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SSAT Middle Level Practice Test

Test 3

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WHAT'S INSIDE

Writing Sample	1 essay prompt
Verbal	60 questions
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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 influence of movies or television on people's behavior

Directions: How do movies or television influence people's behavior? Use reasons and specific examples to support your answer.

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. PLEAD:
   (A) cry
   (B) tease
   (C) beg
   (D) try
   (E) strike
2. PROWL:
   (A) sneak
   (B) leave
   (C) fight
   (D) scrub
   (E) growl
3. VESSEL:
   (A) car
   (B) account
   (C) decoration
   (D) container
   (E) blood
4. APPROVE:
   (A) judge favorably
   (B) watch attentively
   (C) regard innocently
   (D) consider carefully
   (E) withhold information
5. SEEP:
   (A) fall
   (B) stick
   (C) gurgle
   (D) liquefy
   (E) ooze
6. VEX:
   (A) play
   (B) irritate
   (C) locate
   (D) scream
   (E) scribble

7. DOZE:
   (A) refresh
   (B) bore
   (C) ignore
   (D) sleep
   (E) graze
8. BOUNTY:
   (A) upper limit
   (B) woven basket
   (C) generous gift
   (D) new harvest
   (E) outside border
9. COARSE:
   (A) rough
   (B) unpopular
   (C) difficult
   (D) sticky
   (E) sifted
10. MEEK:
   (A) old
   (B) quick
   (C) submissive
   (D) tiny
   (E) worried
11. HARBINGER:
   (A) entry
   (B) dock
   (C) messenger
   (D) consequence
   (E) lagoon
12. SENTRY:
   (A) beginning
   (B) row
   (C) companion
   (D) watch
   (E) revolutionary
13. ORBIT:
   (A) inertia
   (B) galaxy
   (C) project
   (D) revolution
   (E) program
14. PARADOX:
   (A) contradiction
   (B) curse
   (C) imperfection
   (D) dislike
   (E) submission
15. BUFFOON:
   (A) median
   (B) gas
   (C) sphere
   (D) gift
   (E) fool
16. IMMINENT:
   (A) immature
   (B) impenetrable
   (C) impossible
   (D) impending
   (E) implicated
17. TUMULT:
   (A) philosophy
   (B) sustenance
   (C) disorder
   (D) juvenilia
   (E) dossier
18. SPURN:
   (A) reject
   (B) unearth
   (C) clash
   (D) incinerate
   (E) twirl
19. PLETHORA:
   (A) waste
   (B) compassion
   (C) forewarning
   (D) myth
   (E) excess
20. DISSEMINATE:
   (A) broadcast
   (B) discourage
   (C) clarify
   (D) subside
   (E) renovate

21. LUCKY:
(A) gleeful
(B) hilarious
(C) happy
(D) fortunate
(E) useful

22. IRRESPONSIBLE:
(A) unsure
(B) incisive
(C) inconclusive
(D) unrealistic
(E) unreliable

23. JEOPARDY:
(A) journey
(B) archival
(C) entertaining
(D) endangerment
(E) vocabulary

24. MOIST:
(A) fresh
(B) sponge
(C) swamp
(D) damp
(E) saturate

25. SHAMEFUL:
(A) humiliating
(B) bewildering
(C) caustic
(D) evil
(E) willful

26. PRECLUDE:
(A) promise
(B) avoid
(C) imagine
(D) prevent
(E) listen

27. FOIBLE:
(A) flaw
(B) strength
(C) goodbye
(D) story
(E) tradition

28. MEDITATE:
(A) reject
(B) agree
(C) compromise
(D) repair
(E) ponder

29. TRAVESTY:
(A) disaster
(B) mockery
(C) misfortune
(D) adage
(E) opinion

30. SURMISE:
(A) provide
(B) daybreak
(C) govern
(D) guess
(E) shock

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. Braid is to hair as wind is to _____.
    (A) movie
    (B) joke
    (C) bow
    (D) clock
    (E) run
32. Blade is to grass as _____.
    (A) grain is to sand
    (B) plant is to leaves
    (C) roof is to house
    (D) metal is to rod
    (E) air is to gas
33. Athlete is to training as _____.
    (A) student is to studying
    (B) child is to parent
    (C) porpoise is to sea
    (D) adult is to child
    (E) mercenary is to money
34. Novel is to author as _____.
    (A) opera is to composer
    (B) light is to switch
    (C) form is to shape
    (D) song is to tape
    (E) rain is to flood
35. Miser is to gold as _____.
    (A) button is to zipper
    (B) prison is to criminal
    (C) toastmaster is to dinner
    (D) general is to victories
    (E) engine is to caboose
36. Horse is to centaur as _____.
    (A) worm is to snake
    (B) fish is to mermaid
    (C) cat is to lion
    (D) unicorn is to tapestry
    (E) Pegasus is to fly
37. Bat is to ball as _____.
    (A) theater is to seats
    (B) glove is to hand
    (C) fist is to mitt
    (D) foot is to pedal
    (E) stove is to pan
38. Ignition is to start as _____.
    (A) air is to tire
    (B) brake is to stop
    (C) gas is to tank
    (D) shut is to door
    (E) radio is to antenna
39. Touch is to push as _____.
    (A) sip is to gulp
    (B) glass is to water
    (C) translucent is to opaque
    (D) angry is to choleric
    (E) water is to milk
40. Bananas are to bunch as _____.
    (A) chicken is to duck
    (B) capon is to rooster
    (C) ram is to ewe
    (D) surgeon is to operation
    (E) lettuce is to head

