



# Chapter 5

## Practice Test 1

# PART 1—ENGLISH LANGUAGE ARTS

*Suggested Time—90 Minutes*

57 QUESTIONS

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## REVISING/EDITING

QUESTIONS 1–11

### IMPORTANT NOTE

The Revising/Editing section (Questions 1–11) is in two parts: Part A and Part B.

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### REVISING/EDITING Part A

**DIRECTIONS:** Read and answer each of the following questions. You will be asked to recognize and correct errors in sentences or short paragraphs. Mark the **best** answer for each question.

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1. Read this paragraph.

(1) Art Spiegelman’s graphic novel *Maus: A Survivor’s Tale* is one of the most acclaimed works of literature of the 20th century. (2) *Maus* is the true story of Spiegelman’s parents, Vladek and Anja, Jews who survived the Holocaust in Poland and then emigrated to America after World War II. (3) In Part I of *Maus*, Spiegelman uses text and illustrations to depict the terror Vladek and Anja felt during the Nazi occupation of Poland, Part II focuses on the Spiegelmans’ lives in America after the war. (4) Part II won the Pulitzer Prize for Literature in 1992.

Which sentence should be revised to correct a run-on?

- A. sentence 1
- B. sentence 2
- C. sentence 3
- D. sentence 4

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2. Read this sentence.

J.D. Salinger’s first novel *The Catcher in the Rye*, was published in 1951, when he was 32 years old.

Which edit should be made for this sentence?

- E. insert comma after *novel*
- F. delete comma after *Rye*
- G. insert comma after *Salinger’s*
- H. delete comma after *1951*

3. Read these sentences.

- (1) Many nature preserves are located far from major cities.
- (2) Some big cities have managed to establish their own nature preserves.

What is the best way to combine these sentences to clarify the relationship between the ideas?

- A. Because some big cities have managed to establish their own nature preserves, many nature preserves are located far from major cities.
  - B. Many nature preserves are located far from major cities, and some big cities have managed to establish their own nature preserves.
  - C. Yet some big cities have managed to establish their own nature preserves, many nature preserves are located far from major cities.
  - D. While many nature preserves are located far from major cities, some big cities have managed to establish their own nature preserves.
4. Read this sentence.

Uninteresting and a little loud, I left the concert early.

How should this sentence be revised?

- E. I left the concert early because it was uninteresting and a little loud.
- F. Uninteresting and a little loud, the concert was left early.
- G. I left the concert, uninterested and a little loud.
- H. Early, uninteresting, and a little loud, I left the concert.

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## REVISING/EDITING Part B

**DIRECTIONS:** Read the passage below and answer any questions following it. You will be asked to improve the writing quality of the passage and to correct errors so that each passage follows the conventions of standard written English. You may reread the passage if you need to. Mark the **best** answer for each question.

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### Bluefin Tuna: An Endangered Dinner

(1) Although sushi lovers may never know it, their eating habits may be contributing to the worldwide shortage of Pacific bluefin tuna. (2) A recent study jointly published by several conservation agencies recommended that bluefin tuna be added to the U.S. National Marine Fisheries Service’s list of endangered species. (3) Adding the bluefin tuna to this list would ensure the popular fish is given extreme protection from exploitation and other kinds of harm.

(4) Obviously, let’s ask: how did we get here? (5) Much of this sharp decline can be blamed on people’s insatiable appetite for raw tuna. (6) Scientists estimate that bluefin tuna have been depleted to 3 percent of their pre-exploitation population, or the average number of fish in the oceans before humans began commercially fishing. (7) Originally a favorite of the Japanese diet, tuna sashimi is now prized by eaters all over the world, only heightening the demand for bluefin tuna. (8) Still, the majority of fish caught today is sent to Japan.

(9) Another reason that Pacific bluefin tuna stocks have decreased by 97 percent relates to fishing practices. (10) According to marine biologists, the majority of the bluefin tuna that are caught are very young fish that have not matured to adulthood. (11) Most of the world’s captured tuna never had a chance to procreate. (12) The stock of tuna has decreased sharply.

