$100.

3 The price of the same item when Gina was 12 years old

\$100

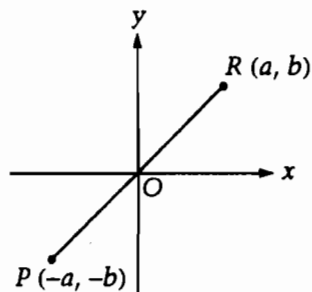
$x$  is a positive number.  
 $y$  is a negative number.

4  $x - y$

0

Column A

Column B



5 The length of segment  $OP$

The length of segment  $OR$

1, 2, 4, 8, 16

6 A number above that is the sum of 2 equal odd integers

A number above that is the sum of 2 equal even integers

$m$  and  $t$  are integers.

$$t^m = 16$$

7  $t$

$m$

$$x \leq 5$$

$$x + y \leq 7$$

8  $x$

$y$

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

A circle graph shows the various parts of a household budget. The sector that represents rent is 25 percent of the total area.

9 The degree measure of the central angle of the sector that represents rent

90°

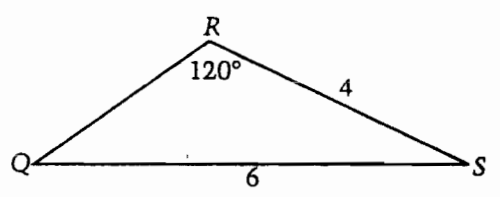
10 The volume of a right circular cylinder with radius 3

The volume of a right circular cylinder with height 3

The sum of the negative of  $t$  and the square of  $s$  is less than 2.

11  $t + 2$

$s^2$



12 The area of  $\triangle QRS$

12

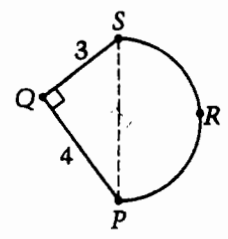
Column A

Column B

$f > g > 0$

13  $\frac{f+1}{f}$

$\frac{g+1}{g}$



T is a point (not shown) on semicircular arc SRP. T is different from S and P.

14 The distance between point Q and point T

3

$k$  is a positive integer.  
 $v = 10 \times k$

15 The sum of the digits of  $k$

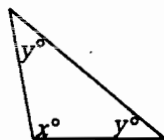
The sum of the digits of  $v$

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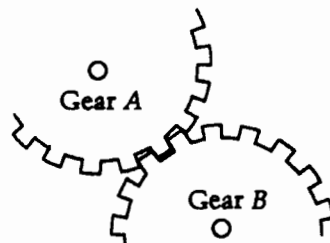
**4****4****4****4****4****4**

18 If  $0.92x = 9.2$ , what is the value of  $\frac{1}{x}$ ?



Note: Figure not drawn to scale.

19 In the triangle above,  $x$  and  $y$  are integers.  
If  $35 < y < 40$ , what is one possible value of  $x$ ?



Note: Figure not drawn to scale.

20 The figure above shows parts of two circular gears whose teeth interlock when the gears turn. Gear A has 72 teeth and gear B has 48 teeth. How many complete revolutions does gear A make when gear B makes 9 complete revolutions?

21 If the sum of two numbers is 2 and their difference is 1, what is their product?

GO ON TO THE NEXT PAGE 

IF YOU  
THIS

**4****4****4****4****4****4**

**22** If  $27^{15} = 3^y$ , what is the value of  $y$ ?

**21** There are 120 red marbles and 80 blue marbles in a bag that contains 200 marbles. If only blue marbles are to be added to the bag so that the probability of randomly drawing a blue marble from the bag becomes  $\frac{2}{3}$ , how many blue marbles must be added to the bag?

**23** If the perimeter of a rectangle is 10 times the width of the rectangle, then the length of the rectangle is how many times the width?

**25** The average (arithmetic mean) of 5 positive integers is 350. Two of the integers are 99 and 102 and the other integers are greater than 102. If all 5 integers are different, what is the greatest possible value for any of the 5 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**

# Section 6 6 6 6

Time—15 Minutes  
13 Questions

For each question in this section, select the best answer from among the choices and fill in the 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 1-13 refer to the following passages.