41. Accelerator is to motion as _____.
(A) ignition is to speed
(B) catalyst is to change
(C) inertia is to immobile
(D) experiment is to hypothesis
(E) automobile is to vehicle

42. Probable is to certain as _____.
(A) plausible is to definite
(B) approach is to reproach
(C) steady is to rocky
(D) correct is to accurate
(E) save is to record

43. Obstruct is to impede as impenetrable is to _____.
(A) porous
(B) impervious
(C) transparent
(D) hidden
(E) merciful

44. Include is to omit as acknowledge is to _____.
(A) know
(B) notice
(C) greet
(D) ignore
(E) recognize

45. Nucleus is to electron as _____.
(A) constellation is to Sun
(B) Earth is to satellite
(C) neutron is to proton
(D) atom is to neutron
(E) Earth is to Sun

46. Sculptor is to statue as _____.
(A) programmer is to computer
(B) actor is to play
(C) orchestra is to conductor
(D) composer is to music
(E) paint is to artist

47. Dreary is to happy as _____.
(A) close is to narrow
(B) dearth is to surplus
(C) light is to graceful
(D) interdict is to expect
(E) curtain is to play

48. Allow is to restrict as _____.
(A) seeing is to believing
(B) encourage is to prevent
(C) gain is to success
(D) terrible is to worse
(E) heart is to soul

49. Interrupt is to speak as _____.
(A) intrude is to enter
(B) intercede is to interfere
(C) telephone is to telegraph
(D) interfere is to assist
(E) shout is to yell

50. Modesty is to arrogance as _____.
(A) cause is to purpose
(B) hate is to emotion
(C) agility is to stamina
(D) debility is to strength
(E) finance is to poverty

51. Flammable is to inflammable as _____.
(A) opportune is to inopportune
(B) impartial is to disinterested
(C) relevant is to incoherent
(D) persistent is to important
(E) truculent is to intrusion

52. Tailor is to pattern as builder is to _____.
(A) foundation
(B) blueprint
(C) contractor
(D) architect
(E) construct

53. Impeach is to dismiss as _____.
(A) imprison is to jail
(B) arraign is to indict
(C) absent is to present
(D) plant is to sow
(E) accuse is to charge

54. Speedy is to greyhound as _____.
(A) clever is to fox
(B) wool is to lamb
(C) mammal is to whale

(D) fin is to fish

(E) shark is to voracious

55. Exhale is to lung as _____.

(A) pump is to heart

(B) taste is to tongue

(C) think is to brain

(D) exhume is to corpse

(E) perspire is to skin

56. Celebrate is to birth as _____.

(A) crime is to penalty

(B) party is to graduation

(C) announce is to birthday

(D) grieve is to death

(E) joy is to lament

57. Recommend is to urge as _____.

(A) cajole is to insult

(B) harass is to bother

(C) apply is to receive

(D) request is to plead

(E) refuse is to deny

58. Weeping is to tears as breathing is to _____.

(A) mouth

(B) carbon dioxide

(C) nose

(D) air

(E) lungs

59. Plane is to air pocket as _____.

(A) horse is to reins

(B) safety is to danger

(C) ground is to sky

(D) vehicle is to rut

(E) hangar is to airport

60. Arbitrate is to dispute as _____.

(A) regard is to problem

(B) exacerbate is to problem

(C) organize is to labor

(D) management is to union

(E) solve is to mystery

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?	**Answer**
	(A) 0 (B) 1 (C) 2 (D) 3	(A) (B) ● (D)

1. The average of three numbers is 5. What is three times the sum of the three numbers?
   (A) 6
   (B) 15
   (C) 30
   (D) 45
   (E) 90
2. How many factors does the number 15 have?
   (A) 2
   (B) 3
   (C) 4
   (D) 6
   (E) 8
3. John owns $\frac{1}{3}$ of the CDs in the collection. If there are a total of 180 CDs, how many does John own?
   (A) 20
   (B) 40
   (C) 60
   (D) 120
   (E) 360
4. What is the perimeter of an equilateral triangle, one side of which measures 6 inches?
   (A) 18 inches
   (B) 12 inches
   (C) 6 inches
   (D) 3 inches
   (E) It cannot be determined.
5. Tyler, Sharice, and James want to put their money together in order to buy a $360 radio. If Sharice agrees to pay twice as much as James, and Tyler agrees to pay six times as much as Sharice, how much will Sharice contribute?
   (A) $30
   (B) $48
   (C) $90
   (D) $150
   (E) $180
6. The price of a jacket is reduced by half, and the resulting price is then reduced by 10%. The final price is what percentage of the original price?

