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SSAT Upper Level Practice Test December 2023

December 2023 · Grades 8-11 · Free PDF

WHAT'S INSIDE

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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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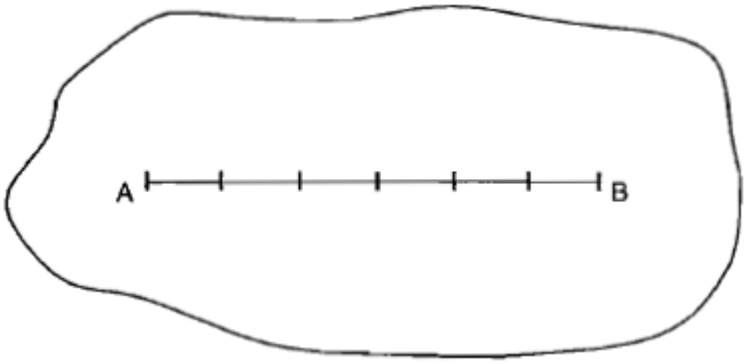
SECTION 1 WRITING SAMPLE

TOPIC: Laughter is the best medicine.

ASSIGNMENT: Do you agree or disagree with the topic? Illustrate your opinion with specific examples from your life, from literature or history, or from current events.

SECTION 2 QUANTITATIVE SKILLS

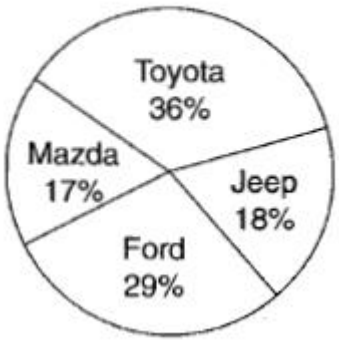
1. On the map, the symbol l--l represents 12 miles. If Hailey drives at a speed of 60 miles per hour, how long will it take her to drive from city A to city B?



(A) 48 minutes
(B) 36 minutes
(C) 1 hour, 36 minutes
(D) 1 hour, 12 minutes
(E) 1 hour, 48 minutes

2. The car dealership sold 1,800 cars last year. According to the chart, how many Mazdas did the dealership sell?

Cars Sold by Car Dealership

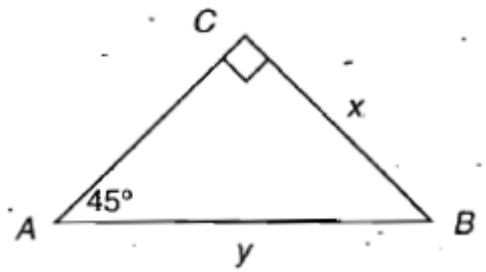


(A) 648
(B) 306
(C) 324
(D) 522
(E) 486

3. Henry wants to paint a wall 10 feet high by 24 feet long. If 1 quart of paint covers 40 square feet of wall space, how many quarts of paint does Henry need to paint the entire wall?

(A) 3 quarts
(B) 4 quarts
(C) 5 quarts
(D) 6 quarts
(E) 7 quarts

4. Describe the measure of side AC.



(A) x
(B) > x
(C) < x
(D) y
(E) > y

5. If $900 is to be divided equally amongst a group of people, how many persons are in the group?

(A) 17
(B) 19
(C) 21
(D) 15
(E) 27

6. The Crown Movie Theater collected $705 yesterday. If 54 adults paid $9.50 each and each child paid $3.50 less than each adult, how many children paid admissions?

(A) 32
(B) 38
(C) 29
(D) 25
(E) 42

7. Simplify $6|-3|-4|5|$.

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

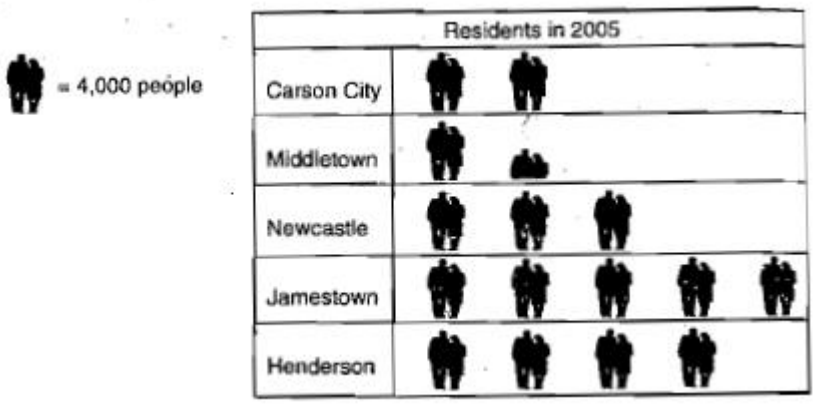
8. Hector Villanueva has a 0.300 batting average (hits/times at bat). If he gets a total of 10 more hits the next 10 times at bat, his batting average will jump to 0.400. Determine how many hits he had originally.

(A) 24
(B) 16
(C) 22
(D) 34
(E) 18

9. Given $5 > 3x \geq -2$, find a possible value for x.

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

10. Find the ratio of the number of residents of Middletown to the number of residents of Henderson in the year 2005.



(A) 1/5
(B) 2/5
(C) 3/8
(D) 5/8
(E) 4/9

11. Find the value of y in the equation $y = 4x^3$ when $x = \frac{2}{3}$.

(A) $9\frac{1}{3}$
(B) $1\frac{5}{27}$
(C) $9\frac{4}{11}$
(D) $8\frac{12}{25}$
(E) $12\frac{2}{3}$

12. Review the following five algebraic expressions and then select the correct answer below.

(a) 4(r+s)+t
(b) 4r+4s
(c) 4rst
(d) 4r(s+t)
(e) 4rt+4rs

(A) a = b
(B) c > d
(C) e < a

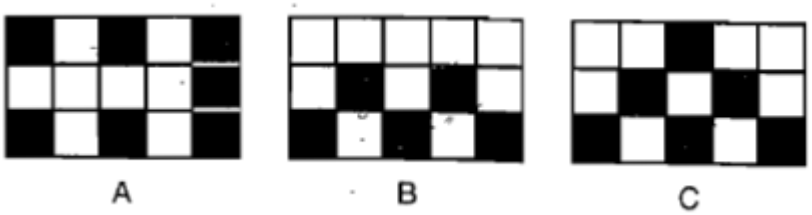
(D) b > d
(E) d = e

13. The table represents the frequency distribution of students' weights. Find the mean weight and round to the nearest tenth.