(13) And many experts say that as long as tuna remains popular among consumers, the troubling cycle will continue unabated. (14) On a normal day at Tokyo’s busy Tsukiji fish market, a single bluefin tuna can sell for tens of thousands of dollars. (15) In fact, in 2013, Kiyoshi Kimura, a Japanese restaurateur, paid \$1.76 million for a tuna—a record price. (16) Indeed, it is easy to understand why fishermen continue to eagerly search the Pacific Ocean for the endangered fish: they can make a fortune selling just one fish.

(17) Some chefs think serving bluefin tuna in restaurants is unconscionable, given their low population numbers. (18) They recognize that action needs to be taken, and have started to pursue other, more sustainable methods. (19) In the United States, many prominent chefs have endorsed the Bluefin Boycott in the name of conservation.

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5. Which revision of sentence 4 best maintains the formal style established in the passage?
- A. How did this happen? is a question you should ask.
  - B. First of all, I must back up for a second: how did we get here?
  - C. It is worth analyzing the causes of the tuna shortage.
  - D. The causes of the tuna shortage: let's talk about them.
6. Where should sentence 5 be moved to improve the organization of the second paragraph (sentences 4–8)?
- E. between sentences 3 and 4
  - F. between sentences 6 and 7
  - G. between sentences 7 and 8
  - H. the end of the paragraph (after sentence 8)
7. Which revision of sentence 8 uses the most precise language?
- A. Still, about 80 percent of the bluefin tuna caught today is sent to Japanese consumers.
  - B. Still, the majority of fish caught today is sent to Japanese consumers.
  - C. Still, about 80 percent of the bluefin tuna caught today is sent to Japan.
  - D. Still, the majority of bluefin tuna caught today is sent to Japanese consumers.
8. What is the best way to combine sentences 11 and 12 to clarify the relationship between ideas?
- E. Because most of the world's captured tuna never had a chance to procreate, the stock of tuna has decreased sharply.
  - F. Despite that most of the world's captured tuna never had a chance to procreate, the stock of tuna has decreased sharply.
  - G. The stock of tuna has decreased sharply, yet most of the world's captured tuna never had a chance to procreate.
  - H. Because the stock of tuna has decreased sharply, most of the world's captured tuna never had a chance to procreate.
9. Which transition word or phrase should be added to the beginning of sentence 17?
- A. And
  - B. In addition
  - C. Moreover
  - D. However

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10. Read this sentence.

Legendary sushi chef Jiro Ono, for instance, has taken to finding alternative fish to take the place of bluefin tuna in his menu.

Where should this sentence be added to best support the ideas in the fifth paragraph (sentences 17–19)?

- E. between sentences 16 and 17
  - F. between sentences 17 and 18
  - G. between sentences 18 and 19
  - H. at the end of the paragraph (after sentence 19)
11. Which concluding sentence should be added after sentence 19 to support the argument presented in the passage?
- A. Ultimately, it will take a more global consensus between scientists, chefs, and consumers to truly reverse the devastation facing the bluefin tuna.
  - B. In the end, not much can be done to save the bluefin tuna as it races toward extinction.
  - C. Ultimately, scientists need to conduct more studies to identify the best way to protect the bluefin tuna.
  - D. If Japanese fishing of bluefin tuna continues at present levels, the status of the tuna is precarious.

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## READING COMPREHENSION

### QUESTIONS 12–57

**DIRECTIONS:** Read the passage below and answer the questions following it. Base your answers **on information contained only in the passage**. You may reread a passage if you need to. Mark the **best** answer for each question.

*The following excerpt, from Mark Twain’s 1876 The Adventures of Tom Sawyer, details Tom’s first encounter with a new neighbor.*

Tom skirted the block, and came round into a muddy alley that led by the back of his aunt’s cow-stable. He presently got safely beyond the reach of capture and punishment, and hastened toward the public square of the village, where two “military” companies of boys had met for conflict, according to previous appointment. Tom was General of one of these armies, Joe Harper (a bosom friend) General of the other. These two great commanders did not condescend to fight in person—that being better suited to the still smaller fry—but sat together on an eminence and conducted the field operations by orders delivered through aides-de-camp. Tom’s army won a great victory, after a long and hard-fought battle. Then the dead were counted, prisoners exchanged, the terms of the next disagreement agreed upon, and the day for the necessary battle appointed; after which the armies fell into line and marched away, and Tom turned homeward alone.