(A) 10%
(B) 40%
(C) 45%
(D) 55%
(E) 60%

7. In a jar of gumdrops, the ratio of green gumdrops to red gumdrops is 9:5. If only green and red gumdrops are in the jar and the total number of gumdrops is 56, how many green gumdrops are in the jar?
(A) 5
(B) 8
(C) 15
(D) 28
(E) 36

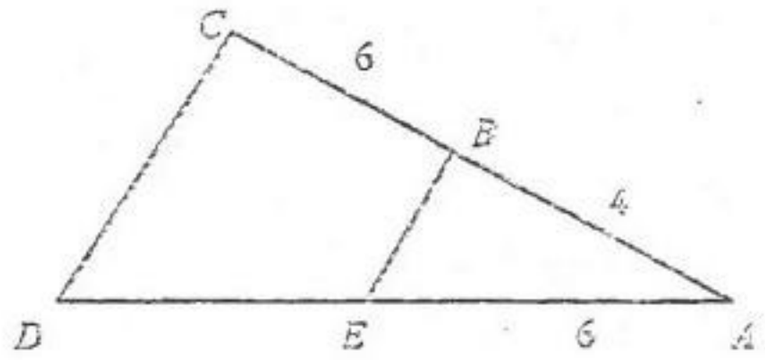
8. A stop sign has eight equal sides and a perimeter of 96. What is the length of each individual side?
(A) 2
(B) 4
(C) 8
(D) 12
(E) It cannot be determined.

9. Two cardboard boxes have equal volume. The dimensions of one box are $6 \times 6 \times 10$. If the length of the other box is 3 and the width is 10, what is the height of the second box?
(A) 2
(B) 5
(C) 10
(D) 12
(E) 16

10. At a fund-raiser, 500 people each donated y dollars. In terms of y, what was the total number of dollars donated?
(A) 500
(B) $500y$
(C) $\frac{y}{500}$
(D) $\frac{500}{y}$
(E) $500 + y$

11. Using the formula $A = p + prt$, find A, when $p = 500$, $r = 0.08$, and $t = 2\frac{1}{2}$.
(A) 700
(B) 600
(C) 550
(D) 500
(E) 450

12.



Triangles ABE and ACD are similar. Find the length of $\overline{DE}$.
(A) 9
(B) 15
(C) 4
(D) 11
(E) 8

13. The expression $(3K^3)^2$ is equivalent to _____.
(A) $9K^6$
(B) $27K^6$
(C) $27K^5$
(D) $9K^5$
(E) $3K^5$

14. Find the value of y in the proportion $\frac{30}{48} = \frac{5}{y}$.
(A) $\frac{3}{8}$
(B) 3
(C) 15
(D) 8
(E) $8\frac{1}{3}$

15. If $\frac{5}{x}$ is subtracted from $\frac{3}{x}$, the result is _____.
(A) 2
(B) $\frac{8}{x}$

(C) $-\frac{2}{x}$

(D) $\frac{2}{x}$

(E) $\frac{2}{x^2}$

16. The markdown price of a computer game was \$22.97, which represented 50% of the original selling price. What was the original selling price?

(A) \$27.56

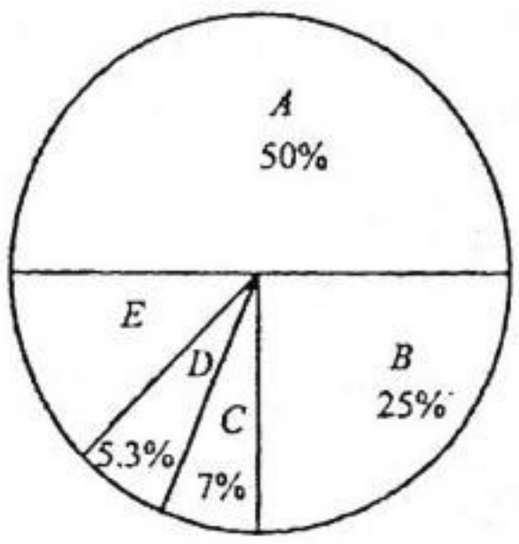
(B) \$42.35

(C) \$45.94

(D) \$49.00

(E) \$45.35

17. Use this chart to answer question 17.



Freddie's Budget

Weekly net income = \$480

A. Food

B. Rent and Utilities

C. Entertainment

D. Clothing

E. Miscellaneous

How much money does Freddie spend on miscellaneous items each week?

(A) \$43.05

(B) \$19.05

(C) \$130.95

(D) \$18.55

(E) \$60.96

18. What is the x-intercept of the line described by the equation $y = 4x + 5$?

(A) 5

(B) -5

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

(D) $-\frac{4}{5}$

(E) 0

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

(A) (5)(13)

(B) (5)(12)

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

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

(E) (15)(6)

20. If $|6a - 2| = 3$, what is a possible value of a?

(A) 3

(B) -3

(C) 29

(D) $-\frac{1}{3}$

(E) $\frac{5}{6}$

21. Dinner (plus tax and tip) cost \$145.6. The tax rate is 10% and Mr. Simmons left a 20% tip. Both tax and tip are calculated on the base amount of the check. What was the base amount of Mr. Simmons's bill?