These two passages reflect two different views of the values and integrity of journalism. Passage 1 is from a 1990 account of the origins of investigative journalism and "muckraking." Passage 2 was written in the 1920's by a noted satirist famous for voicing strong opinions.

## Passage 1

Since the lineage of investigative journalism is most directly traceable to the Progressive era of the early 1900's, it is not surprising that the President of the United States at the time was among the first to articulate its political dimensions. Theodore Roosevelt called investigative reporters "muckrakers," after a character from John Bunyan's *Pilgrim's Progress* who humbly cleaned "the filth off the floor." Despite the misgivings implied by the comparison, Roosevelt saw the muckrakers as "often indispensable to the well-being of society":

There are in the body politic, economic and social, many and grave evils, and there is urgent necessity for the sternest war upon them. There should be relentless exposure of and attack upon every evil man, whether politician or businessman.

Roosevelt recognized the value-laden character of investigative journalism. He perceived correctly that investigative reporters are committed to unearthing wrongdoing. For these journalists, disclosures of morally outrageous conduct maximize the opportunity for the forces of "good" to recognize and do battle with the forces of "evil."

So, the current folklore surrounding investigative reporting closely resembles the American ideal of popular democracy. Vigilant journalists bring wrongdoing to public attention. An informed citizenry responds by demanding reforms from their elected representatives. Policymakers respond in turn by taking corrective action. Partly a product of its muckraking roots, this idealized perspective is also an outgrowth of the commonly perceived effects of exposés published in the early 1970's. The most celebrated of these exposés were the news stories that linked top White House officials to Watergate crimes.\* These stories were widely

held responsible for the public's loss of confidence in the Nixon administration, ultimately forcing the President's resignation.

Investigative journalists *intend* to provoke outrage in their reports of malfeasance. Their work is validated when citizens respond by demanding change from their leaders. By bringing problems to public attention, the "journalists of outrage" attempt to alter societal agendas.

\*The burglarizing of the Democratic party headquarters at the Watergate complex and other crimes committed during the 1972 presidential elections

## Passage 2

What ails newspapers in the United States is the fact that their gigantic commercial development compels them to appeal to larger and larger masses of undifferentiated people and that the truth is the commodity that the masses of undifferentiated people cannot be induced to buy. The dominant citizen of democratic society, despite a superficial appearance of intelligence, is really quite incapable of anything resembling reasoning.

So, the problem before a modern newspaper, hard pressed by the need of carrying on a thoroughly wholesome business, is that of enlisting the interest of these masses of people, and by interest, of course, I do not mean their mere listless attention, but their active emotional cooperation. Unless a newspaper can manage to arouse these people's feelings it might just as well not have at them at all, for their feelings are the essential part of them, and it is out of their feelings that they dredge up their obscure loyalties and aversions. Well, and how are their feelings to be stirred up? At bottom, the business is quite simple. First scare them—and then reassure them. First get people into a panic with a bugaboo—and then go to the rescue, gallantly and uproariously, with a stuffed club to lay it. First fake 'em—and then fake 'em again.

GO ON TO THE NEXT PAGE



(75) Insofar as our public gazettes have any serious business at all, it is the business of snouting out and exhibiting new and startling horrors, atrocities, impending calamities, tyrannies, villainies, enormities, mortal perils, jeopardies, outrages, catastrophes—first snouting out and exhibiting

(80) them, and then magnificently circumventing and disposing of them. The first part is easy. It is almost unheard of for the mob to disbelieve in a new bugaboo. As soon as the hideous form is unveiled it begins to quake and cry out: the reservoir of its primary fears is always ready to run

(85) over. And the second part is not much more difficult. The one thing demanded of the remedy is that it be simple, more or less familiar, easy to comprehend, that it make no draft upon the higher

(90) cerebral centers—that it avoid leading the shy and delicate intelligence of the mob into strange and hence painful fields of speculation. All healthy journalism in America—healthy in the sense that it flourishes spontaneously and needs no outside

(95) aid—is based firmly upon just such an invention and scotching of bugaboos. And so is all politics. Whatever stands above that fundamental imposture is an artificiality. Intelligent and honest journalism and politics—these things, in a democratic

(100) society, have no legitimate place. They are, when they are encountered, exotic curiosities, pale and clammy orchids, half-fabulous beasts in cages.

