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SSAT Middle Level Practice Test Test 2

Test 2 · Grades 5-7 · Free PDF

WHAT'S INSIDE

Writing Sample	1 essay prompt
Verbal	60 questions
Quantitative	25 questions
Reading	40 questions
Quantitative	20 questions

Questions only. The answer key is not included. Work under timed conditions, then check any question you're unsure about with a step-by-step explanation.

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SECTION 1
WRITING THE ESSAY

Time: 25 minutes

Directions: Using two sheets of lined theme paper, plan and write an essay on the topic assigned below. DO NOT WRITE ON ANOTHER TOPIC. AN ESSAY ON ANOTHER TOPIC IS NOT ACCEPTABLE.

Topic: The advantages and disadvantages of new factory built near your community

Directions: A company has announced that it wishes to build a large factory near your community. Discuss the advantages and disadvantages of this new influence on your community. Do you support or oppose the factory? Explain your position.

GO ON TO THE NEXT SECTION

SECTION 2
VERBAL REASONING

Time: 20 minutes

60 Questions

Directions: This section is divided into two parts that contain different types of questions. As soon as you have completed Part One, answer the questions in Part Two. You may write in your test booklet. For each answer you select, fill in the corresponding circle on your answer document.

Part One

Directions: Each question in Part One is made up of a word in capital letters followed by four choices. Choose the one word that is most nearly the same in meaning as the word in capital letters.

Example	**Answer**
SWIFT: (A) clean (B) fancy (C) fast (D) quiet	(A) (B) ● (D)

1. DETER:
   (A) hinder
   (B) halt
   (C) steer
   (D) sting
   (E) turn
2. HOSTILE:
   (A) indifferent
   (B) suspicious
   (C) unfriendly
   (D) doubtful
   (E) friendly
3. UTILIZE:
   (A) utilities
   (B) sing
   (C) undo
   (D) make use of
   (E) modernize
4. ABDICATE:
   (A) control
   (B) resign
   (C) explain
   (D) remorse
   (E) disprove
5. PROMINENT:
   (A) extravagant
   (B) outstanding
   (C) secret
   (D) surreptitious
   (E) disturbing
6. BOUNDARY:
   (A) limit
   (B) map
   (C) seam
   (D) hovel
   (E) ceiling

7. ILLITERATE:
   (A) sickly
   (B) unable to vote
   (C) unclean
   (D) unmanageable
   (E) unable to read
8. ORATOR:
   (A) ear
   (B) professor
   (C) poet
   (D) student
   (E) speaker
9. CORROBORATE:
   (A) understand
   (B) disagree
   (C) confirm
   (D) cooperate
   (E) agree
10. RATIFY:
   (A) assess
   (B) approve
   (C) delete
   (D) consider
   (E) examine
11. EXPEDITE:
   (A) hasten
   (B) hinder
   (C) block
   (D) harm
   (E) send
12. TURBULENT:
   (A) authentic
   (B) tamed
   (C) tranquil
   (D) violent
   (E) fatal
13. TENACIOUS:
   (A) divisive
   (B) timid
   (C) stranded
   (D) thin
   (E) unyielding
14. PERTINENT:
   (A) truthful
   (B) irreverent
   (C) prudent
   (D) irrelevant
   (E) applicable
15. DOGMATIC:
   (A) opinionated
   (B) bovine
   (C) traditional
   (D) canine
   (E) individualistic
16. UNSCRUPULOUS:
   (A) unresolved
   (B) filthy
   (C) honest
   (D) austere
   (E) unprincipled
17. WILY:
   (A) broken
   (B) crooked
   (C) narrow
   (D) cunning
   (E) blunt
18. BLATANT:
   (A) secret
   (B) shining
   (C) obvious
   (D) closed
   (E) insipid
19. PRETEXT:
   (A) fit
   (B) excuse
   (C) reason
   (D) doubt
   (E) preface
20. ACUMEN:
   (A) keenness
   (B) beauty
   (C) courtesy
   (D) poise
   (E) illness

21. RECEDE:
(A) requite
(B) surrender
(C) retreat
(D) decline
(E) lose

22. FASTIDIOUS:
(A) classify
(B) precise
(C) unkempt
(D) sanitary
(E) chaos

23. SURLY:
(A) wily
(B) anticipate
(C) rude
(D) strong
(E) prodigal

24. FRUGAL:
(A) poverty
(B) facility
(C) increase
(D) careful
(E) wealth

25. DEPLETE:
(A) proceed
(B) continue
(C) guide
(D) exhaust
(E) utilize

26. FORCE:
(A) might
(B) soldier
(C) military
(D) power
(E) requirement

27. EXTINCT:
(A) poor
(B) inactive
(C) brief
(D) clear
(E) imperfect

28. THWART:
(A) grow
(B) love
(C) advance
(D) frustrate
(E) defend

29. STIPEND:
(A) payment
(B) fluid
(C) financier
(D) plant
(E) bank

30. REPUTABLE:
(A) honest
(B) star
(C) significant
(D) capable
(E) fame

Part Two

Directions: Each question below is made up of a sentence with one or two blanks. One blank indicates that one word is missing. Two blanks indicate that two words are missing. Each sentence is followed by four choices. Select the one word or pair of words that will best complete the meaning of the sentence as a whole.

Example	Answer
Ann carried the box carefully so that she would not _____ the pretty glasses.	● Ⓑ Ⓒ Ⓓ

(A) break
(B) fix
(C) open
(D) stop

When our boat first crashed into the rocks we were _____, but we soon felt _____ when we realized that nobody was hurt.