As he was passing by the house where Jeff Thatcher lived, he saw a new girl in the garden—a lovely little blue-eyed creature with yellow hair plaited into two long-tails, white summer frock and embroidered pantalettes<sup>1</sup>. The fresh-crowned hero fell without firing a shot.

1 undergarments that cover the legs

A certain Amy Lawrence vanished out of his heart and left not even a memory of herself behind. He had thought he loved her to distraction; he had regarded his passion as adoration; and behold it was only a poor little evanescent partiality. He had been months winning her; she had confessed hardly a week ago; he had been the happiest and the proudest boy in the world only seven short days, and here in one instant of time she had gone out of his heart like a casual stranger whose visit is done.

He worshipped this new angel with furtive eye, till he saw that she had discovered him; then he pretended he did not know she was present, and began to “show off” in all sorts of absurd boyish ways, in order to win her admiration. He kept up this grotesque foolishness for some time; but by-and-by, while he was in the midst of some dangerous gymnastic performances, he glanced aside and saw that the little girl was wending her way toward the house. Tom came up to the fence and leaned on it, grieving, and hoping she would tarry yet awhile longer. She halted a moment on the steps and then moved toward the door. Tom heaved a great sigh as she put her foot on the threshold. But his face lit up, right away, for she tossed a pansy over the fence a moment before she disappeared.

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The boy ran around and stopped within a foot or two of the flower, and then shaded his eyes with his hand and began to look down street as if he had discovered something of interest going on in that direction. Presently he picked up a straw and began trying to balance it on his nose, with his head tilted far back; and as he moved from side to side, in his efforts, he edged nearer and nearer toward the pansy; finally his bare foot rested upon it, his pliant toes closed upon it, and he hopped away with the treasure and disappeared round the corner. But only for a minute—only while he could button the flower inside his jacket, next his heart—or next his stomach, possibly, for he was not much posted in anatomy, and not hypercritical, anyway.

He returned, now, and hung about the fence till nightfall, “showing off,” as before; but the girl never exhibited herself again, though Tom comforted himself a little with the hope that she had been near some window, meantime, and been aware of his attentions. Finally he strode home reluctantly, with his poor head full of visions.

12. How can the perspective of the narrator best be described?
- E. from Tom Sawyer’s point of view
  - F. from an all-knowing perspective
  - G. from the girl’s point of view
  - H. from the perspective of the townspeople who witness Tom’s adventures
13. The author most likely includes the phrase “Then the dead were counted, prisoners exchanged, the terms of the next disagreement agreed upon, and the day for the necessary battle appointed” (lines 18–22) in order to
- A. convey the seriousness of the conflict between the boys.
  - B. suggest that Tom and his friends strictly adhered to traditional rules and customs of warfare.
  - C. treat the “warfare” as seriously as Tom and his friends might.
  - D. lament the endless nature of the boys’ fighting.
14. The phrase “The fresh-crowned hero fell without firing a shot” (lines 31–32) suggests that
- E. with one glance, Tom fell helplessly in love with “the new girl.”
  - F. Tom’s gun malfunctioned, preventing him from properly fighting in the battle.
  - G. upon seeing the appealing young girl, Tom fell flat on his face in shock.
  - H. Tom forgot about his victory crown once he spotted “the new girl.”
15. What is the best way to describe Tom’s reaction to seeing the new girl on the street?
- A. indifference
  - B. embarrassment
  - C. enthusiasm
  - D. disinterest