(A) \$78.00

(B) \$113.32

(C) \$77.41

(D) \$112.00

(E) \$81.30

22. What is the area of a square whose diagonal is 8?

(A) 32

(B) 24

(C) 18

(D) 12

(E) $6\sqrt{2}$

23. Which fraction lies between $\frac{2}{3}$ and $\frac{4}{5}$?

(A) $\frac{5}{6}$

(B) $\frac{17}{20}$

(C) $\frac{7}{10}$

(D) $\frac{13}{15}$

(E) $\frac{9}{10}$

24. The circumference of a circle whose diameter is 9 inches is approximately _____.

(A) 22 inches

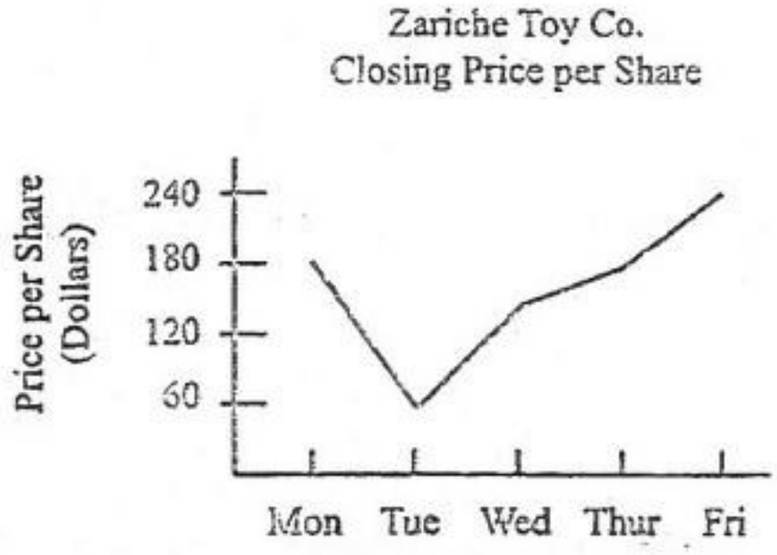
(B) 28 inches

(C) 38 inches

(D) 154 inches

(E) 14 inches

25.



Josie bought 10 shares of Zariche stock at the closing price Monday and sold them at the closing price on Friday. What was Josie's profit on this investment?

(A) $60

(B) $96

(C) $600

(D) $960

(E) None of the above.

GO ON TO THE NEXT SECTION

SECTION 4
READING COMPREHENSION

Time: 35 minutes

40 Questions

Directions: This section contains seven 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

Alchemy is the name given to the attempt to change lead, copper, and other metals into silver or gold. Today, alchemy is regarded as a pseudoscience. Its associations with astrology and the occult suggest primitive superstition to the modern mind, and the alchemist is generally portrayed by historians as a charlatan obsessed with dreams of impossible wealth. For many centuries, however, alchemy was a highly respected art. In the search for the elusive secret to making gold, alchemists helped develop many of the apparatuses and procedures that are used in laboratories today. Moreover, the results of their experiments laid the basic conceptual framework of the modern science of chemistry.

1. The passage is mainly about the _____.
   (A) manufacture of gold from other metals
   (B) mystery surrounding the origins of chemistry
   (C) links between chemistry, astrology and sociology
   (D) specific results of alchemists' experiments
   (E) early history of a scientific field
2. According to the passage, alchemists are generally portrayed in history books as _____.
   (A) rogues motivated by greed
   (B) the ancestors of today's chemists
   (C) brilliant scientists
   (D) talented but misunderstood individuals
   (E) wealthy businessmen
3. It can be inferred from the passage that a "charlatan" _____.
   (A) practiced an early form of chemistry
   (B) uses his research for criminal purposes
   (C) is not respected by historians

(D) understood the secret to making gold

(E) existed only in the Middle Ages

4. The style of the passage is most like that found in a _____.

(A) newspaper article (B) history textbook (C) novel about alchemists

(D) personal letter (E) scientist's diary

5. With which of the following statements would the author most likely agree?

(A) Alchemists helped pave the way for scientists today.

(B) Astrology and the occult also deserve consideration as legitimate sciences.

(C) Alchemy was a primitive, superstitious field of science.

(D) Alchemy is becoming increasingly respectable among today's chemists.

(E) Few alchemists ever became wealthy from their work.

6. The following questions are all answered by the passage EXCEPT: _____?

(A) How did alchemists turn metals into gold

(B) Has the general consensus always been that alchemists were charlatans

(C) What have alchemists contributed to science

(D) How do historians view alchemy

(E) What did alchemists hope to achieve

7. Which of these titles is the most appropriate for the passage?

(A) In Pursuit of Wealth.

(B) Alchemists: Charlatan or Scientist?

(C) Alchemy's Contributions to Science.

(D) Turning Copper to Gold.

(E) Alchemy as Art.