Pounds, p_i	Frequency, f_i	$p_i f_i$
98	2	
105	1	
109	1	
120	3	
126	2	
132	4	

(A) 120.3
(B) 118.2
(C) 122.1
(D) 116.9
(E) 119.2

14. If the areas of all the inner squares are equal, select the correct answer among the following descriptions.



(A) The white area in B is less than the white area in A.
(B) The dark area in A is greater than the dark area in C.
(C) The white areas in A and B are equal.
(D) The dark area in C is greater than the white area in B.
(E) The white area in C is less than the dark area in B.

15. Represent the area of a triangle with a base of 2x + y and a height of 4z.
(A) 2z(2x + y)
(B) 2x(z + y)
(C) 2xyz
(D) z(2x + y)
(E) 2z + 4xy

16. A container holds 3 yellow, 4 blue, and 2 white marbles. If 1 marble is drawn at random from the container, what is the possibility that it is either yellow or blue?
(A) 1/3
(B) 3/8

(C) 6/9
(D) 7/9
(E) 2/3

17. Determine the ratio of the area of a circle with radius 2 to the area of a circle with radius 4.

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

18. Each of the equal legs of an isosceles triangle is 3 more than the base, and the perimeter is 30. Find die measure of one of the equal legs.

(A) 12
(B) 10
(C) 7
(D) 11
(E) 15

19. If the area of a square is $4a^2$, find its perimeter.

(A) $6a$
(B) $8a^2$
(C) $12a$
(D) $6a^2$
(E) $8a$

20. Hal spends $t + 4$ hours per day watching television. Jose spends t hours and Tony watches television $t - 2$ hours per day. Find the average number of hours of watching television for the three students.

(A) $\frac{4t+2}{3}$
(B) $\frac{3t+2}{3}$
(C) $\frac{5t-1}{3}$
(D) $t + 12$
(E) $\frac{3t-2}{3}$

21-22.

Major Network Television Shows					
	2002	2003	2004	2005	Summary
Reality	2	3	12	14	31
Comedy	7	9	8	7	31
Law	3	6	7	5	21
Detective	8	9	6	12	35
Cartoons	10	12	14	16	52
News	20	24	21	15	80
Summary	50	63	68	69	250

21. In 2002, what percent of all television shows were detective stories?
(A) 20%
(B) 18%
(C) 16%
(D) 23%
(E) 24%

22. The total number of cartoons in the year 2004 and 2005 represent what percent of all shows in the years 2002 through and including 2005?
(A) 18%
(B) 24%
(C) 22%
(D) 12%
(E) 16%

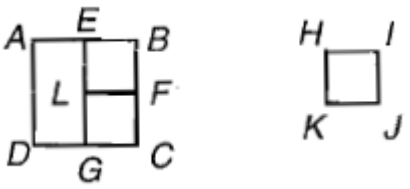
23. If *a* is a negative integer and *b* is a positive one, which of the following statements is true?
(A) $ab < ba$
(B) $a + b > b - a$
(C) $a^2 < 0$
(D) $b^2 < 0$
(E) $ba \geq ab$

24. Express the linear relationship indicated in the table.

x	1	2	3	4	5
y	1	3	5	7	9

(A) $y = x + 1$
(B) $y = 2x + 1$
(C) $y = 3x - 1$
(D) $y = 2x - 1$
(E) $y = x + 4$

25. *ABCD* and *HIJK* are squares. *E*, *F*, and *G* are the midpoints of *AB*, *BC*, and *CD*, respectively. *EB* is the same length as *HI*. Which of the following statements is true?



(A) *AE* is equal to *BC*.
(B) Area *ABCD* is equal to area *EBCG* + area *HIJK*.
(C) Area *ABCD* is equal to area *AEGD* + twice area *HIJK*.
(D) *EG* is greater than twice the length of *HI*.
(E) Area *AEGD* + area *HIJK* is equal to area *ABCD*.

SECTION 3 READING COMPREHENSION SKILLS

Ever wonder why we have wisdom teeth? If you're like most people, you'll have your wisdom teeth removed before they even start to surface. How can we just throw away teeth without their absence having some impact on the state of our mouths? The science of dentistry studies questions like this.

Although it dates back to 3700 B.C. in Egypt, dentistry as we know it did not emerge until the 19th century, when people began to study systematically the mouth, gums, jaw, and teeth. Modern dentistry is an intrinsic part of our lives. Nowadays, we cannot go a day without hearing something about teeth care, if only through our television sets. If we have gingivitis, we can use mouthwash. If we have cavities, we can get fillings in a variety of colors and material types. If we have yellow teeth, we can make them white again in seven short days.

And, if we have crooked teeth, we can get braces. In fact, people routinely get braces, so much so that we consider it an oddity if someone goes through their entire childhood without the experience of going to the orthodontist every month. Chances are that if someone does not get braces, they lack money or time, not interest in having work done.

The evolution of dentistry shows how medical science is changing the human being. Because of increasingly good dental care, we don't lose our teeth and rely on our wisdom teeth coming in to give us a new set. To answer the question with which we began: We simply don't need those teeth anymore. Indeed, nowadays we have to pay to get our redundant teeth taken out.