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16. Which of the following best explains Tom’s behavior toward the pansy in the fourth paragraph?
- E. He is unsure if it would be appropriate to pick up the flower immediately.
  - F. He thinks his “showing off” has failed, so he gives up and heads home with the pansy.
  - G. He is so delighted by the girl’s pansy that he cannot hide his glee.
  - H. He wishes to impress the girl, if she is still watching, by carrying the flower off in an unusual way.
17. Why does the author mention that Tom will “button the flower inside his jacket, next his heart—or next his stomach, possibly” (lines 82–84)?
- A. Tom is not savvy enough to differentiate between the location of his heart and stomach.
  - B. Tom is so distracted by his new crush that he mistakenly buttons his flower in the wrong place.
  - C. Tom’s anatomy is highly unusual in that his stomach is located close to his heart.
  - D. Tom metaphorically places the flower “next to his heart,” but in reality he places it in his trouser pocket.
18. The attitude of the new girl towards Tom is
- E. enamored.
  - F. unclear.
  - G. appalled.
  - H. humored.
19. The author most likely mentions Amy Lawrence in order to
- A. explain that Tom is faithful to Amy and loves her very much.
  - B. demonstrate the fickleness of Tom’s affections.
  - C. compare her sense of style with the new girl’s.
  - D. introduce a new character the reader is about to meet.

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Many contemporary scientists believe that the universe began in a giant explosion, or “big bang.” At least ten billion years ago, they surmise, a state of extremely high temperature and pressure caused the universe to expand rapidly from a compressed state. Soon after, there was significant cooling, and at this point there were probably many types of elementary particles present. As further cooling occurred, the first nuclei were formed. Gradually, over millions of years, the universe began to take on the characteristics that we observe today.

One of the major assumptions upon which the big bang theory is dependent is called the cosmological principle. This principle states that our observations of general properties of the universe do not depend on our location or the direction in which we look. Based on this assumption, scientists believe that the explosion known as the big bang occurred not at any particular point, but instantaneously throughout space.

Evidence to support the big bang theory comes mainly from observations of galaxies out beyond our Milky Way. These galaxies are so far away that, by the time light reaches us from there, millions of years have passed. Distant objects are seen as they appeared when the light we receive first left them, providing us with a picture of the early universe.

In addition, the discovery of weak radiation has given support to the big bang theory of the origin of the universe. This low-level static, observed coming from every direction in space, is regarded as the remains of the initial fireball. At the very beginning, the temperature of the fireball was unimaginably hot. This heat accounts for the radiation we now detect.

Another important piece of evidence is the amount of an element called Helium-4 found in the universe. If the big bang theory is correct, we would expect to find that Helium-4 makes up about 25% of the matter in the universe. When the universe was only one or two minutes old, it was much too hot to make Helium-4. Then for about 14 minutes, the temperature was perfect for making this element through a process called nuclear fusion. By the time the universe was about 17 minutes old, the universe had cooled down too much to make Helium-4. These 14 minutes of fusion would generate enough Helium-4 to make up 25% of the matter. In fact, that is what we see today, supporting the big bang theory.

It is true that nuclear fusion has always taken place in stars, as well. But all of the stars that have ever existed could not possibly create anywhere near the amount of Helium-4 that exists. So, nuclear fusion when the universe was in its infancy is a logical hypothesis to explain all the Helium-4 we observe.

20. Which of the following best tells what the passage is about?
- E. a proof of the origin of the universe
  - F. an explanation of how scientists derived the age of the universe
  - G. a consideration of one major use of static
  - H. a discussion of some evidence for one theory of the origin of the universe

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21. In order to support the big bang theory, the author mentions which of the following?
- A. the results of Galileo’s research
  - B. the discovery of low-level radiation
  - C. the presence of lead in the initial fireball
  - D. the exact temperature of the initial fireball
22. The discussion of the change in temperature, in lines 4–10, implies that
- E. gradually, the earth moved into a period known today as an ice age.
  - F. nuclei have always been present.
  - G. elementary particles are never found under extreme temperatures.
  - H. nuclei did not exist under the extreme heat of the initial explosion.
23. The discussion of the cosmological principle suggests that
- A. scientists sometimes have to base their theories on other theories.
  - B. scientists will never be able to concretely prove the big bang theory.
  - C. we cannot make direct observations of the characteristics of the universe.
  - D. scientists are able to identify the precise location at which the big bang took place.
24. In what way is measurement of the speed of light useful for scientists researching the big bang theory?
- E. Scientists can measure the speed and force of the explosion.
  - F. The light distorts the images the scientists are observing.
  - G. Scientists can estimate the time period in which the observations they make now actually occurred.
  - H. Scientists are able to observe the explosion as it happened.
25. According to the fourth paragraph, what is one characteristic of the static that caused scientists to associate it with the big bang?
- A. The radiation was created as the universe cooled.
  - B. The low-level static does not seem to be coming from one specific place.
  - C. The initial fireball was comprised mostly of static.
  - D. The initial explosion was equivalent in magnitude to a nuclear explosion.