(A) afraid; relieved
(B) happy; confused
(C) sleepy; sad
(D) sorry; angry

31. Dessert is to meal as _____.
    (A) ocean is to river
    (B) finale is to performance
    (C) lunch is to breakfast
    (D) fork is to spoon
    (E) plate is to table
32. Confirm is to deny as _____.
    (A) pull is to tug
    (B) contend is to imply
    (C) assert is to proclaim
    (D) simplify is to organize
    (E) accept is to reject
33. Tower is to airport as lighthouse is to _____.
    (A) jet
    (B) park
    (C) farm
    (D) shoreline
    (E) museum
34. Fidelity is to unfaithfulness as _____.
    (A) laziness is to slothfulness
    (B) loyalty is to honor
    (C) friendship is to gossip
    (D) intelligence is to unconcern
    (E) honesty is to deceit
35. Widespread is to limited as _____.
    (A) enlarged is to big
    (B) provincial is to international
    (C) encompassed is to surrounded
    (D) broad is to narrow
    (E) unusual is to strange
36. Saw is to carpenter as plow is to _____.
    (A) steelworker
    (B) farmer
    (C) banker
    (D) surveyor
    (E) physician
37. Sword is to fence as glove is to _____.
    (A) golf
    (B) hockey
    (C) soccer
    (D) box
    (E) baseball
38. Encourage is to demand as _____.
    (A) motivate is to undermine
    (B) insinuate is to hint
    (C) condemn is to reprimand
    (D) fire is to dismiss
    (E) suggest is to order
39. Grin is to delight as _____.
    (A) laugh is to happiness
    (B) resignation is to uncertainty
    (C) anxiety is to confusion
    (D) frown is to dismay
    (E) perspiration is to exhaustion
40. Mysterious is to understandable as _____.
    (A) skillful is to swift
    (B) obscure is to clear

(C) clouded is to warm
(D) doubtful is to incredulous
(E) unknown is to indefinable

41. Scissors is to cut as pencil is to _____.
(A) read
(B) raze
(C) snip
(D) write
(E) turn

42. Pasta is to sauce as _____.
(A) tomato is to vine
(B) napkin is to plate
(C) cheese is to milk
(D) noodle is to dough
(E) toast is to jam

43. Bread is to crust as orange is to _____.
(A) pudding
(B) rind
(C) tree
(D) lemon
(E) butter

44. Team is to captain as _____.
(A) game to opponent
(B) sport is to player
(C) paper is to reporter
(D) navy is to ensign
(E) republic is to president

45. Olfactory is to smell as _____.
(A) allergic is to nose
(B) tactile is to touch
(C) sweet is to mouth
(D) heavy is to strength
(E) seasonal is to flower

46. Ruler is to measure as camera is to _____.
(A) photograph
(B) soul
(C) piano
(D) lung
(E) limb

47. Tiptoe is to walk as _____.
(A) rasp is to throat
(B) press is to wrinkle
(C) whisper is to speech
(D) dance is to rhythm
(E) tumble is to tree

48. Kernel is to central as trivia is to _____.
(A) productive
(B) controversial
(C) unimportant
(D) unleavened
(E) harvested

49. Fib is to liar as _____.
(A) campaign is to politician
(B) perform is to crew
(C) tally is to banker
(D) convict is to attorney
(E) flatter is to toady

50. Nap is to sleep as snack is to _____.
(A) part
(B) age
(C) rest
(D) meal
(E) biscuit

51. Building is to foundation as plant is to _____.
(A) primer
(C) floor
(B) root
(D) grotto
(E) pane

52. Nose is to olfactory as ear is to _____.
(A) allergic
(B) beautiful
(C) edible
(D) auditory
(E) raspy

53. Irk is to soothing as support is to _____.
(A) elevating
(B) undermining
(C) irritating
(D) vilifying
(E) conciliating

54. Illegible is to read as _____.
(A) irreparable is to break
(B) broken is to fix

(C) illegal is to act
(D) intense is to strain
(E) invisible is to see

55. Tact is to diplomat as _____.
(A) training is to physician
(B) bias is to judge
(C) parsimony is to philanthropist
(D) agility is to gymnast
(E) vulnerability is to victim

56. Ravenous is to hunger as _____.
(A) agitated is to placidity
(B) concerned is to apathy
(C) smart is to tenacity
(D) furious is to indignation
(E) pliable is to obstinacy

57. Amplify is to sound as bolster is to _____.
(A) courage
(B) silence
(C) smell
(D) insomnia
(E) light

58. Auditorium is to lecture as _____.
(A) attic is to storage
(B) temple is to religion
(C) target is to arrow
(D) theater is to concert
(E) cafeteria is to food

59. Philanthropic is to benevolence as _____.
(A) devout is to malice
(B) realistic is to plan
(C) smooth is to surface
(D) ostentatious is to reserve
(E) miserly is to stinginess

60. Spurious is to authenticity as _____.
(A) abject is to subjectivity
(B) affluent is to character
(C) laughable is to seriousness
(D) totalitarian is to completeness
(E) lavish is to expense

GO ON TO THE NEXT SECTION

SECTION 3
QUANTITATIVE REASONING

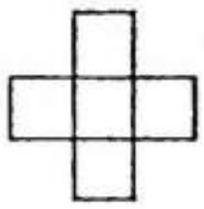
Time: 35 minutes
25 Questions

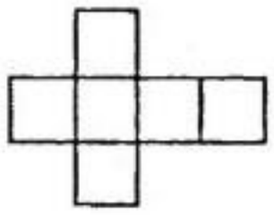
Directions: Any figures that accompany questions in this section may be assumed to be drawn as accurately as possible EXCEPT when it is stated that a particular figure is not drawn to scale. Letters such as x, y and n stand for real numbers.

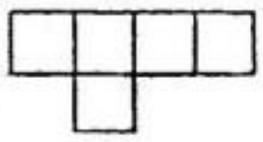
Each question consists of a word problem followed by four answer choices. You may write in your test booklet; however, you may be able to solve many of these problems in your head. Next take a look at the four answer choices and select the best one.

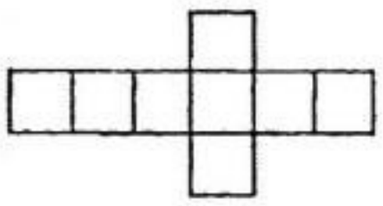
Example	If $3 + x = 5$, what is the value of x? (A) 0 (B) 1 (C) 2 (D) 3	**Answer** (A) (B) ● (D)

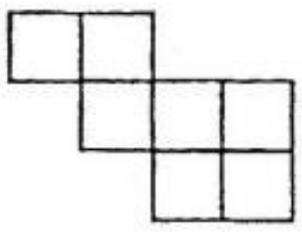
1. Which of the following shapes can be folded to create a cube with no overlapping flaps?