1. The article says that we pull our wisdom teeth because_____.
(A) we have gingivitis
(B) they cause crooked teeth
(C) we don't need them anymore
(D) we listen to information about teeth care daily on TV
(E) they make our teeth yellow

2. Which of the following statements is true based on the reading?
(A) Braces are a common solution to yellowing teeth.
(B) Egyptian dentists conducted dentistry much as we do today.
(C) If we have gingivitis, we can treat it with fillings.
(D) We don't expect to lose our teeth because we have been taught how to care for them.
(E) Braces are a rare experience while growing up.

3. When did dentists pull the first tooth?
(A) 3700 B.C.
(B) 17th century
(C) 18th century
(D) 19th century
(E) The article does not say.

4. The writer's main purpose is apparently_____.
(A) to answer frequently asked questions about teeth.
(B) to talk a little about the history of dentistry
(C) to explain dreams about teeth
(D) to write the section on dentistry for a medical school text
(E) to encourage people to cut down on sweets

5. All but which of the following problems, according to the article, can dentists fix?
(A) bad breath
(B) yellowing teeth
(C) crooked teeth
(D) root canals
(E) cavities

It's easy, nowadays, to blame others for bad things that happen to us. We complain that we don't have enough money because the government takes our taxes. We blame carbohydrates for our fat count. We blame society for our embarrassingly low educational scores.

Well, I disagree. I say we could save money by skipping McDonald's and buying the non-name-brand food items at the grocery. I say we're fat because we don't exercise. I say we're stupid because we watch too much TV and never read anything more difficult than sixth grade reading material.

I say that it's in our own hands if we are operating at less than our potential.

So, sometime, when you're at a loss for something to do, change your life for the better. Crack open the dictionary at a random page and see what's inside.

Seriously.

Chances are you'll find something interesting you didn't know before. Reading the dictionary is like reading a thousand mininovels, for each word has a story.

For example, we often hear someone referred to as a "spinster." Most of us know that we use this term to describe an old, unmarried woman, but few of us know that the name originally had more meaning. The reason that "spinster" came to refer to all old, unmarried women is because in earlier times old, unmarried women had to spin to earn their livings; old, unmarried women who could not spin nevertheless got lumped in with the rest. Consider, also, the word "whirling dervish." We know that this word is used to refer to dancers or tornadoes. Originally, however, the word referred to Muslim priests who wandered the land as beggars; In addition to whirling dervishes, there existed also howling and dancing dervishes, too.

So, take five minutes and read the dictionary next time you're bored. Seriously.

6. What is the best title for this passage?
(A) Unexpected Discoveries
(B) Through the Eye of a Needle
(C) A Thousand and One Words
(D) Boring Facts and Trivia
(E) On the Origin of the Word “Dervish”

7. How would you describe the authors tone in this piece?
(A) humorous and trivial
(B) adamant and angry
(C) friendly yet tired
(D) amusing yet serious
(E) sulky and sullen

8. Who does the author say is responsible for the state of our lives?
(A) the government
(B) McDonald s
(C) television
(D) educators
(E) we, ourselves

9. Why does the author give the word seriously in line 12 its own paragraph?
(A) The author thinks the reader will take his/her advice seriously; therefore s/he uses seriously to indicate s/he has made a joke.
(B) The author must include nine paragraphs in the article and is cheating.
(C) The author wishes the reader to look up the word seriously in a dictionary.
(D) The author anticipates that the reader will scoff at the author's advice; the author wishes to convey serious intent of his/her advice.
(E) The author desires to confuse the reader at all costs.

10. Which of the following words best defines the phrase *lumped in*?
(A) left out
(B) copied
(C) combined with
(D) evolved
(E) destroyed

Pieter Brueghel, 16th century Flemish painter, has left for us a series of great paintings. One of his best works depicts the Greek myth of Icarus.

To understand Brueghel's treatment of the piece, you must first recall the facts of the Icarus story. Icarus was the son of Deadalus, the most brilliant thinker of his time. Deadalus had aided Ariadne in saving Theseus from the Minotaur. The king, angered by Deadalus' action, swiftly imprisoned Deadalus and his son in a lonely tower on a deserted shore, visited only by birds. Eager to escape, however, Deadalus used the feathers and wax to create two sets of wings, and he and his son made plans to fly to freedom. Unfortunately, Icarus, exhilarated by the freedom he felt while flying, flew too close to the sun, despite his father's warnings. The suns heat melted the wax on his wings, and he plummeted into the ocean and drowned. Deadalus, heartbroken, nevertheless, made it to safety.

Brueghel's work depicts a huge, glorious scene of people working the land along a beautiful shoreline. Animals frolic; men work. Ships laden with goods plow through the waves. Amidst all the action captured in the scene, one is hard pressed to locate Icarus. Finally, after some searching, we see him. He is located in the lower, right-hand side of the painting. Even so, his depiction is small. Indeed, ail we see are two pale legs, kicking frantically in the surf.

Brueghel's work sends a clear message, one that underscores the largeness of the world and the relative insignificance of the individual therein.

11. What will the author most likely discuss next?
(A) artist Vincent van Gogh and how he cut off his ear
(B) another artwork by Brueghel
(C) an explanation of Brueghel's message regarding the insignificance in the world
(D) an expanded discussion of the crime that landed Dedalus in jail
(E) nothing, the article is complete

12. The author's purpose can best be described by which of the following statements?
(A) to avoid discussing anything important
(B) to advocate the talents of Brueghel
(C) to relate the tale of Dedalus and Icarus
(D) to argue that Brueghel is an untalented artist
(E) to show how art can convey social comment.