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The perception of *canis lupus*, the wild wolf, as humanity's great antagonist is one that pervades Western literature. It is *canis lupus* who dispossesses the Three Little Pigs, who devours Little Red Riding Hood's granny, and who eventually shows up after Peter cried "wolf!" too many times. This image likely originated in the Middle Ages. During the Black Plague, human cultivation of herd animals—sheep, cattle, and the like—came to a standstill. Ravenous wolves, no longer able to stalk their traditional prey (herd animals), turned their attentions to human beings. Men soon came to see the wolf as "the Devil, red-tongued, sulfur-breathed, and yellow-eyed."

Ironically, *canis lupus* and humans have lived together, usually peacefully, for two million years—since the wolf evolved to its present form. About 13,000 years ago, Paleolithic hunter-gatherers bred wolves as domestic dogs, *canis familiaris*. Why wolves? We can't say for sure. There are all kinds of possibilities. One prevalent view today posits that wolves gathered around the Paleolithic humans' campsite looking for food. Some wolves may have been less frightened and more willing to approach closely. Through natural selection these wolves' offspring were the first steps of the wolves' evolution into dogs.

But why did the humans welcome the dogs? Perhaps our ancestors admired the beast's power, intelligence, and social interactions. The wolf pack, say many biologists, is just a more primitive version of the human hunter-gatherer social structure. They have a community in which it is their social interdependence that aids them all in survival. Sound familiar?

People may have domesticated the wolf also because of wolves' expressiveness.

Through body language and facial expressions, wolves communicate their moods, from anger and aggression to happiness and submission. Early humans surely picked up on the signals, just as the wolves probably picked up on the humans' own methods of communication. Domestication may have been a natural step once the two species had developed a way to understand one another's moods.

To capture their prey, wolves use tactics so similar to those of hunter-gatherer teams that anthropologists suspect early humans learned to track large animals by watching wolves do the same. Wolves may "appoint" one pack member as a decoy who will lunge at and run around the prey. This allows the rest of the pack to take its victim by surprise. Wolf packs may also form two teams, one to stampede its prey toward the other. In these and other ways, the wolves use their various strengths to achieve success as a group. Some may be physically powerful, some watchful and clever, but if the pack is successful all will sleep with a full belly by nightfall.

These theories ring true to anyone who has a dog today. After all, all modern dogs (no matter how different they seem from the wolf) communicate in the same way as do wolves, and a family's pet dog becomes a member of the "pack," just as those first domesticated wolves must have done thousands of years ago.

26. Which of the following best tells what this passage is about?
- E. how humans domesticated the wild wolf
  - F. some speculations about the history of relations between wolves and humans
  - G. how wolves live
  - H. wolves in fairy tales

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27. According to the passage, all of the following are true about wolves **except** that they
- A. hunt herd animals.
  - B. are skilled hunters.
  - C. have always coexisted peacefully with humans.
  - D. used hunting methods that may have served as a model for early man’s hunting methods.
28. According to the passage, domestic dogs
- E. are descendants of *canis lupus*.
  - F. are “red-tongued” and “sulfur-breathed.”
  - G. are classic examples of hunter-gatherers.
  - H. attack herd animals.
29. The author states that our perception of the wolf as evil probably originated during the Middle Ages because it was then that
- A. human beings first started to tell bedtime stories.
  - B. human beings first started to breed dogs.
  - C. the term *canis lupus* was first coined.
  - D. wild wolves preyed on people.
30. The author provides which of the following as an example of herd animals?
- E. cattle
  - F. wolves
  - G. Paleolithic men
  - H. large animals
31. The author uses the word “ironically” at the beginning of the second paragraph because it is ironic that
- A. human beings died by the millions during the Black Plague.
  - B. humans would so despise an animal that had so infrequently been their enemy.
  - C. Paleolithic wolves were more primitive than Paleolithic humans.
  - D. wolves have more physical power than intelligence.