(A) 

(B) 

(C) 

(D) 

(E) 

2. Of the following, 25 percent of $20.05 is closest to _____.
   (A) $1.95
   (B) $2
   (C) $4
   (D) $5
   (E) $20

3. Dividing 63 by 5 leaves a remainder of _____.
   (A) 18
   (B) 5
   (C) 4
   (D) 3
   (E) 2

4. If $7,500 + \square - 500 = 9,500$, then $\square$ = _____.
   (A) 200
   (B) 300
   (C) 2,000
   (D) 2,500
   (E) 3,000

5. The width of a rectangle is one-third of its length. If the length is 9, what is its perimeter?
   (A) 3
   (B) 4
   (C) 16

(D) 24

(E) 32

6. What is the value of a in Figure 1?

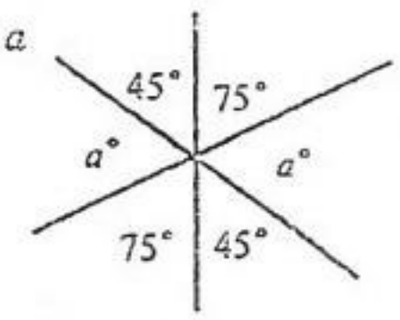


Figure 1

(A) 30

(B) 60

(C) 90

(D) 120

(E) It cannot be determined from the information given.

7. Of the following, which number is the greatest?

(A) 0.08

(B) 0.7899

(C) 0.7923

(D) 0.792

(E) 0.79

8. "When 6 is added to three times a number N, the result is 48." Which of the following equations represents this statement?

(A) $6N + 3 = 48$

(B) $48 + 6N = 3$

(C) $48N + 3 = 6$

(D) $3N + 6 = 48$

(E) $48 - 6N = 3$

9. If $N + 7$ is an odd, whole number, then N could be which of the following?

(A) 7

(B) 5

(C) $\frac{1}{2}$

(D) 0

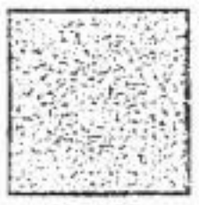
(E) -7

10. A bull is tied to a seven-foot leash in the center of a square pen, as shown in Figure 2. If a side of the pen is 14 feet in length, which figure best shows the shape and size of the area in which the bull can move?

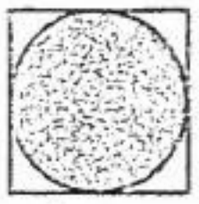


Figure 2

(A)



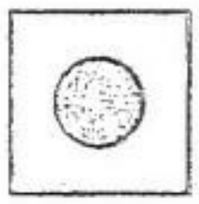
(B)



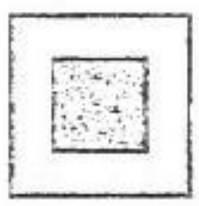
(C)



(D)



(E)



11. If a harvest yields 60 bushels of corn, 100 bushels of wheat, and 80 bushels of soybeans, what percent of the total harvest is corn?

(A) 25%

(B) 30%

(C) 33%

(D) 40%

(E) 50%

12. Which of the following is a multiple of 4?

(A) 1

(B) 2

(C) 3

(D) 6

(E) 8

13. A 3-foot, 2-inch board is how many times bigger than a 2-foot board?

(A) 1.5

(B) 1.6

(C) 1.7

(D) $\frac{19}{12}$

(E) $\frac{17}{12}$

14. What is the distance between $(-10, -13)$ and $(-16, -9)$ along the line connecting them?

(B) 10

(C) $2\sqrt{13}$

(D) $4\sqrt{13}$

(E) 13

15. What is the perimeter of a regular pentagon whose sides measure four units?

(A) 7.5

(B) 9

(C) 12

(D) 15

(E) 20

16. What is 60 expressed as the product of its prime factors?

(A) (15)(6)

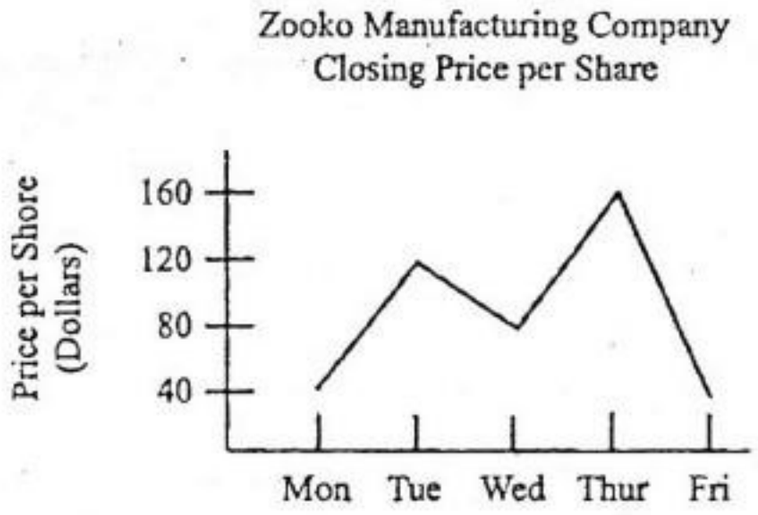
(B) (5)(12)

(C) (5)(3)(3)(2)

(D) (4)(5)(3)

(E) (2)(5)(3)(2)

17. Mike bought 10 shares of Zooko stock at the closing price on Tuesday and sold them at the closing price on Friday. How much money did Mike lose on his investment?