13. Which of the following words can be substituted for the word exhilarated in line 11 without changing the meaning of the sentence?
(A) saddened
(B) angered
(C) joyous
(D) frightened
(E) advised

14. What is the tone of this piece?
(A) solemn
(B) understanding
(C) sarcastic
(D) joyous
(E) unintelligent

15. All but which of the following words have the same meaning as plummeted in line 14?
(A) fell
(B) hung
(C) dropped
(D) sank
(E) plunged

16. Which of the following words has a meaning most nearly opposite to the word frantically in line 22?
(A) feebly
(B) wildly
(C) enthusiastically
(D) vigorously
(E) angrily

17. What caused Icarus' wings to melt?
(A) the cold ocean spray
(B) the swooping, swirling seagulls

(C) the dampness of the water
(D) the heat of Dedalus' wrath
(E) the warmth of the sun

History documents the bloody habits of Vlad Tepes (or Vlad the Impaler), an infamous general who lived in Transylvania from 1431 to 1476. Stories about Vlad Tepes seem gruesome even by today's standards. Consider this story about a group of generals whom Vlad Tepes was entertaining. Prior to their arrival, Vlad had punished several people by impaling them on long spikes surrounding the banquet area. One of the visiting generals complained of the smell; after all, he had been invited to a dinner. Vlad apologized and then had the general impaled on an even longer spike. His reason? So that the general, being suspended above the other rotting bodies, would not have to smell what offended him.

Other vampire tales come to us from this period, but they are clinical, historical accounts. The vampire legend grew popular only after the publication of Bram Stoker's Dracula in 1897. In his novel, Stoker creates a frightening combination of man and monster. His Dracula is striking in appearance, ruthless, calculating, and quite intelligent. Since then, vampire stories have grown in popularity over the years, inspiring both serious and tongue-in-cheek treatments.

The serious vampire offerings have grown increasingly enraptured by the idea of being undead. Take for example, the work of Anne Rice. Rice's books modernize the old vampire story. While Stokers novel tells about the exploits of a single vampire, Rice's novels explore an entire vampiric underworld that coexists with—and preys upon—the human world. Rice's stories allow the old vampire lore to evolve into an entire world view; they work out in great detail the logistical and philosophical problems that come into play, if vampires really exist en masse. More importantly, however, Rice^ stories humanize the vampire. Many of her characters are guilt-stricken to the point of madness because they must drink human blood to survive; some rail against their undead state, for they are frozen in time, unable to transit from one stage of human maturity to the next.

18. What does the word Tepes mean?
(A) innocent
(B) Dracula
(C) impaler
(D) bloody
(E) ruler

19. Which statement gives an accurate description of Vlad Tepes' character?
(A) He is a wise and caring ruler.
(B) He is a brilliant military strategist.
(C) He was poor, despite his great power.
(D) He was popular with women.
(E) His sense of justice is very unconventional.

20. Which is the best title for this passage?
(A) An American Werewolf in London
(B) Witches, Warlocks, and Other Halloween Nasties
(C) The Vlad Dynasty: A Family Tree
(D) The Enduring Zombie
(E) Still Hungry After All These Years

21. Which date approximates the time period when Anne Rice wrote?
(A) 1431
(B) 1476
(C) 1789
(D) 1897
(E) 1990

22. The statement "Other vampire tales come to us from this period, but they are clinical, historical accounts" implies that_____.
(A) vampire tales that come from this period are even more exciting than the Tepes story
(B) interest in vampire lore died out altogether during this period
(C) vampire stories that were written from this period were boring
(D) stories about female vampires were especially popular during this period
(E) Anne Rice was popular even during this period

Existentialism is a philosophy that focuses only on the actions that we humans make in the physical world that surrounds us. Because it admits no afterlife of any sort, Existentialism takes the world very seriously; every decision forces the Existentialist to ponder deeply the consequences. She only gets one shot at life, so everything depends on her getting it right the first time. According to its tenets, life is absurd and filled with actions that seem pointless, futile, and ceaselessly endless.

Camus illustrates Existentialism using the example of Sisyphus from Greek mythology. Sisyphus vastly enjoyed life but held little respect for the gods. Upon his deathbed, Sisyphus instructed his wife to leave his body unburied as a gesture of anger and resentment at dying. She agreed to do as he said, but when he died, she reneged on her word. Upon waking in Hades, Sisyphus knew immediately that his wife had betrayed him, and he asked permission from King Hades to go revenge himself upon her. Hades agreed on condition that Sisyphus return to the underworld immediately after getting his revenge. However, as soon as Sisyphus reached the earth's surface, he chose to give up his revenge and refused to return to the underworld. Only after great efforts did King Hades recapture his prisoner.

As punishment for his hubris or conceitedness, King Hades created a special task for Sisyphus. He now spends eternity rolling an enormous rock up a great hill, only to have it come crashing down immediately upon reaching the hill's summit. Sisyphus' task illustrates clearly the tenets of Existentialism outlined here. Let's see how.

23. According to the article, the story of Sisyphus comes from_____.
(A) old wives' tales
(B) Japanese tradition
(C) Indian lore
(D) Roman history
(E) Greek myth

24. What does Sisyphus initially want to do when he returns to earth?
(A) Stay alive.
(B) Get revenge on his brother.
(C) Punish his wife.
(D) See his family.
(E) Negotiate a treaty.

25. Which of the following most nearly means tenets as used in line 6?
(A) beliefs
(B) rules
(C) portable buildings
(D) woven strands of rope to catch fish
(E) numbers

26. What will probably come after paragraph three?
(A) background information about Camus
(B) more information about Sisyphus' escapades
(C) nothing; the author has made his/her point
(D) a discussion of how Sisyphus' story illustrates the tenets of Existentialism
(E) an opinion from a philosophy professor at the University of Kentucky

27. Which of the following words best represents an antonym for hubris?
(A) daring
(B) fearful
(C) piety
(D) miserable
(E) perturbed

Have you ever wondered why you aren't supposed to wear white after Labor Day? It is a long-standing tradition, one that those of us from the South have had beaten into our heads from our very earliest memories. But from where does this rule come?