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The term *Inka* means ruler and is the basis for the name of the Inca Empire; after conquering the Inca, the Spaniards adopted the Spanish spelling Inca. Before the Spaniards' arrival, however, the Inca called their empire Tawantinsuyu. This means "four parts together," as the empire was divided into four regions whose corners met at Cusco (in Peru), the capital of the empire.

Inca territory covered much of South America, including Peru as well as parts of Ecuador, Bolivia, Argentina, Chile, and Columbia. Originally a small tribe in Cusco, the Inca formed the Kingdom of Cusco and then expanded through the leadership of Pachacuti-Cusi Yupanqui. He sent spies to regions he wanted to incorporate into the empire to determine the strength of those regions. He then offered the leaders the opportunity to join the Inca Empire, promising greater wealth. These rulers quite often accepted, and Pachacuti brought the rulers' children to Cusco to learn about the Incan political system.

As the Inca Empire expanded its reach, Pachacuti created the central Incan government, Tahuantinsuyu, and four local governments headed by loyal leaders. After Pachacuti's death, his son took his place, as did his son's son years later. Under this family, the creation of the empire was swift, taking place between 1438 and 1533. Thereafter, the empire was even more swiftly dismantled, as the Spanish conquered Incan territory. The last of the Incan territory was taken by 1572.

The Inca are known today for their architecture, including the world-famous Machu Pichu. Their temples were constructed without mortar to bind the stones together, but the stones fit together so beautifully that a steel blade cannot be inserted between different stones. The Inca are also known

for creating units of measurement, such as the length between the thumb and forefinger and the distance of a wingspan, and for an understanding of astronomy. Indeed, the Inca developed two calendars, one based on the cycle of the sun and the other on the lunar cycle. Time within a day was measured by the travel of the sun.

Unfortunately, much information about the Inca remains a mystery, because many aspects of Incan culture were destroyed by the Spanish invaders. Among the outstanding questions is whether the Inca developed a written language. For years, archaeologists believed they had not, but more recent theories suggest that the Inca may have used knotted strings, known as quipu, at least as a means of storing numerical data. Whether the quipu conveyed other information remains a subject of inquiry and debate.

**32.** Which of the following best tells what this passage is about?

- E.** how Pachacuti expanded the Inca Empire
- F.** the solar and lunar calendars used by the Inca
- G.** the destruction of aspects of Incan culture by the Spanish
- H.** a brief history of the Inca Empire and its accomplishments

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- 33.** Which of the following best describes the relationship between Pachacuti and some leaders of nearby regions?
- A.** Pachacuti feared the regional leaders' growing power.
  - B.** The leaders were persuaded by Pachacuti's offer to join the Empire.
  - C.** Pachacuti admired the leaders for their skills in battle.
  - D.** The leaders feared Pachacuti's military might and harsh reputation.
- 34.** Which of the following statements about Incan architecture is best supported by the passage?
- E.** Its stones are known to fit together well.
  - F.** Machu Pichu is the only remaining example.
  - G.** It utilized both stones and steel.
  - H.** The Spanish disliked the architecture.
- 35.** What aspect of the Inca Empire "remains a mystery" (line 58)?
- A.** what the Spanish hoped to gain by invading
  - B.** whether the Incan people had a written language
  - C.** when the Inca developed their calendars
  - D.** how the Spanish succeeded in destroying the Inca Empire
- 36.** What role did Pachacuti's spies play in the Inca Empire?
- E.** They warned Pachacuti of plots to overthrow him.
  - F.** They learned about the Spaniards' plan for invasion.
  - G.** They informed Pachacuti about certain territories.
  - H.** They eventually supported the invading Spaniards.
- 37.** Which of the following statements about "quipu" (line 67) would the author be most likely to agree?
- A.** They prove the existence of a written language.
  - B.** There remains some debate about their significance.
  - C.** The Spaniards destroyed all existing quipu.
  - D.** They can represent numbers but not letters.