(A) \$ 80

(B) \$ 200

(C) \$ 800

(D) \$ 2,000

(E) \$ 95

18. The hypotenuse of a right triangle is 5 and one leg is 3. Find the length of the other leg of the triangle.

(A) 16

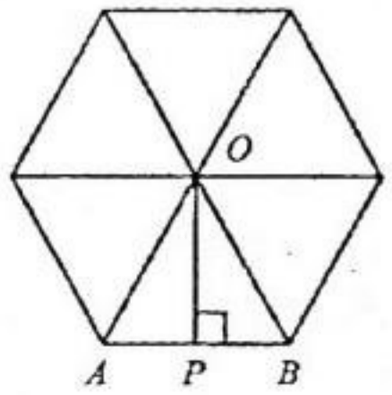
(B) 10

(C) 8

(D) 12

(E) 4

19. Calculate the area of the hexagon. $OP = 2\sqrt{3}$, $AB = 4$.



(A) $96\sqrt{3}$

(B) $32\sqrt{3}$

(C) 32

(D) $24\sqrt{3}$

(E) 24

20. If $|4a-3|=5$, which of the following is a possible value for a?

(A) -2

(B) -1

(C) 0

(D) 1

(E) 2

21. If a class of 6 students has an average grade of 83 before a seventh student joins, what must the seventh student get as a grade in order to raise the class average to 85?

(A) 80

(B) 84

(C) 88

(D) 95

(E) 97

22. If 6 is a factor of a certain number, what must also be factors of that number?

(A) 1, 2, 3, and 6

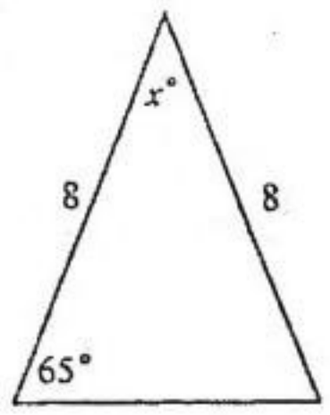
(B) 2 and 3 only

(C) 6 only

(D) 2 and 6 only

(E) 1, 2, and 3

23.



$x =$ _____.

(A) 8

(B) 30

(C) 50

(D) 65

(E) 70

24. For what priced item does 20 % off equal a \$ 8. 00 discount?

(A) \$ 5. 00

(B) \$ 4. 00

(C) \$ 10. 00

(D) \$ 80. 00

(E) \$ 40. 00

25. On Monday, Gerri ate $\frac{1}{8}$ of an apple pie. On Tuesday, she ate $\frac{1}{4}$ of what was left of the pie. What fraction of the entire pie did Gerri eat on both days?

(A) $\frac{1}{4}$

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

(C) $\frac{5}{8}$

(D) $\frac{7}{8}$

(E) $\frac{11}{32}$

GO ON TO THE NEXT SECTION

SECTION 4
READING COMPREHENSION

Time: 35 minutes

40 Questions

Directions: This section contains eight short reading passages. Each passage is followed by several questions based on its content. Answer the questions is following a passage on the basis of what is stated or implied in that passage. You may write in your test booklet.

Passage 1

The wealthy hunting societies of Europe at the end of the age of the glaciers did not have their future under their own control. The environment would determine their fate, as it would the fate of the animals. But the humans had an advantage the animals did not. Although people did not notice it, the climate had changed. Summers grew longer and warmer, ice sheets shrank, and glaciers retreated. Because of the changes in climate, plant and animal life changed. The mammoth, rhinoceros, and reindeer disappeared from western Europe, their going perhaps hastened by the human hunters themselves. On what had been open grassland or tundra with dwarf birch and willow trees, great forests spread, stocked with the appropriate forest animals—red deer, aurochs, and wild pigs. Because the great herds of beasts on which they had preyed disappeared, the economic basis of the hunting societies was cut away. But this provided a moment when early humans were able to prove their advantage over the biological specialization of animals: the reindeer found his coat too hot to wear and had to leave; humans merely took their coats off and readjusted their habits.

1. The title that best expresses the idea of this passage is _____.
   (A) "Extinct Prehistoric Animals"
   (B) "Humans Conflict With Their Environment"
   (C) "Human Adaptation to Climate Change"
   (D) "Changes in Plant and Animal Life"
   (E) "Primitive Hunting Tribes"
2. From the context of the passage, "aurochs" most likely refers to _____.
   (A) an animal that became extinct
   (B) an animal that left Europe
   (C) a type of bird
   (D) an animal that survived in Europe
   (E) the name of one of the hunting societies

3. The disappearance of certain animals from western Europe was _____.
   (A) the immediate result of a more advanced culture
   (B) the direct result of humans' equipment
   (C) caused mostly by human hunting
   (D) a result of changes in climate
   (E) disastrous to primitive humans
4. The writer apparently believes that a society's future course may be determined by _____.
   (A) adapting to changes
   (B) the ambitions of the people
   (C) cultural enrichment
   (D) the clothing worn
   (E) economic abundance
5. In the passage's last sentence, the word "coat" means _____.
   (A) something different each time it is used
   (B) the same thing both times it is used
   (C) different things to different readers
   (D) a thick layer of fur or hair
   (E) to cover with a substance

Passage 2

With Union troops in the South and an increasing number of federal officials, most of whom were loyal Republicans, the latter sought to build up a strong Southern wing of their party. Many Freedmen's Bureau officials were interested not only in the welfare of the freedman but in the growth of the Republican party as well. Moreover, missionary groups and teachers from the North, who saw in the Republican party an instrument by which the South could be saved from barbarism, supported it enthusiastically. It would be incorrect, however, to conclude that these groups were primarily political in their motives or activities. But the special agency that recruited Republicans, primarily among blacks, was the Union League.

The Union League of America was organized in the North during the war. It did an effective job in rallying support for the war wherever there was much opposition. Later it branched out into the South to protect the fruits of Northern victory. As a protective and benevolent society, it welcomed black members and catechized them on political activity. As the Freedmen's Bureau and other Northern agencies grew in the South, the Union League became powerful attracting a large number of blacks. With the establishment of Radical Reconstruction, the league became the spearhead for Southern Republicanism. Since black males were the most numerous enfranchised group in many areas, the league depended on them for the bulk of Republican strength. Black women also played a role in "getting out the vote" and in shaping political decisions in their communities. In October 1867 a reporter for the *New York Times* noted the presence

of black women in the audience at local Republican and state constitutional conventions. He and other observers were impressed that, in contrast to white women who were quiet spectators at political meetings, black women shouted from the balconies, forcing their voices into the debates. As Elsa Barkley Brown has pointed out: "African-
(25) American women in Virginia, Mississippi, South Carolina and elsewhere understood themselves to have a vital stake in African-American men's franchise". The fact that only men could exercise the franchise did not at all mean that women were not involved.