People dispute the origin of this custom. Some say that the rule developed from practicality. After all, everyone knows that wearing white in the summer is wise because the white reflects heat and helps the wearer keep cool; wearing dark colors is wise in the winter because the dark material absorbs heat and keeps the wearer warm. The rule of thumb, they say, merely solidifies what was already well known, widely accepted common knowledge.

Others say that the custom developed out of practical concerns, but for cleanliness reasons not for warmth purposes. They argue that the rule of white applies only to shoes, and that out of attempts to keep them clean grew the rule of wearing white only in the warm months.

Still others say that the rule grew out of a class struggle that took place in the late 1800s. With the rise of manufacturing in America, a new class of wealthy people grew up, one that conflicted with the old money class that had existed since the founding of the colonics in the 18th century. The nouveau riche class wanted desperately to be accepted by the old money folk, but the old money people did not want to accept them. Therefore, the old money folk used knowledge that they had created for use among themselves, unwritten customs and accepted ways of doing things unknown to the nouveau riche, to keep the new money folk away.

Whatever the reason, however, the rule remains in use today.

28. Which of the following words can be substituted for the word solidifies without changing the meaning of the sentence?
(A) confirms
(B) thickens
(C) rebuilds
(D) reconstitutes
(E) goes against

29. Which of the following statements is supported by the information in the passage?
(A) Customs became a weapon used by those with new money to force those with old money to let them became part of society.
(B) Customs became a weapon used by those with old money to snub those with new money.
(C) Customs regarding fashion quickly became out of date.
(D) Customs regarding when to wear white changed to allow people to wear white year-round.
(E) Customs always grow out of practical responses to issues of daily life.

30. Which of the following statements is not true according to the article?
(A) The issue over when to wear white may have originated in the 1800s.
(B) The nouveau riche had a hard time getting respect.
(C) People should wear dark clothes in the winter.
(D) Wearing white originally applied to shoes rather than clothes.
(E) Concerns over keeping clean were never a concern when the rules for wearing white were developed.

31. All but which of the following inferences may be made about the author?
(A) The author is willing to do research to find answers to interesting questions.
(B) The author has studied some history.
(C) The author is knowledgeable about fashion.
(D) The author is female.
(E) The author is from the South.

32. What will come next in this discussion?
(A) nothing; the author has finished the article
(B) a discussion of other instances in which the new money and old money clashed
(C) an account of some famous Southern women who defied the “no-white- after-Labor Day” rule
(D) a complete list of instances in which one can break the “no-white-after- Labor-Day” rule
(E) a handy mnemonic device to help us remember when to wear black

33. This passage deals with all but which of the following topics?
(A) social customs
(B) historical data
(C) human behavior
(D) psychology

(E) data analysis

34. Based on your, reading of the article, what does nouveau riche mean?
(A) newly married -
(B) newly wealthy
(C) newly graduated
(D) newly born
(E) newly bankrupted

35. This article sets out to_____.
(A) set the record straight on old money in the South .
(B) supply interesting, but trivial, information
(C) support new money people in the North
(D) explain the cause of the Civil War
(E) convince people to wear white after Labor Day

36. In which of the following publications would you most likely find this information?
(A) the sports section of your local newspaper
(B) the world news section of a weekly newsmagazine
(C) the arts and leisure section of the Sunday paper
(D) the science news section of a television news program
(E) the comics page online

Most, if not all, Americans are familiar with the concept of kamikaze, special Japanese pilots who fought in World War II. These men were unique because they enlisted in the war effort knowing that they would be fighting to the death. They trained to be suicide pilots, who purposely drove their planes headlong into their targets, exploding themselves along with their planes and their targets.

Few of us, however, have heard of the kaiten. The kaiten were small vessels, carried on submarines; they weighed eight tons and were loaded with explosive warheads. They had limited range (traveling a distance ranging from 12 miles at top speed and 30 miles at low speed) and silent movement. But like the kamikaze planes, these kaiten were unrecoverable; if they reached their target, they exploded, captain and all, and if they didn't, they sank, carrying their captains with them.

Both of these military strategies depended heavily on the concept of honor. Honorable death, especially by suicide for the sake of the Emperor during battle, brought nobility to the soldier and his family. These fighters were idolized by their countrymen; they represented the highest ideals of the nation—that of total sacrifice on behalf of their ruler.

37. Based on the article, which of the following actions would be seen as honorable by Japanese warriors in World War II?

(A) becoming a kamikaze pilot but pulling out of the final dive at the last minute
(B) refusing to man the kaiten on which he had trained
(C) defending Hiroshima as the atom bomb dropped
(E) emigrating to Canada just after the war started
(D) spying for the Americans

38. Which of the following words best describes the kaiten?

(A) luxury liners
(B) floating coffins
(C) bamboo tubes
(D) warrior flutes
(E) underwater kayaks

39. What kind of ruler did Japan have during World War II, according to this article?

(A) emperor
(B) king
(C) prince
(D) president
(E) chancellor

40. Which of the following gives an example of something that is unrecoverable}

(A) a penny at the bottom of a wading pool
(B) the moon when it is full
(C) your shoe when it fails over a cliff
(D) your book you left at your grandmother's house
(E) a sand dune at high tide