Passage 2

Before a joint session of Congress in January 1918, President Woodrow Wilson outlined his plan for a post-World War I peace settlement. Known as the Fourteen Points, Wilson's plan is best remembered for its first point, which declared that international diplomacy should be conducted in the open and that quiet, unpublicized diplomacy should be made illegal. Wilson believed that public diplomacy would end the threat of war by preventing immoral national leaders from secretly plotting aggressive actions against others.

Although Wilson was a highly intelligent and well-meaning man, he lacked insight into the complexities of international politics. Contrary to Wilson's belief, war rarely results from the behind-the-scenes plotting of unscrupulous national leaders. Rather, war usually stems from unresolved disagreements among nations—disagreements over territory, access to resources, and so forth. Even if quiet diplomacy could be eliminated, these disagreements would still remain, as would the threat of war.

8. The second paragraph of this passage is primarily about _____.
   (A) disagreements among nations
   (B) the actual causes of war
   (C) the first point in Wilson's Fourteen Points
   (D) diplomacy's role in international politics
   (E) a post-World War I peace settlement

9. The attitude of the writer toward the subject is _____.
   (A) apologetic (B) opinionated (C) cheerful
   (D) suspicious (E) calculating

10. The author would most likely agree that war between country *A* and country *B* would result from which of the following situations?
   (A) An agreement by a leader in country *A* to tax imports from a third country.
   (B) A dispute over ownership of a piece of land bordering both countries.
   (C) A secret alliance made between country *A* and another country.
   (D) The capture of a spy from country *A* in country *B*.
   (E) An unpublicized agreement by country *A* to sell weapons to country *B*.

11. Why does the author say that open diplomacy would not prevent war?
   (A) Open diplomacy is not a solution to the problems which lead to war.
   (B) Quiet diplomacy will always be a part of international relations.
   (C) Disagreements over territory and resources rarely lead to conflict.
   (D) International relations are too complex to be conducted in the public eye.
   (E) War breaks out because immoral rulers make decisions in secret.

12. All of the following questions can be answered by the passage EXCEPT: _____?
   (A) To the author, what is the reason why war usually starts
   (B) Did Wilson support public diplomacy, or concealed diplomacy
   (C) Does the author think the Fourteen Points was a good plan
   (D) How does the author think the threat of war could be eliminated for good
   (E) Does the author feel he or she understands international politics better than Wilson did

13. Which of the following is the author most likely to discuss next?
   (A) An example of a war that resulted from a territorial or resource dispute.
   (B) Wilson's domestic policies in the post-World War I period.
   (C) The events leading up to World War I.
   (D) Other examples of Wilson's intelligence.
   (E) The impact of import taxes on foreign trade relations.

Passage 3

Most people would agree that obedience to authority is necessary. Without obedience it would be difficult, if not impossible, for society to function.

A famous experiment conducted by Stanley Millgram at Yale University in the Unites States in the 1960s went toward answering this question. The experiment is too

complex to describe here in detail, but it showed that most people will obey authority even if it goes against what they think is morally right. Subjects were deceived by the experimenter into thinking that they were inflicting pain on others by electric shocks. The experimenters told the subjects that what they were doing was important for science and that they must continue to administer the shocks. The finding was that about 65 percent of subjects in the experiment regularly administered what they believed to be very painful shocks.

Some people have suggested that the phenomenon could to some extent explain the horrific acts of men such as Adolf Eichmann and the other Nazi officials responsible for Hitler's Holocaust. At their trial after World War Ⅱ, Eichmann and the others consistently maintained that they did not act out of hatred or cruelty but because they had been ordered to de so by their superiors.

Stanley Millgram himself observed, "It is psychologically easy to ignore responsibility when one is only an intermediate link in a chain of evil action. Thus there is a fragmentation of the total human act; no one decides to carry out the evil act and is confronted with its consequences."

14. In context, which of the following is the best word or phrase to insert at the beginning of the second sentence?
(A) Consequently.
(B) On the other hand.
(C) After all.
(D) However.
(E) Oddly enough thought.

15. Which of the following is the best sentence to insert at the end of the first paragraph?
(A) How could it be otherwise?
(B) Would society break down into total anarchy?
(C) For example, without obedience how could a country have an army?
(D) However, can too much obedience be bad?
(E) However, some political scientists dispute this claim.

16. Of the following, which is the best version of the underlined portion of sentence in line 3 (reproduced below)?

A famous experiment conducted by Stanley Millgram at Yale University in the 1960s <u>*went toward*</u> *answering this question.*

(A) as it is now
(B) was something helpful in
(C) helped to be
(D) went somewhere in the direction of
(E) went some way toward

17. Where in the essay could the following sentence best be inserted to improve the essay?

The experiment has been repeated in a number of countries around the world with similar results, suggesting that the phenomenon is not unique to the United States.

(A) After "A famous... question", in lines 3-4.

(B) After "Subjects were... shocks", in lines 6-7.

(C) After "The experimenters... snocks", in lines 8-9.

(D) After "The finding... shocks", in lines 9-11.

(E) After "Some people, Holocaust", in lines 12-14.

18. Which of the following best describes the function of the final paragraph?

(A) To cast doubt on the suggestion made in "Some pople... Holocaust", in lines 12-14.