**1** Passage 1 suggests that Roosevelt's choice of name for investigative reporters reflects his belief that

- (A) they were irresponsible about checking the accuracy of their reporting
- (B) their writing style was unrefined and colloquial
- (C) they were motivated by greed and desire for fame
- (D) they were unsung and underpaid
- (E) they did unpleasant but necessary work

**2** The terms "folklore" (line 26) and "idealized perspective" (line 33) suggest that the author of Passage 1 would agree with which statement?

- (A) Democracy and journalism are incompatible.
- (B) Investigative journalism depends on creating a false villain.
- (C) Many people have a romanticized conception of the role of journalists.
- (D) Readers are easily swayed by appeals to their patriotism.
- (E) People seldom believe what they read in newspapers.

**3** The author of Passage 1 refers to the report on the "Watergate crimes" (line 38) primarily as an example of

- (A) a story covered better by television than by print media
- (B) editorial pandering to an ignorant public
- (C) journalism that had a tangible effect on politics
- (D) a flagrant abuse of the freedom of the press
- (E) the subversion of legitimate political power

**4** In the last paragraph of Passage 1 (lines 42-47), the author is

- (A) showing how investigative reporting has broken with its past tradition
- (B) acknowledging that reporters are not merely trying to impart information
- (C) disparaging those who believe that meaningful reform is possible
- (D) expressing sympathy for victims of overzealous reportage
- (E) citing an exception to the generalization mentioned by Roosevelt

**5** The brand of journalism discussed in Passage 1 is based on the assumption that

- (A) public awareness of injustice is necessary for change to occur
- (B) newspapers are read chiefly for information that will help people to get ahead
- (C) most people take for granted that politicians are corrupt
- (D) most people are suspicious of whistleblowers
- (E) most people's beliefs are inconsistent with their actions

**6** In line 53, "dominant" most nearly means

- (A) compelling
- (B) influential
- (C) headstrong
- (D) typical
- (E) superior

GO ON TO THE NEXT PAGE 

- 7** The tactics described in lines 69-73 convey the
- (A) main difference between reporters' and editors' attitudes toward the public
  - (B) immense difficulty involved in solving society's problems
  - (C) physical danger that occasionally awaits reporters
  - (D) extent to which journalism relies on manipulation
  - (E) reason why newspapers are so seldom profitable
- 8** In the last sentence of Passage 2, the author mentions orchids and beasts in order to
- (A) give an example of sensationalism in newspaper reporting
  - (B) suggest something so unusual as to be bizarre
  - (C) indicate a preference for fiction over news
  - (D) chide newspapers for dealing with excessively morbid subjects
  - (E) cite exceptions that disprove the previous sentence
- 9** Both passages indicate that a fundamental ingredient in the success of a newspaper is
- (A) financial assistance from the government
  - (B) a thirst for truth
  - (C) commercial development
  - (D) reporters of great integrity
  - (E) an engaged readership
- 10** The author of Passage 2 would most likely respond to the journalists' view in Passage 1 of the battle between the forces of "good" and "evil" (lines 24-25) by
- (A) praising the journalists' idealism
  - (B) mocking the journalists' naïveté
  - (C) admiring the journalists' wit
  - (D) arguing that good and evil are not easily defined
  - (E) offering exceptions to the general rule
- 11** Unlike Passage 2, Passage 1 assumes that newspapers generally
- (A) cater to a thoughtful, responsible citizenry
  - (B) rely on an obedient and docile public for assent
  - (C) are compromised by the advertising that supports them
  - (D) are read by only an elite minority of subscribers
  - (E) require close supervision by government censors
- 12** Both authors' discussions assume that the public
- (A) ignores the press more often than not
  - (B) will react when prompted by the press
  - (C) is indifferent to corruption
  - (D) has a higher degree of literacy than is found in most other countries
  - (E) is well-informed and astute in its political choices
- 13** The two authors would most likely agree with which statement?
- (A) Newspapers are a powerful means of getting the public's attention.
  - (B) Journalism is an important force for good.
  - (C) Competition between newspapers tends to improve the coverage of news.
  - (D) Most investigative journalism is actually driven by the profit motive.
  - (E) A knowledge of history is more important to a journalist than is a talent for writing.