SECTION 4 VERBAL SKILLS

1. MALICE
(A) cunning
(B) forethought
(C) spite
(D) benevolence
(E) premeditation

2. WAN
(A) single
(B) lonely
(C) sanguine
(D) pale
(E) individual

3. BLATANT
(A) obvious
(B) fragrant
(C) odious
(D) airy
(E) subtle

4. DETER
(A) alternate
(B) beget
(C) curve
(D) discourage
(E) encourage

5. CONCUR
(A) agree
(B) refer
(C) breed
(D) race
(E) study

6. OATH
(A) vow
(B) fool
(C) grain
(D) vessel
(E) disagreement

7. CONTEMPORARY
(A) tardy
(B) rapid
(C) lengthy
(D) angry
(E) modern

8. CREDULOUS
(A) gullible
(B) nervous
(C) skittish
(D) outraged
(E) impossible

9.ARDOR
(A) passion
(B) disinterest
(C) closet
(D) difficulty
(E) list

10. APPARATUS
(A) magic
(B) alert
(C) awake
(D) device
(E) mistake

11. HOAX
(A) conflagration
(B) falsification
(C) imagination
(D) peregrination
(E) elation

12. OSTRACIZE
(A) blend
(B) fold
(C) exhaust
(D) enlarge
(E) exclude

13. PERUSE
(A) drive
(B) utilize
(C) know
(D) read
(E) understand

14. ELUCIDATE
(A) confuse
(B) speak
(C) escape
(D) make clear
(E) take care

15. MENDICANT
(A) pharmacist
(B) beggar
(C) epoxy
(D) bandage
(E) soporific

16. HAUGHTY
(A) arrogant
(B) uninterested
(C) humble
(D) attractive
(E) bored

17. SMITE
(A) strike
(B) defend
(C) burn
(D) sneer
(E) grin

18. DORMANT
(A) inactive
(B) exuberant
(C) collegial
(D) clean
(E) friendly

19. INCITE
(A) rouse
(B) cut
(C) bite
(D) burn
(E) illustrate

20. ZENITH
(A) appliance
(B) constellation
(C) negative
(D) summit
(E) nadir

21. JOVIAL
(A) happy
(B) plump
(C) lugubrious
(D) slow
(E) large

22. LEXICON
(A) route
(B) waterway
(C) river
(D) dictionary
(E) enclosure

23. CHAFF
(A) beverage
(B) companion
(C) irritation
(D) waste
(E) annoyance

24. RAZE
(A) fortify
(B) build
(C) elevate
(D) shave
(E) tear down

25. PERNICIOUS
(A) intelligent
(B) harmless
(C) false
(D) harmful
(E) entertaining

26. MINUTIAE
(A) trivia
(B) speed
(C) notes
(D) weaponry
(E) ammunition

27. PREHENSILE
(A) understanding
(B) grasping
(C) primitive
(D) antediluvian
(E) condescending

28. REPUGNANT
(A) offensive
(B) small
(C) hardy
(D) copied
(E) compact

29. TACITURN
(A) alien
(B) ubiquitous
(C) avian
(D) melodious
(E) silent

30. ABJURE
(A) announce
(B) rule
(C) judge
(D) renounce
(E) balance

31. Nose is to face as finger is to_____.
(A) foot
(B) hand
(C) ear
(D) head
(E) ring

32. Bark is to tree as _____.
(A) grass is to seed
(B) peel is to banana
(C) body is to skin
(D) core is to apple
(E) coat is to pants

33. Flag is to country as_____.
(A) document is to nation
(B) cloth is to uniform
(C) comma is to pause
(D) state is to union
(E) president is to coin

34. Fork is to eat as _____.
(A) pencil is to paper
(B) pen is to write
(C) ink is to fill
(D) teacher is to instruct
(E) spoon is to soup

35. Epic is to haiku as _____.
(A) mural is to painting
(B) symphony is to song
(C) sketch is to still life
(D) novel is co book
(E) drop is to pond

36. Cap is to baseball as helmet is to_____.
(A) soccer
(B) tennis
(C) cycling
(D) golf
(E) head

37. Butterfly is to insect as_____.
(A) grasshopper is to cricket
(B) cardinal is to bird
(C) ant is to sparrow
(D) worm is to robin
(E) bee is to hummingbird

38. Idle is to employed as.
(A) graceful is to clumsy
(B) petite is to small
(C) elegant is to formal
(D) engine is to truck
(E) worker is to job

39. Noise is to irritate as_____.
(A) music is to calm
(B) cacophony is to appease
(C) singing is to singer
(D) speech is to text
(E) sound is co wave

40. Picture is to representation as_____.
(A) goat is co sheep
(B) mineral is to water
(C) painting is to sculpture
(D) apple is to orange
(E) perfume is to fragrance

41. Surgery is to hospital as_____.
(A) illness is to infection
(B) slippers is to ballet
(C) lessons is to school
(D) dormitory is to students
(E) doctor is to office

42. Bush is to shrub as_____.
(A) car is to automobile
(B) tree is to flower
(C) bud is to vase
(D) fruit is to vegetable
(E) stalk is to corn

43. Greet is to salute as _____.
(A) hello is to goodbye
(B) army is to navy
(C) wag is to tail
(D) suit is to tic
(E) dress is to evening gown

44. Escape is to confinement as _____.
(A) pursue is to safety
(B) sing is to choir
(C) eat is to buffet
(D) educate is to school
(E) run is to danger

45. Perspiration is to nervousness as _____.
(A) heat is to weather
(B) stress is to articulation
(C) caffeine is to coffee
(D) shivering is to cold
(E) sweat is to water

46. Corporal is to sergeant as joey is to_____.
(A) gosling
(B) penguin
(C) Josephine
(D) emu
(E) kangaroo

47. Funny is to hilarious as_____.
(A) amusing is to joke
(B) safe is to dangerous
(C) hot is to sweltering
(D) helpful is to courteous
(E) terrifying is to scary

48. Library is to books as_____.
(A) CD is to cassettes
(B) ice is to freezer
(C) computer is to circuits
(D) can is to carton
(E) tiger is to forest