(B) To provide evidence to support the suggestion made in "Some pople... Holocaust", in lines 12-14.

(C) To provide a statement of the possible significance of the experiment described in paragraph 2, especially as it relates to what is discussed in the second paragraph.

(D) To give an example to illustrate the point made in the second sentence.

(E) To suggest areas for further experimentation.

19. All of the following strategies or techniques are used by the author EXCEPT _____.

(A) direct quotation

(B) indirect quotation

(C) irony

(D) citing of evidence

(E) explanation of a procedure

Passage 4

What is a cord of wood? Some people say the cord is the most elastic unit of measure ever devised by the mind of humans. A "standard" cord is a pile of stacked wood 4 × 4 × 8 feet; that's 128 cubic feet. How much of this is wood? That depends on what kind of wood, the size and straightness of the sticks, and who does the piling. Small crooked sticks, cut from hardwood limbs and piled by one of those cordwood artists who know how to make air spaces, may contain less than 30 cubic feet of solid wood per cord. Smooth, round wood such as birch or spruce, in sizes eight inches and better, will average 100 cubic feet or more per cord. That's with the bark on. Peeled wood will make 10 to 12 percent more cubic volume in the same sized stack.

The heating value of wood varies enormously with the kind of tree. Black locust, white oak, hickory, black birch, and ironwood are the best. A cord of any of these woods, when seasoned, is worth approximately a ton of coal. Beech, yellow birch, sugar maple, ash, and red oak are next. White birch, cherry, soft maple, sycamore, and elm are comparatively poor fuel woods, with basswood, butternut, poplar, and the softwoods at the bottom of the scale.

20. The title that best expresses the main idea of this selection is _____.
    (A) "The Value of a Cord of Wood"
    (B) "Kinds of Trees"
    (C) "Modern Heating"
    (D) "Fuels"
    (E) "Standard Measures"
21. A standard cord of wood _____.
    (A) contains less than 30 cubic feet of solid wood
    (B) is measured by weight of the wood per foot
    (C) is stacked wood in a pile 4 × 4 × 8 feet
    (D) always contains 128 cubic feet of wood
    (E) will average 100 cubic feet of wood
22. Removal of the bark before stacking _____.
    (A) prevents seasoning of wood
    (B) allows more air spaces in a cord of wood
    (C) decreases the measurements of the wood
    (D) increases the cubic volume of wood in a cord
    (E) makes the stacking easier
23. The amount of heat supplied by wood depends upon the _____.
    (A) amount of bark left on the wood
    (B) way the wood was cut
    (C) straightness of the sticks
    (D) person who has piled the wood
    (E) type of tree from which the wood came
24. The most valuable fuel woods come from _____.
    (A) home-grown beech, maple, cherry, and elm trees
    (B) sycamore, ash, butternut, and poplar that have been sprayed
    (C) any kind of wood that is well-seasoned
    (D) all kinds of birches and oaks
    (E) hickory, ironwood, black birch, black locust, and white oak

Passage 5

There are many things from which I might have derived good, by which I have not profited, I dare say, Christmas among the rest. But I am sure I have always thought of Christmas-time, when it has come round—apart from the *veneration* due to its sacred origin, if anything belonging to it can be apart from that—as a good time; a kind, forgiving, charitable, pleasant time; the only time I know of, in the long calendar of the year, when men and women seem by one consent to open their shut-up hearts freely and to think of people below them as if they really were fellow travelers to the grave, and not another race of creatures bound on other journeys. And therefore, uncle,

though it has never put a scrap of gold or silver in my pocket, I believe that it has done me good, and will do me good; and I say, "God bless it!"

The clerk in the tank involuntarily applauded.

"Let me hear another sound from you," said Scrooge, "and you'll keep your Christmas by losing your situation! You're quite a powerful speaker, sir," he added, turning to his nephew. "I wonder you don't go into Parliment."

—from A Christmas Carol by
Charles Dickens

25. The word *veneration* probably means _____.
(A) disapproval (B) agreement (C) participation
(D) worship (E) love

26. The first speaker _____.
(A) has been fired by Scrooge
(B) is obviously frightened of Scrooge
(C) is a very religious person
(D) enjoys and celebrates Christmas
(E) is defending Christmas

27. The first speaker believes that Christmas _____.
(A) is an excuse for people to throw wild parties
(B) has been separated from its religious origin
(C) is a pleasant nuisance
(D) brings out the best in people
(E) could be a profitable time of year

28. The phrase "by one consent" is synonymous with _____.
(A) unanimously (B) affirmation (C) contractual
(D) reaffirmation (E) partially

29. Scrooge probably is angry with _____.
(A) only the clerk
(B) the speaker and the clerk
(C) no one
(D) only the speaker
(E) people who celebrate Christmas

Passage 6

Although eating too much fat has been shown to be harmful, some fat is essential in the human diet. Fat helps in the absorption of some vitamins, provides our bodies with insulation, and is a source of energy. And eating some fat in a meal helps people to feel full for a longer period of time, so they will not want to snack between meals. But not all fat is healthy. There are two kinds of fat, saturated and unsaturated. Saturated fat

is the kind of fat that is usually solid at room temperature. It is found in meat and dairy products. This kind of fat is very high in calories, and it raises the blood cholesterol level. High blood cholesterol can clog the arteries, which may lead to heart attacks. There are two types of unsaturated fat. One type, called polyunsaturated, or "essential
(10) fatty acid", is found in fish, sunflower seeds, corn oil, and walnuts. Some research suggests that essential fatty acids help to prevent heart disease and aid in healthy brain function and vision. Monounsaturated fat is found in foods like olives, avocados, and peanuts. Diets high in monounsaturated fat can lower cholesterol levels. However, even though some fat is needed, dietary guidelines suggest that no more than 30% of
(15) calories in a person's diet should come from fat.