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Georgia O’Keeffe is known primarily for her large paintings of flowers, images of New York City architecture, and subjects relating to New Mexico. Born in 1887, O’Keeffe knew she wanted to be an artist at the age of ten. After studying art at the School of the Art Institute of Chicago and the Art Students League of New York, O’Keeffe abandoned her dream of being an artist because she did not believe she was talented enough in the techniques she had been taught.

Four years later, however, she discovered new, more modern artistic ideas and returned to school to master—and then teach—the new approach. Early in 1916, the owner of an important art gallery, Alfred Stieglitz, showed some of O’Keeffe’s charcoal drawings, which he said were among “the purest, finest, sincerest things” he had seen in his gallery. Later, he organized a collection of her oil paintings and watercolors. O’Keeffe and Stieglitz would eventually marry.

During the 1920s, O’Keeffe began painting extreme close-ups of flowers and other natural forms. The exhibitions of her work (at Stieglitz’s gallery, among others) established her as one of the most important artists in America. During this period, she also painted scenes of New York City, but by the end of the decade, O’Keeffe wanted to find a new source of inspiration. She found that inspiration in New Mexico, whose desert colors and distinctive natural architecture led her to paint an entirely new subject matter.

O’Keeffe’s popularity continued to grow throughout the 1930s and 1940s, and her work was featured in major institutions, such as the Museum of Modern Art. During the 1950s (following her husband’s death in 1946), O’Keeffe traveled around the world, painting scenes of what she saw, including a

series of paintings based on her views of the clouds she saw from airplanes.

She continued to paint using oil paints until 1972, when her eyesight deteriorated. She thereafter limited herself to pencil and charcoal. In 1977, O’Keeffe received the Presidential Medal of Freedom from President Gerald Ford.

Following her death in 1986, many of O’Keeffe’s works were left to the Georgia O’Keeffe Foundation and later the Georgia O’Keeffe Museum in Santa Fe. In 2006, a newly discovered fossil of an ancient crocodile-like creature found near O’Keeffe’s former New Mexico home was named *Effigia okeeffeae* (“O’Keeffe’s Ghost”) to honor her for the numerous paintings she drew from her home, which was called Ghost Ranch.

38. Which of the following best tells what the passage is about?
- E. the flowers in O’Keeffe’s work
  - F. a brief history of modern art
  - G. O’Keeffe’s career as an artist
  - H. modern artists of the twentieth century
39. According to the author, why was a fossil named for O’Keeffe?
- A. because O’Keeffe left her works to the Georgia O’Keeffe Museum
  - B. because the fossil was found near the source of many O’Keeffe paintings
  - C. because “O’Keeffe’s Ghost” was one of her most popular paintings
  - D. because the crocodile-like creature was featured in an O’Keeffe painting

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40. Why did O’Keeffe decide not to become an artist after her initial schooling?
- E. She was devoted to her marriage to Alfred Stieglitz.
  - F. Her art was rejected by several galleries.
  - G. Her flower paintings were not yet popular among the public.
  - H. She felt unsure about her artistic abilities.
41. How did O’Keeffe react to her declining eyesight (lines 50–53)?
- A. She retired to New Mexico.
  - B. She stopped using oil paints.
  - C. She spent more time traveling.
  - D. She showed her work at museums.
42. What prompted O’Keeffe to paint images of New Mexico?
- E. She found a source of inspiration there.
  - F. Alfred Stieglitz asked her to do so.
  - G. She wanted to establish a museum in Santa Fe.
  - H. The flowers of New Mexico were particularly beautiful.
43. Which of the following best describes O’Keeffe as an artist?
- A. celebrated and significant
  - B. frustrated and insecure
  - C. dependent upon her husband
  - D. consistent in her vision

CONTINUE ON TO THE NEXT PAGE ►

*This excerpt from “Crossing Brooklyn Ferry,” written in 1856, describes the poet Walt Whitman’s experience of riding the ferry from Manhattan to Brooklyn in the half hour before sunset.*

Flow on, river! flow with the flood-tide,  
and ebb with the ebb-tide!  
Frolic on, crested and scallop-edg’d  
waves!  
5 Gorgeous clouds of the sunset! drench  
with your splendor me, or the men  
and women generations after me!  
Cross from shore to shore, countless  
crowds of passengers!  
10 Stand up, tall masts of Mannahatta!  
stand up, beautiful hills of Brooklyn!  
Throb, baffled and curious brain! throw  
out questions and answers!  
Suspend here and everywhere, eternal  
15 float of solution!  
Gaze, loving and thirsting eyes, in the  
house or street or public assembly!