49. Car is to key as television is to _____.
(A) outlet
(B) sound
(C) remote control
(D) cabinet
(E) sound

50. Rain is to umbrella as draft is to_____.
(A) wind
(B) cold
(C) thirst
(D) door
(E) military

51. Impressive is to inspiring as derogatory is to_____.
(A) critical
(B) praiseworthy
(C) positive
(D) elevating
(E) dismal

52. Roof is to house as head is to_____.
(A) thought
(B) body
(C) brain
(D) foot
(E) attic

53. Glorious is to exalted as_____.
(A) esteemed is to serious
(B) trivial is to unimportant
(C) fatal is to mortal
(D) insufferable is to kindly
(E) tired is to vigilant

54. Meager is to abundant as_____.
(A) slender is to skinny
(B) rare is to medium
(C) feeble is to rich
(D) decrepit is to robust
(E) weak is to slow

55. Period is to exclamation point as_____.
(A) whale is to fish
(B) turtle is to tortoise
(C) elephant is to pachyderm
(D) glance is to stare
(E) comma is to quotation marks

56. Gem is to stone as_____.
(A) opal is to jade
(B) granite is to shale
(C) pearl is to price
(D) diamond is to mine
(E) jewel is to rock

57. Destitute is to money as_____.
(A) change is to coins
(B) poor is to housing
(C) confident is to doubt
(D) nonplussed is to extravagance
(E) putrid is to rot

58. Sign is to sing as_____.
(A) hand is to heart
(B) song is to mouth
(C) applause is to shout
(D) stop is to pots
(E) rasp is to raps

59. Morose is to cheerful as_____.
(A) clean is to hyperactive
(B) happy is to ecstatic
(C) hygienic is to contaminated
(D) mud is to dirt
(E) subtle is to torpid

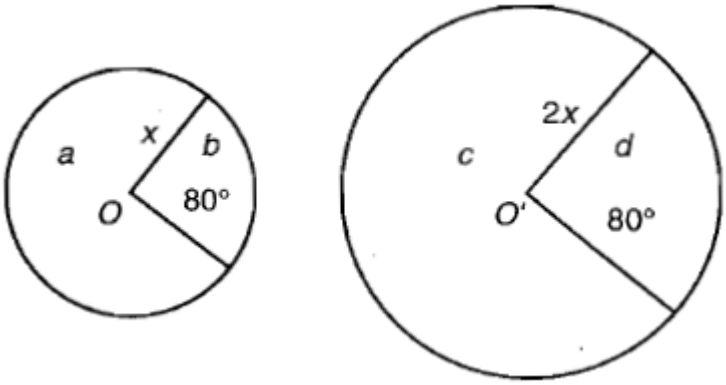
60. Clue is to solution as_____.
(A) period is to sentence
(B) question is to resume
(C) map is to vacation
(D) signpost is to destination
(E) obesity is to eating

SECTION 5 QUANTITATIVE SKILLS

1. In an auto manufacturing plant, the ratio of executives to assembly line workers is 1:15. If there are 480 employees altogether, how many assembly line workers are there?

(A) 350
(B) 450
(C) 400
(D) 300
(E) 410

2. *O* and *O*' are the centers of their respective circles, with radii x and 2x respectively.



Choose the best answer.

(A) area *c* > area *a*
(B) area *b* > area *d*
(C) area *d* > area *c*
(D) area *a* + area *b* = area *d*
(E) area *d* = 2 × area *b*

3. The quotient of 16 and *a* is greater than 4. What is a possible value of *a*?

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

4. Four cab drivers drive an averse of 432 miles per day. Six other cab drivers drive an average of 486 miles per day. How many miles do all ten cabbies driver per day?

(A) 5,832
(B) 2,916
(C) 6,376
(D) 4,866
(E) 4,644

5. For all integers r and s, r * s = r/s + s^2. Find the value of 9*3

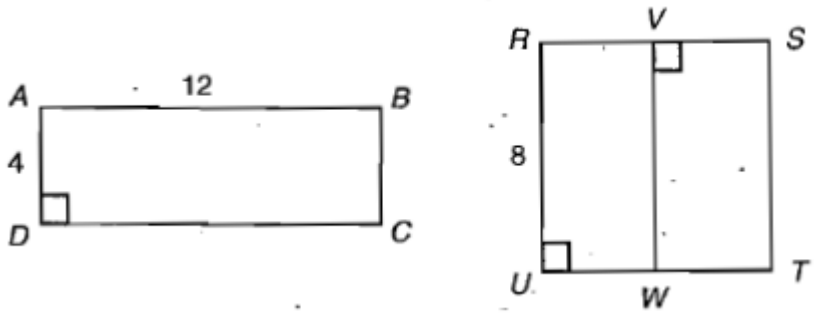
(A) 11
(B) 9
(C) 12
(D) 7

(E) 10

6. If the following sets of numbers represent three sides of a triangle, select the scalene triangle.

(A) 4, 4, 4
(B) 6, 7, 7
(C) 8, 11, 8
(D) 5, 6, 7
(E) 9, 9, 9

7. *ABCD* is a rectangle with length 12 and width 4. *RSTU* is a square, with *V* and *W* the midpoints of *RS* and *TU*, respectively. RU = 8.



Select the correct statement.

(A) The perimeter of *ABCD* is greater than the perimeter of *RSTU*.
(B) The perimeter of *RVWU* is greater than the perimeter of *ABCD*.
(C) One-half of the perimeter of *ABCD* is equal to the perimeter of *RVWU.*
(D) The perimeter of *RVWU* plus the perimeter of *VSTW* is greater than the perimeter of *ABCD*.
(E) The perimeter of *VSTW* is less than one-half the perimeter of *ABCD*.