By the fall of 1867 chapters of the league were all over the South. South Carolina
(30) alone had eighty-eight, and it was said that almost every black in the state was enrolled. Ritual, secrecy, night meetings, and an avowed devotion to freedom and equal rights made the league especially attractive to blacks. At elections they looked to their chapters for guidance of voting. If they had any doubt about the straight Republican ticket, the league had only to remind them that this was the party of
(35) Abraham Lincoln and of deliverance. A vote for Democrats, they said, was a vote for the return of slavery. During most of Reconstruction, the Union League and such smaller organizations as the Lincoln Brotherhood and the Red Strings delivered the black vote to the Republican party in national as well as state and local elections.

6. In line 13, "catechized them" most nearly means _____.
   (A) advised
   (B) pledged to secrecy
   (C) administered an oath of loyalty
   (D) warned
   (E) instructed in important basic principles
7. In line 27, "exercise the franchise" most nearly means _____.
   (A) run for government office
   (B) be members of the Republican party
   (C) vote to elect government officials
   (D) participate in political activities
   (E) take an oath to become full-fledged American citizens
8. The Union League of America depended on black males to strengthen the Republican Party in the South during the Radical Reconstruction period because _____.
   (A) in many areas they were the only people who could read and write
   (B) in many areas they were the largest group of people who could vote
   (C) the leaders of the Union League of America were male chauvinists
   (D) they had a history of supporting the Republican Party
   (E) black women generally did not support Republican candidates for office
9. The passage states that all of the following wanted to build up the Republican party in the South EXCEPT _____.
   (A) missionary groups and teachers from the North
   (B) many officials of the Freedman's Bureau

(C) the Union League of America

(D) many Union troops in the South

(E) many Federal officials in the South

10. According to the information in the passage, all of the following are true about the Union League of America EXCEPT _____.

(A) it did not exist before the war

(B) it was organized in the North

(C) it worked to increase support for the war

(D) it attracted many blacks as members

(E) it was the only organization organizing black support for the Republican party during Reconstruction

Passage 3

The periodical cicadas, most notably *Magicicada septendecim*, have the longest life cycle of any insect. Their unique life cycle begins underground, where the nymphs patiently suck the juice from the roots of trees. Then, after 17 years of waiting, the adult cicadas emerge from the ground, swarm in vast numbers, and temporarily swamp the landscape. Within a few weeks they mate, lay their eggs, and die.

The question that puzzled biologists was, Why is the cicada's life cycle so long? And is there any significance to the life cycle being a prime number of years? Another species, *Magicicada tredecim*, swarms every 13 years, implying that life cycles lasting a prime number of years offer some evolutionary advantage.

One theory suggests that the cicada has a parasite that also goes through a lengthy life cycle and that the cicada is trying to avoid. If the parasite has a life cycle of, say, 2 years then the cicada wants to avoid a life cycle that is divisible by 2, otherwise the parasite and the cicada will regularly coincide. Similarly, if the parasite has a life cycle of 3 years then the cicada wants to avoid a life cycle that is divisible by 3, otherwise the parasite and the cicada will once again regularly coincide. Ultimately, to avoid meeting its parasite, the cicadas' best strategy is to have a long life cycle lasting a prime number of years. Because nothing will divide into 17, *Magicicada septendecim* will rarely meet its parasite. If the parasite has a 2-year life cycle they will meet only every 34 years, and if it has a longer life cycle, say 16 years, then they will meet only every 272 (16 × 17) years.

In order to fight back, the parasite has only two life cycles that will increase the frequency of coincidences—the annual cycle and the same 17-year cycle as the cicada. However, the parasite is unlikely to survive reappearing 17 years in a row, because for the first 16 appearances there will be no cicadas for it to parasitize. On the other hand, in order to reach the 17-year life cycle, the generations of parasites would first have to

evolve through the 16-year life cycle. This would mean at some stage of evolution the parasite and cicada would not coincide for 272 years! In either case the cicada's long prime life cycle protects it.

This might explain why the alleged parasite has never been found! In the race to
(30) keep up with the cicada, the parasite probably kept extending its life cycle until it hit the 16-year hurdle. Then it failed to coincide for 272 years, by which time the lack of coinciding with cicadas had driven it to extinction. The result is a cicada with a 17-year life cycle, which it no longer needs because its parasite no longer exists.

11. Scientists theorize that cicadas have a 17-year life cycle because _____.
    (A) 17 years is the optimum length of time for cicadas to most efficiently use available food and other resources in order to reproduce
    (B) no parasite species can survive 17 years without reproducing
    (C) it evolved as the most advantageous way for cicadas to co-exist with a parasite that has now become extinct
    (D) it evolved as a successful defense against a parasite that no longer exists
    (E) all insects have a life cycle lasting a number of years that is some randomly selected prime number
12. *Magicicada tredecim* probably has a 13-year life cycle rather than a 17-year one because _____.
    (A) it is a less advanced species than *Magicicada septendecim*
    (B) two species of cicada having the same life cycle would create unnecessary competition for both species, so one evolved a different long prime number life cycle
    (C) its parasite is still extant, so it cannot evolve a life cycle lasting so long
    (D) its parasite became extinct so it had no need to evolve a life cycle lasting a longer prime number of years
    (E) it has a parasite with a 16-year life cycle, which means that it will meet its parasite only once every 208 (16×13) years
13. According to the theory described in the passage, which of the following statements is NOT true?
    (A) The cicada wants to decrease the frequency with which its life cycle coincides with its parasite.
    (B) The cicada's parasite wants to increase the frequency with which its life cycle coincides with that of the cicadas.
    (C) For the cicada's parasite, the longer the life cycle of the cicadas the better.
    (D) To avoid meeting its parasite it is advantageous for the cicada to have a long life cycle.
    (E) To avoid meeting its parasite it is advantageous for cicadas to have a life cycle lasting a prime number of years.
14. Which of the following most accurately describes the explanation given in the passage for the fact that *Magicicada septendecim* has a 17-year life cycle?
    (A) It is based on a scientific theory that has excellent theoretical and empirical support.
    (B) It is based entirely on conjecture.

(C) It is based on a scientific theory that has good theoretical support but no real empirical support.