30. According to the passage, essential fatty acids _____.
    (A) are found in peanuts
    (B) can be eaten in unrestricted amounts
    (C) raise the level of cholesterol in the blood
    (D) may aid in having good vision
    (E) lower cholesterol levels
31. The best title for this passage is _____.
    (A) "Benefits of Eating Fat"
    (B) "Foods High in Saturated Fat"
    (C) "Why Fat Is Harmful"
    (D) "Types of Fat"
    (E) "The Role of Fat"
32. Saturated fats could be found in all of the following EXCEPT _____.
    (A) a pepperoni pizza
    (B) hamburgers and butter
    (C) sausages and bacon
    (D) tuna fish salad
    (E) a grilled cheese sandwich
33. Monounsaturated fat _____.
    (A) is found in sunflower seeds and walnuts
    (B) can lower cholesterol levels
    (C) is solid at room temperature
    (D) helps to prevent heart disease
    (E) is an essential fatty acid
34. According to the passage _____.
    (A) calories from fat are always harmful
    (B) counting calories is not important
    (C) monounsaturated fat has the smallest number of calories
    (D) saturated fats are very high in calories
    (E) all fats contain the same amount of calories

Passage 7

In recent years, scientific research has done much to alter long-held beliefs about history. This is particularly true of scholarship surrounding the Silk Road. The Silk Road was a trans-Asian trading route that extended across two continents, linking China with the center of European trade in the Mediterranean. Most famous for the transport of silk, this ancient highway was also the conduit for such items as roses, peaches, gunpowder, and paper. Systems of belief were also passed along the road: the spread of Christianity, Buddhism, and Islam was accelerated by the connection between East and West.

Based on historical texts, historians have traditionally believed that the Silk Road was established in 115 B.C., yet the recent discovery of a much older piece of silk in Egypt suggests that the road was established at least a thousand years earlier. Through carbon dating, scientists dated the fabric of the newly discovered piece of silk to around 1000 B.C. In that period, only the Chinese held the secret to silk manufacturing. Mediterranean countries would not develop the technology to manufacture silk until the sixth century A.D. As a result, historians now believe that Asia and Europe may have traded silk via the Silk Road as long ago as the second century B.C.—though exactly how traders navigated the plateaus, mountains and deserts that lie along the route remains a mystery.

35. This passage is primarily about _____.
    (A) the introduction of silk manufacturing to Europe
    (B) conflict between Chinese and Mediterranean traders
    (C) ancient trading routes between East and West
    (D) the spread of Christianity, Buddhism, and Islam
    (E) the impact of a new discovery on a historical theory
36. As used in the article, the phrase "systems of belief" most likely means _____.
    (A) religions (B) military secrets (C) organizations
    (D) languages (E) travel routes
37. According to the passage, all of the following were traded along the Silk Road EXCEPT _____.
    (A) explosives (B) fruit (C) flowers
    (D) jewels (E) fabrics
38. It can be inferred from paragraph 2 that historians believe that _____.
    (A) most ancient Egyptian garments were made of silk
    (B) carbon dating is not the most accurate method of dating artifacts
    (C) the ancient silk fragment found in Egypt must have been imported from China
    (D) the ancient Egyptians were unable to cross plateaus, mountains, or deserts
    (E) the silk fragment discovered in Egypt was a fake

39. The author's style is best described as _____.

(A) poetic (B) mysterious (C) dramatic

(D) informative (E) surprised

40. According to the passage, it is reasonable to assume that _____.

(A) the author believes the Silk Road never existed

(B) historians can't say for sure whether the recent silk discovery was from Asia

(C) the Silk Road had not been established yet in 200 B.C.

(D) if it weren't for the Silk Road, Mediterranean countries never would have developed silk-producing technology

(E) civilizations used the Silk Road for more than just trade

GO ON TO THE NEXT SECTION

SECTION 5
MATHEMATICS ACHIEVEMENT

Time: 40 minutes

25 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 **Answer**

$(5 + 3) - 2 =$

(A) 6

(B) 8

(C) 10

(D) 13



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

1. A gas tank is $\frac{1}{4}$ empty. When full, the tank holds 20 gallons. How many gallons are in the tank now?
   (A) 3
   (B) 6
   (C) 8
   (D) 12
   (E) 15
2. Which of the following is the least?
   (A) $\frac{1}{4} + \frac{2}{3}$
   (B) $\frac{3}{4} - \frac{1}{3}$
   (C) $\frac{1}{12} \div \frac{1}{4}$
   (D) $\frac{3}{4} \times \frac{1}{3}$
   (E) $\frac{1}{12} \times 4$
3. If the sum of x and $x + 3$ is greater than 35, which is a possible value for x?
   (A) -18
   (B) -12
   (C) -2
   (D) 12
   (E) 18
4. If a square has a perimeter of 100, what is the length of each side?
   (A) 4
   (B) 11
   (C) 22
   (D) 25
   (E) 110
5. If a Set R contains four positive integers whose average is 7, what is the greatest number Set R could contain?
   (A) 4
   (B) 9
   (C) 25