8. If $\frac{x}{5} = y + 2$, find the value of x when y = 7.

(A) 15
(B) 20
(C) 30
(D) 25
(E) 45

9. If a and b arc integers and a> 0 and b < 0, select the statement that is true for all cases of *a* and *b*.

(A) $ab > 0$
(B) $ab < 0$
(C) $a^2 > b^2$
(D) $a^3 < b^3$
(E) $2a \leq b$

10. If the hypotenuse of a right triangle is 13 and one of its legs is 5, find the area of the triangle.

(A) 20

(B) 40
(C) 45
(D) 30
(E) 25

11. If the circumference of a circle is 31.4, find its radius. Use the formula $C = 2\pi r$ and let $\pi = 3.14$.

(A) 6
(B) 5
(C) 7
(D) 4
(E) 8

12. Malcolm and Dwayne start off running around the track at the same time. If Malcolm can run around the track in 5 minutes and Dwayne can cover the same distance in 3 minutes, when will they again meet at the start of the track?

(A) 12 minutes
(B) 16 minutes.
(C) 15 minutes
(D) 18 minutes
(E) 13 minutes

13. Find the value of the expression $4xy + 5z^2$ when x = 4, y = -3, and z = -2.

(A) -28
(B) 32
(C) -16
(D) 22
(E) 30

14. The sum of the square of a number and 3 is equal to the product of 4 and 7. What is the number.

(A) 3
(B) 6
(C) 5
(D) 4
(E) 7

15. If r, s, and t are positive consecutive odd integers and they are all greater than 3, which of the following statements is true?

(A) $r + t < 2s$
(B) $r^2 > st$
(C) $r + t > 2s$
(D) $r^2 > 2s$
(E) $rs > t^2$

16. If $x = 4/5$, $y = 2/3$, and $z = \sqrt{3}$, find the value of $10x - 9y - 4z^2$.

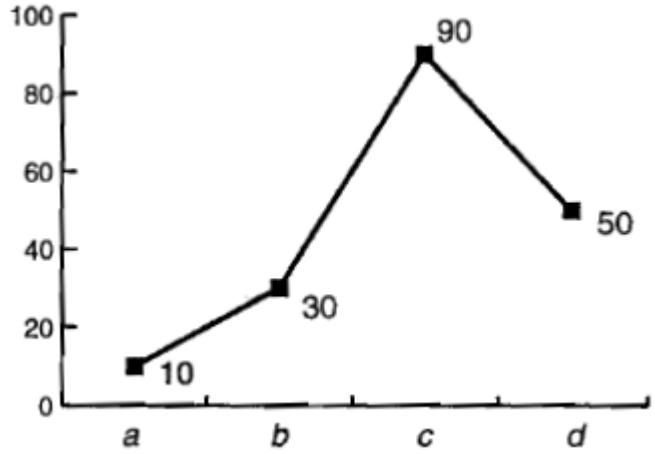
(A) -6

(B) -10
(C) -8
(D) 4
(E) 2

17. Metal screws weigh 3 kilograms per cubic meter. The screws are packaged in a cube whose edge is 1.5 meter. Find the weight of the cube. Round the answer to the nearest tenth of a kilogram.

(A) 9.6 kilograms
(B) 10.125 kilograms
(C) 10.1 kilograms
(D) 9.65 kilograms
(E) 12.5 kilograms

18. Examine the graph and then select the best answer.



(A) $d > a + b + c$
(B) $d = a + b + c$
(C) $d = a + b$
(D) $c - a < b + c$
(E) $a + c < b + d$

19. The areas of *a* rectangle and *a* square are equal. If one side of the square is twice the width of the rectangle and the length of the rectangle is 16, find the width of the rectangle.

(A) 4
(B) 10
(C) 6
(D) 8
(E) 9

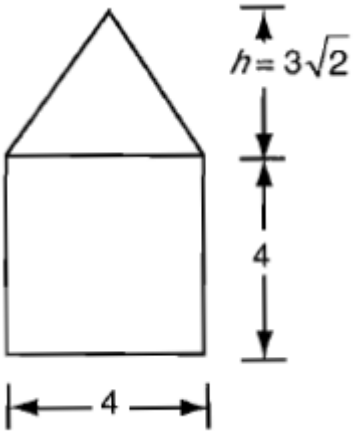
20. If a is a negative integer and b is a positive integer, which of the following statements is true?

(A) $a^2 < 0$
(B) $b^2 < 0$

(C) $a^2 + b^2 > 0$
(D) $ab^2 > 0$
(E) $ab > b^2$

21. If $2^6 = 4^x$, find x.
(A) 6
(B) 5
(C) 2
(D) 4
(E) 3

22. Find the total area of the figure.



(A) $4\sqrt{6} + 4$
(B) $3\sqrt{2} + 4$
(C) $5\sqrt{3} + 12$
(D) $16 + 6\sqrt{2}$
(E) $4\sqrt{3} + 2\sqrt{2}$

23. Find the value of $\frac{3^9}{4\times3^7}$.
(A) 3
(B) $3\frac{1}{2}$
(C) $2\frac{1}{4}$
(D) $2\frac{3}{4}$
(E) $3\frac{3}{4}$

24. Of the following expressions, which is the smallest?
(A) 5 x 3 - (2 + 7)
(B) 5(3)-48/6
(C) 14 - 5 + 30/6
(D) 18/2 - 3(4 - 6) + 54/9
(E) $5(6 + 3) - 3^2$

25. Dwayne was on a diet. When he weighed himself at the scare of his diet, Dwayne weighed 215 pounds. At the end of three months, Dwayne weighed 175 pounds. What fraction of his original weight did he lose? Reduce to lowest terms.

(A) 8/43
(B) 9/36
(C) 7/29
(D) 9/35
(E) 4/11