(D) It is a mathematician's tongue-in-cheek attempt to offer a mathematical explanation for a biological phenomenon that cannot be mathematically explained.

(E) It is based on a theory with excellent empirical support but almost no theoretical support.

15. If an organism is discovered that parasitizes *Magicicada septendecim* it would _____.

(A) totally invalidate the theory that *Magieicada septendecim* evoived a long life cycle lasting a prime number of years to protect itself from a parasite

(B) demonstrate conclusively that *Magicicada Septendecim* evolved a long life cycle lasting a prime number of years in order to protect itself from a parasite

(C) suggest that the theory that *Magicicada septendecim* evolved a long life cycle lasting a prime number of years to protect itself from a parasite is probably not true

(D) show conclusively that certain parasites can survive 272 years without a host to parasitize

(E) suggest that parasites have evolved at a faster rate than cicadas

Passage 4

A single flower he sent me, since we met. All tenderly his messenger he chose;
Deep-hearted, pure, with scented dew still wet—One perfect rose.

I knew the language of the floweret; "My fragile leaves," it said, "his heart enclose." Love long has taken for his amulet.

(5) One perfect rose
Why is it no one ever sent me yet?
One perfect limousine, do you suppose?
Ah no, it's always just my luck to get.
One perfect rose.

16. What is the tone of the first two stanzas?

(A) Ironic (B) Angry (C) Irritated
(D) Serious (E) Sarcastic

17. Which word changes the meaning of the poem?

(A) Scented (line 2). (B) Limousine (line 7). (C) Floweret (line 3).
(D) Tenderly (line 1). (E) Language (line 3).

18. The first two lines of stanza two use which of the following literary devices?

(A) Realism (B) Hyperbole (C) Alliteration
(D) Personification (E) Dialect

19. The best meaning for "scented" is _____.

(A) pure
(B) rose colored
(C) attractive to touch

(D) wet

(E) attractive to the sense of smell

20. What event is being described in the poem?

(A) A mixed reaction to a gift.

(B) A tale of miscommunication.

(C) A tale of a flower-delivery service.

(D) A dream.

(E) The story of all love affairs.

Passage 5

Thomas, Chess, and Checkers stayed quiet for a long time. After a while, Chess and Checkers started to sing a Flathead song of mourning. *For a wake, for a wake.* Samuel was still alive, but Thomas sang along without hesitation. That mourning song was B-7 on every reservation jukebox.

(5) After the song, Thomas stood and walked away from the table where his father lay flat as a paper plate. He walked outside and cried. Not because he needed to be alone; not because be was afraid to cry in front of women. He just wanted his tears to be individual, not tribal. Those tribal tears collected and fermented in huge BIA [Bureau of Indian Affairs] barrels. Then the BIA poured those tears into beer and Pepsi cans and (10) distributed them back onto the reservation. Thomas wanted his tears to be selfish and fresh.

"Hello," be said to the night sky. He wanted to say the first word of a prayer or a joke. A prayer or a joke often sound alike on the reservation.

"Help," he said to the ground. He knew the words to a million songs: Indian, (15) European, African, Mexican, Asian. He sang "Stairway to Heaven" in four different languages but never knew where that staircase stood. He sang the same Indian songs continually but never sang them correctly. He wanted to make his guitar sound like a waterfall, like a spear striking salmon, but his guitar only sounded like a guitar. He wanted the songs, the stories, to save everybody.

21. Thomas, Chess, and Checkers are _____.

(A) Mexican (B) European (C) Asian

(D) African (E) Native American

22. In line 2, *a wake* means _____.

(A) the turbulence left behind by something moving through water

(B) no longer asleep

(C) a viewing of a dead person before burial

(D) aftermath

(E) celebration

23. The fact that Thomas, Chess, and Checkers sing a song of mourning while Samuel is still alive suggests that _____.
(A) Samuel is afraid to die
(B) Samuel doesn't belong on the reservation
(C) Samuel's life is tragic
(D) they believe the song has healing powers
(E) Samuel is a ghost

24. Thomas wants his tears to be "selfish and fresh" (lines 10-11) because _____.
(A) it is difficult for him to share his feelings with others
(B) he wants to mourn his father as an individual, not just as another dying Indian
(C) he feels guilty mourning his father before his father has died
(D) he doesn't think the tribe will mourn his father's passing
(E) tribal tears were meaningless

25. The sentence "Then the BIA poured those tears into beer and Pepsi cans and distributed them back onto the reservation" (lines 9-10) is an example of _____.
(A) a paradox (B) dramatic irony (C) onomatopoeia
(D) flashback (E) figurative language

26. In line 14, Thomas asks for help because _____.
(A) he can't stop crying
(B) he wants to be a better guitar player
(C) he wants to be able to rescue people with his music
(D) he can't remember the words to the song
(E) no one wants to listen to him play

Passage 6

An excerpt from a Dead Sea Scroll describing Abraham's *sojourn* in Egypt and the beauty of Sarah, his wife, was recently made public for the first time. The 2,000-year-old scroll, badly preserved and extremely brittle, is the last of seven scrolls found in 1947 in the caves of the Judean desert south of Jericho. Scholars say that this scroll enlarges on the hitherto known Biblical tales of Lamech, Enoch, Noah, and Abraham.

This document of Hebrew University yielded *decipherable* contents only after months of exposure to controlled humidity. The centuries had compressed the leather scroll into a brittle, glued-together mass. After it had been rendered flexible, the scroll was folded into pages. Four complete pages, each with 34 lines of writing, resulted. Besides this, scholars had for their studies large sections of the decipherable writing on five other pages, and readable lines and words on additional pages. Scholars were delighted, for they had almost despaired of recovering the scroll as a readable document. The work of giving new life to the desiccated parchment and of unrolling it was done by an old German expert on ancient materials, under the supervision of two Israeli scholars.

27. The word *sojourn* means _____.

(A) stay (B) congruent (C) flight

(D) difficulties (E) servitude

28. *Decipherable* as used in the second paragraph means _____.