(D) 33

(E) 36

6. Which of the following is most nearly 40% of \$9.95?

(A) \$8.00

(B) \$4.00

(C) \$14.50

(D) \$12.00

(E) \$6.75

7. One fifth of a class chose electricity for the topic of a science project. If 4 students chose this topic, how many students are in the class?

(A) 20

(B) 10

(C) 8

(D) 5

(E) 2

8. Don is 8 years older than Peter is. In 7 years, Don will be twice as old as Peter is now. How old is Peter now?

(A) 5

(B) 10

(C) 15

(D) 25

(E) 35

9. If p pieces of candy cost c cents, 20 pieces of candy will cost.

(A) $\frac{pc}{20}$ cents.

(B) $\frac{20c}{p}$ cents.

(C) $20pc$ cents.

(D) $\frac{20p}{c}$ cents.

(E) $20 + p + c$ cents.

10. Durant's Trading Company earned profits of \$75,000 in 1990. In 1998, their profit was \$4,500,000. The profit from 1998 was how many times as great as it was in 1990?

(A) 2

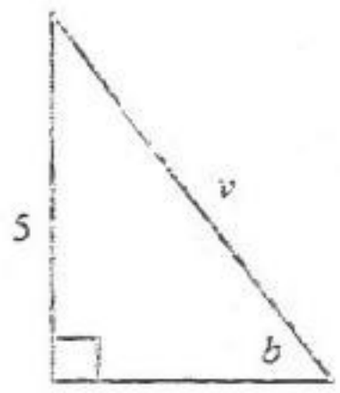
(B) 4

(C) 6

(D) 10

(E) 60

11.



If $b = 45°$, then $v^2 =$ _____.

(A) 64

(B) 50

(C) 25

(D) 10

(E) It cannot be determined

12. A pet goat eats 3 pounds of oats and 2 pound of grass each day. When the goat has eaten a total of 30 pounds, how many pounds of grass has been eaten?

(A) 6

(B) 8

(C) 10

(D) 12

(E) 60

13. If $2x - 4 = 50$, what is $x \div 9$?

(A) 6

(B) 3

(C) 0

(D) 9

(E) 1

14. One half the difference between the number of degrees in a rectangle and the number of degrees in a triangle is _____.

(A) 360

(B) 240

(C) 180

(D) 90

(E) 45

15. A zoo has 3 times as many gorillas as tigers. There are 3 more tigers than there are zebras at the zoo. If z represents the number of zebras, in terms of z, how many gorillas are in the zoo?

(A) $3z$

(B) $z + 3$

(C) $z+6$

(D) $3z+3$

(E) $3z+9$

16. In the fraction $\frac{xy}{z}$. If the value of z is doubled and the value of x is halved, the value of the fraction is _____.

(A) multiplied by four

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

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

(D) doubled

(E) divided by four

17. 40 is 10 percent of _____.

(A) 1.60

(B) 160

(C) 200

(D) 250

(E) 400

18. How much larger than 80 is 100 _____.

(A) 18%

(B) 20%

(C) 25%

(D) 35%

(E) 40%

19. If $\frac{3}{8}''$ on a scale drawing is equivalent to one foot at full scale, what distance on the drawing will stand for forty inches?

(A) $\frac{1}{8}$ inch

(B) $\frac{7}{8}$ inches

(C) $1\frac{1}{4}$ inches

(D) $2\frac{1}{3}$ inches

(E) $8\frac{8}{9}$ inches

20. $6 \div \frac{2}{3} + \frac{1}{3} \times 9 =$ _____.

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

(B) 12

(C) 24

(D) 54

(E) 168

21. If $x+3<12$, x may be _____.

(A) less than 15

(B) greater than 16

(C) equal to 15

(D) less than 9

(E) equal to 9

22. If $a=16$, $b=2$, and $c=3$, the value of $\sqrt{a+3b+c}$ is _____.

(A) 16

(B) 7

(C) 5

(D) 4

(E) 2

23. The average of -3, 17, 0, -1, and 12 is _____.

(A) 5

(B) 3

(C) 2

(D) -3

(E) -6

24. In the fraction $\frac{1}{\Delta-3}$, Δ can be replaced by all of the following EXCEPT _____.

(A) $+3$

(B) $+2$

(C) 0

(D) -1

(E) -2

25. $0.1011 \div 10$ is equivalent to _____.

(A) 0.0010101

(B) 0.01011

(C) 0.010101

(D) 0.1001

(E) 1.0101