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

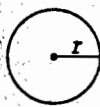
**Time—15 Minutes**  
**10 Questions**

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:**

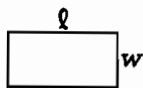
- The use of a calculator is permitted. All numbers used are real numbers.
- Figures that accompany problems in this test are intended to provide information useful in solving the problems. They are drawn as accurately as possible EXCEPT when it is stated in a specific problem that the figure is not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

Reference Information

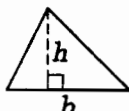


$$A = \pi r^2$$

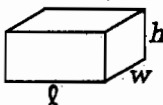
$$C = 2\pi r$$



$$A = lw$$



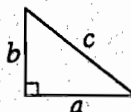
$$A = \frac{1}{2}bh$$



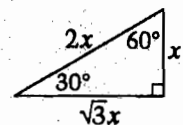
$$V = lwh$$



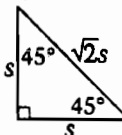
$$V = \pi r^2 h$$



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



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** If  $x^2 = y^3$  and  $x = 8$ , what is the value of  $y$ ?

- (A) 2
- (B) 4
- (C) 5
- (D) 6
- (E) 12

**2** Stickers are 4 for \$0.80 (including tax) and trading cards are 3 for \$1.05 (including tax). What is Kim's change from \$5.00 if she buys 8 stickers and 6 trading cards at these prices?

- (A) \$0.30
- (B) \$1.00
- (C) \$1.30
- (D) \$3.70
- (E) \$4.00

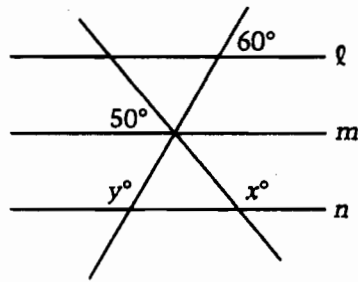
GO ON TO THE NEXT PAGE

- 3  $C$  is the midpoint of line segment  $AB$ , and  $D$  and  $E$  are the midpoints of line segments  $AC$  and  $CB$ , respectively. If the length of  $DE$  is 8, what is the length of  $AB$ ?

- (A) 4  
(B) 8  
(C) 12  
(D) 16  
(E) 32

- 1 Carla has 2 more than 3 times the number of cassette tapes that Jules has. If  $C$  represents the number of Carla's tapes and if  $J$  represents the number of Jules's tapes, which of the following is a correct expression relating  $C$  and  $J$ ?

- (A)  $C = 2J + 3$   
(B)  $C = 2(J + 3)$   
(C)  $C = 3J - 2$   
(D)  $C = 3J + 2$   
(E)  $C = 3(J + 2)$



- 2 In the figure above, five lines intersect as shown. If lines  $l$ ,  $m$ , and  $n$  are parallel, what is the value of  $x + y$ ?