(A) durable (B) intelligible (C) practical

(D) exciting (E) scholarly

29. The scroll _____.

(A) gives new details about people already known of

(B) is limited to an account of Abraham and Sarah

(C) was found in Egypt

(D) is the first of seven found in 1947

(E) tells of Abraham's life in the Judean desert

30. The scroll _____.

(A) is in Germany

(B) was deciphered by a German specialist

(C) was beautifully preserved

(D) belongs to an Israeli university

(E) was taken to Jericho

31. The writing on the scroll _____.

(A) was legible on only four pages

(B) could be read on several pages

(C) was too damaged by age to be deciphered

(D) was irreparable

(E) was finally legible throughout the document

Passage 7

Thousands of species of birds exist today, and nearly every species has its own special courtship procedures and "identification checks". Identification checks are important, because if birds of different species mate, any offspring will usually be sterile or badly adapted to their surroundings.

(5) Plumage often plays a key role in both identification and courtship. In breeding season, male birds often acquire distinctive plumage which they use to attract females who will, in turn, only respond to males with the correct markings. In some species, the females are more brightly colored, and the courtship roles are reversed. Distinctive behavioral, changes can also be important aspects of courtship and breeding activity.

(10) Aggressiveness between males, and sometimes between females, is quite common. Some birds, like whooping cranes and trumpeter swans, perform wonderfully elaborate courtship dances in which both sexes are enthusiastic participants.

Bird sounds are often a very central part of identification and courtship behavior between individuals in a given species. When a female migrates in the spring to her

(15) breeding region, she often encounters numerous birds of different species. By its singing, the male of a species both identifies itself and communicates to females of that species that it is in breeding condition. This information allows a female to predict a male's response to her approach. Later, after mating has taken place, the note patterns of a particular male's song enable a nesting female to continue to identify her own partner.

32. The author implies that a bird engages in identification and courtship procedures mainly in order to _____.

(A) try to dominate the bird population of a given area

(B) find a better nesting spot

(C) find the most colorful partner it can

(D) attract a mate of its own species

(E) increase its control over its nesting partner

33. According to the passage, a feature of the male song bird is its ability to _____.

Ⅰ. attract a female of its own species

Ⅱ. intimidate rival males

Ⅲ. communicate its identity to its mate

(A) Ⅰ only

(B) Ⅲ only

(C) Ⅰ and Ⅱ only

(D) Ⅰ and Ⅲ only

(E) Ⅰ, Ⅱ and Ⅲ

34. The author uses the whooping crane as an example of a bird that _____.

(A) acquires a distinctive breeding plumage

(B) reverses the normal male and female courtship roles

(C) displays unusual aggressiveness while courting

(D) seldom participates in courtship procedures

(E) behaves in an unusual and noteworthy way during courtship

35. According to the passage, matings between birds of different species _____.

(A) may help to establish a permanent new species

(B) are quite common

(C) have never happened

(D) produce more sturdy offspring

(E) do not usually result in healthy offspring

Passage 8

Live thy Life,
Young and old,
Like yon oak,
Bright in spring,

Living gold;
Summer-rich,
Then and then,
Autumn-changed,
Soberer-hued,
Gold again.
All his leaves,
Fall'n at length,
Look, he stands,
Trunk and bough,
Naked strength.
"The Oak" by Alfred Lord Tennyson.

36. In this poem, the seasons represent different _____.
(A) periods of history (B) kinds of trees (C) times of day
(D) stages of life (E) styles of dress

37. The "he" mentioned in line 13 refers to _____.
(A) autumn (B) the oak (C) life
(D) the reader (E) the poet

38. What does "Gold again" in line 10 signify?
(A) The richness of summer.
(B) The color of oak trees.
(C) The revival of the past.
(D) The arrival of autumn.
(E) The increased wealth of the narrator.

39. During which season is the oak referred to as "Living gold"?
(A) Autumn.
(B) Spring.
(C) This description does not refer to a season.
(D) Summer.
(E) Winter.

40. With which of the following statements about life would the speaker be most likely to agree?
(A) It is important to try to accomplish something during one's lifetime.
(B) Life is too short to spend time doing unpleasant things.
(C) The seasons are unpredictable.
(D) Trees ate an integral part of the enjoyment of life.
(E) People should live every period of their lives to the fullest.

GO ON TO THE NEXT SECTION

SECTION 5
MATHEMATICS ACHIEVEMENT

Time: 40 minutes
20 Questions

Directions: Each question is followed by four suggested answers. Read each question and then decide which one of the four suggested answers is best.
Find the row of spaces on your answer document that has the same number as the question. In this row, mark the space having the same letter as the answer you have chosen. You may write in your test booklet.

Example

(5 + 3) − 2 =

(A) 6
(B) 8
(C) 10
(D) 13

The correct answer to this question is lettered A, so space A is marked.

Answer

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

1. Bob is x years old and Jerry is 5 years older. In terms of x, what was the sum of their ages, in years, 4 years ago?
   (A) $2x+3$
   (B) $2x+2$
   (C) $2x-3$
   (D) $x-3$
   (E) $x-10$
2. A game show contestant answered exactly 20 percent of the questions correctly. Of the first 15 questions, he answered 4 correctly. If he answered only one of the remaining questions correctly, which of the following must be true?
   Ⅰ. There were a total of 20 questions.
   Ⅱ. He answered 10 percent of the remaining questions correctly.
   Ⅲ. He didn't answer 9 of the remaining questions correctly.
   (A) Ⅰ only
   (B) Ⅱ only
   (C) Ⅰ and Ⅱ only
   (D) Ⅱ and Ⅲ only
   (E) Ⅰ, Ⅱ and Ⅲ
3. If C is the product of consecutive integers A and B, then C must be _____.
   (A) greater than $A+B$
   (B) a negative integer
   (C) a positive integer
   (D) an even integer
   (E) an odd integer
4. A 40 percent discount is offered on all sweaters at Store S. If a cotton sweater is on sale for $54.00 and a wool sweater is on sale for $72.00, what was the difference in price of the sweaters before the discount?
   (A) $16.00
   (B) $19.20

(C) \$ 20.00

(D) \$ 24.00

(E) \$ 30.00

5. The maximum load that a railway car can carry is 18 tons of freight. If a train has 40 railway cars, and each of these carries $\frac{5}{9}$ of a ton less than its maximum load, how many tons of freight is the train carrying?