- (A) 210  
(B) 220  
(C) 230  
(D) 240  
(E) 250

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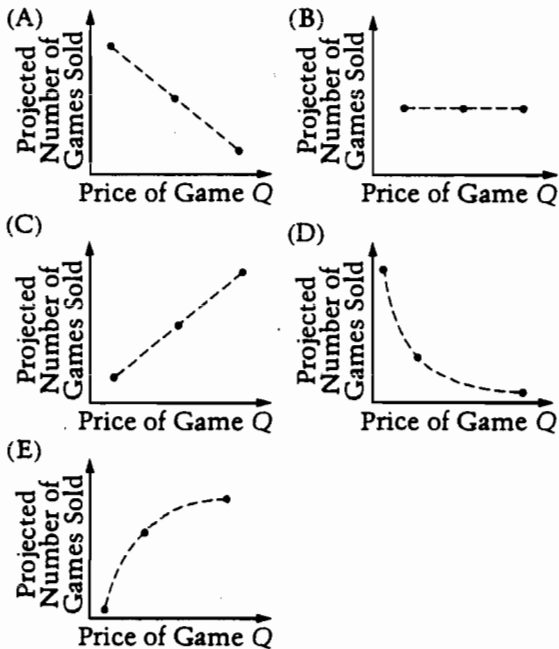
Questions 6-7 refer to the following table.

PROJECTED SALES FOR GAME Q

Price of Game Q	Projected Number of Games Sold
\$50	50,000
\$30	100,000
\$10	150,000

- 6 Based on the projections, how much more money would be received from sales of game Q when the price is \$30 than when the price is \$50?
- (A) \$50,000  
 (B) \$100,000  
 (C) \$500,000  
 (D) \$1,000,000  
 (E) \$2,750,000

- 7 Which of the following graphs best represents the relationship between the price of game Q and the projected number of games sold, as indicated by the table?



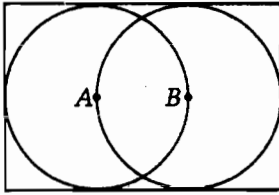
- 8 In the repeating decimal

$$0.\overline{12468} = 0.1246812468 \dots,$$

where the digits 12468 repeat, which digit is in the 4,000th place to the right of the decimal point?

- (A) 1  
 (B) 2  
 (C) 4  
 (D) 6  
 (E) 8

GO ON TO THE NEXT PAGE 



- 9 In the figure above,  $A$  and  $B$  are the centers of the two circles. If each circle has area 10, what is the area of the rectangle?

- (A) 20  
 (B)  $20 - \frac{10}{\pi}$   
 (C)  $\frac{40}{\pi}$   
 (D)  $\frac{50}{\pi}$   
 (E)  $\frac{60}{\pi}$

- 10 There are 3 roads from Plattsville to Ocean Heights and 4 roads from Ocean Heights to Bay Cove. If Martina drives from Plattsville to Bay Cove and back, passes through Ocean Heights in both directions, and does not travel any road twice, how many different routes for the trip are possible?

- (A) 72  
 (B) 36  
 (C) 24  
 (D) 18  
 (E) 12

Passage on genetics, Section 3

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**STOP**



**Score Conversion Table**  
**SAT I: Reasoning Test**  
**Saturday, November 1995**  
**Recentered Scale**

Raw Score	Verbal Scaled Score	Math Scaled Score	Raw Score	Verbal Scaled Score	Math Scaled Score
78	800		37	510	560
77	800		36	510	560
76	800		35	500	550
75	780		34	490	540
74	770		33	490	530
73	750		32	480	530
72	740		31	480	520
71	730		30	470	510
70	720		29	470	510
69	710		28	460	500
68	700		27	450	490
67	690		26	450	490
66	680		25	440	480
65	680		24	440	470
64	670		23	430	470
63	660		22	420	460
62	660		21	420	460
61	650		20	410	450
60	640	800	19	410	440
59	640	790	18	400	440
58	630	770	17	390	430
57	620	750	16	390	420
56	620	730	15	380	420
55	610	720	14	370	410
54	610	710	13	370	400
53	600	700	12	360	400
52	600	690	11	350	390
51	590	680	10	340	380
50	580	670	9	340	370
49	580	660	8	330	360
48	570	650	7	320	350
47	570	640	6	310	340
46	560	630	5	300	330
45	560	630	4	290	320
44	550	620	3	280	300
43	540	610	2	270	290
42	540	600	1	260	270
41	530	590	0	240	260
40	530	590	-1	230	240
39	520	580	-2	210	220
38	520	570	-3	200	200
			and below		

This table is for use only with this test.