(A) 604

(B) $697\frac{7}{9}$

(C) $640\frac{5}{9}$

(D) 648

(E) 660

6. In 2 hours, the minute hand of a clock rotates through an angle of _____.

(A) 60°

(B) 90°

(C) 180°

(D) 360°

(E) 720°

7. Which of the following fractions is not more than one third?

(A) $\frac{22}{63}$

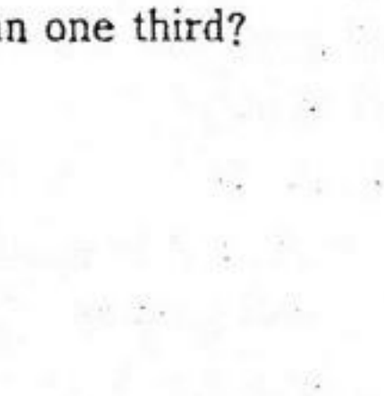
(B) $\frac{4}{11}$

(C) $\frac{15}{46}$

(D) $\frac{33}{98}$

(E) $\frac{102}{303}$

8.



The length of each side of the square above is $\frac{2x+1}{3}$. The perimeter of the square is _____.

(A) $\frac{8x}{3}+4$

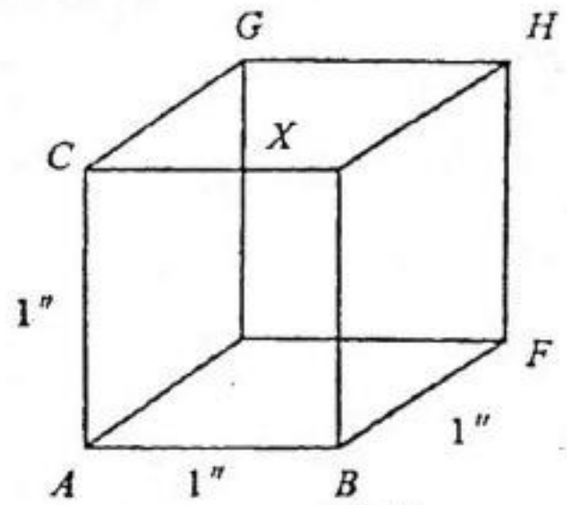
(B) $\frac{8x+4}{3}$

(C) $\frac{2x}{3}+4$

(D) $\frac{2x}{3}+16$

(E) $\frac{4x}{3}+2$

9.



The diagram shows a cube.

The distance from A to X is _____.

(A) 2 inches

(B) $\sqrt{3}$ inches

(C) $\sqrt{2}$ inches

(D) 1 inch

(E) $\frac{1}{\sqrt{2}}$ inch

10. A motorist travels 180 miles to his destination at an average speed of 60 miles per hour and returns to the starting point at an average speed of 90 miles per hour. His average speed for the entire trip is _____.

(A) 72 miles per hour

(B) 52 miles per hour

(C) 50 miles per hour

(D) 48 miles per hour

(E) 45 miles per hour

11. A snapshot measures $1\frac{1}{4}$ inches by $2\frac{3}{8}$ inches. It is to be enlarged so that the longer dimension will be 4 inches. The length of the enlarged shorter dimension will be _____.

(A) $2\frac{1}{2}$ inches

(B) $2\frac{5}{8}$ inches

(C) 3 inches

(D) $3\frac{3}{8}$ inches

(E) $7\frac{3}{5}$ inches

12. From a piece of tin in the shape of a square 6 inches on a side, the largest possible circle is cut out. Of the following, the ratio of the area of the circle to the area of the original square is closest in value to _____.

(A) $\frac{4}{5}$

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

(C) $\frac{3}{5}$

(D) $\frac{7}{9}$

(E) $\frac{3}{4}$

13. If the outer diameter of a metal pipe is 3.01 inches and the inner diameter is 2.21 inches, the thickness of the metal is _____.

(A) 0.40 in

(B) 0.90 in

(C) 1.42 in

(D) 1.94 in

(E) 2.39 in

14. A sportswriter claims that her football predictions are accurate 40% of the time. During football season, a fan kept records and found that the writer was inaccurate for a total of 30 games, although she did maintain her 40% accuracy. For how many games was the sportswriter accurate?

(A) 5

(B) 15

(C) 20

(D) 40

(E) 60

15. In a certain boys' camp, 40% of the boys are from New York State and 10% of these are from New York City. What percent of the boys in the camp are from New York City?

(A) 60%

(B) 50%

(C) 33%

(D) 10%

(E) 4%

16. 55 is to _____ as 110 is to 0.55.

(A) 0.275

(B) 0.900

(C) 4.50

(D) 9.00

(E) 22.5

17. If $n=\sqrt{30}$, then _____.

(A) $\sqrt{5}>n>\sqrt{3}$

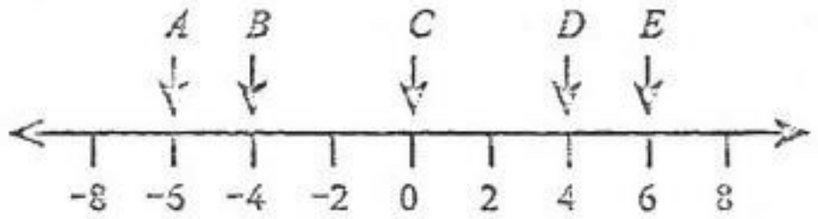
(B) $3>n>2$

(C) $n=4.5$

(D) $5<n<6$

(E) $n>5$

18.



How would you move along the number line above to find the difference between 4 and -4?

(A) From E to B.

(B) From A to D.

(C) From B to D.

(D) From D to A.

(E) From B to E.

19. How many sixths are there in $\frac{3}{5}$?

(A) $2\frac{3}{8}$

(B) $3\frac{3}{5}$

(C) $4\frac{4}{5}$

(D) $5\frac{1}{5}$

(E) 6

20. Four games drew an average of 34,800 people per game. If the attendance at the first three games was 32,500, 35,000 and 38,000, how many people attended the fourth game?

(A) 33,700

(B) 37,000

(C) 39,000

(D) 40,500

(E) 43,000