Sound out, voices of young men! loudly  
and musically call me by my highest<sup>1</sup>  
20 name!  
Live, old life! play the part that looks  
back on the actor or actress!  
Play the old role, the role that is great  
or small according as one makes it!  
25 Consider, you who peruse me, whether I  
may not in unknown ways be looking  
upon you;  
Be firm, rail over the river, to support  
those who lean idly, yet haste with  
30 the hastening current;  
Fly on, sea-birds! fly sideways, or wheel  
in large circles high in the air;  
Receive the summer sky, you water, and  
faithfully hold it till all downcast eyes  
35 have time to take it from you!  
Diverge, fine spokes of light, from the  
shape of my head, or any one’s head,  
in the sunlit water!  
Come on, ships from the lower bay!  
40 pass up or down, white-sail’d schoo-  
ners, sloops, lighters!

1 Most direct

Flaunt away, flags of all nations! be  
duly lower’d at sunset!  
Burn high your fires, foundry chimneys!  
45 cast black shadows at nightfall! cast  
red and yellow light over the tops of  
the houses!

44. How can this poem best be described?
- E. a paean to the ocean as an object with boundless energy
  - F. a reflection on the communal experience of going from one place to another
  - G. a declaration of love for a great city and its inhabitants
  - H. a memory of a past experience that the poet yearns for
45. What is the effect of mentioning “the men and women generations after me” (lines 6–7)?
- A. Whitman imagines how different it will be for his descendants to look at the sun as they cross the river.
  - B. Whitman fathoms himself as just one small person among millions more who will experience the crossing.
  - C. Whitman invites the modern-day reader to think of a time he or she rode on a ferry.
  - D. Whitman offers a thought on the ever-growing population of New York City.

CONTINUE ON TO THE NEXT PAGE ►

46. What is the author suggesting with the phrase “Suspend here and everywhere, eternal float of solution!” (lines 14–15)?
- E. The ferry has provided him with a momentary clarity he wishes could be extended longer.
  - F. He wishes that the ferry would stop moving forward and, instead, pause to float in the river.
  - G. The experience of crossing the river has given him all the solutions to his problems.
  - H. If only the ferry would travel to every shore, he could find what he is looking for.
47. The first lines of the final stanza (lines 18–20) describe
- A. the poet’s realization that the ferry is filled with actors and actresses who are calling out to him.
  - B. a forceful plea to live one’s life, despite one’s old age.
  - C. the frightening moment of seeing a stranger and looking into his or her eyes.
  - D. Whitman’s desire to seize the moment and to be fully in charge of his destiny.

48. Consider the following lines (33–38) from the poem:

Receive the summer sky, you water,  
and faithfully hold it till all down-  
cast eyes have time to take it from  
you!

Diverge, fine spokes of light, from  
the shape of my head, or any one’s  
head, in the sunlit water!

Why might Whitman have included these lines?

- E. to demonstrate the science behind the sun’s UV rays and their interactions with water
- F. to reflect on how seeing a bouncing ray of sun can cheer a disheartened person
- G. to show an unseen connectedness between humans and nature
- H. to suggest that a sunbeam hitting a human’s head can offer not just physical warmth but spiritual sustenance

CONTINUE ON TO THE NEXT PAGE ►

- 49.** The poet most likely ended each thought with an exclamation point in order to
- A.** demonstrate the speaker's agitation and troubled state of mind.
  - B.** indicate the high volume with which the poem ought to be read aloud.
  - C.** convey the speaker's joyous, excited attitude about the objects he sees and describes.
  - D.** express an almost shouting quality that will awaken the reader to action.
- 50.** In the line "Stand up, tall masts of Mannahatta!" (line 10), the narrator means
- E.** to draw the reader's attention to an antiquated spelling of "Manhattan."
  - F.** that the buildings of Manhattan strike him like tall ships.
  - G.** to say that he sees ships in Mannahatta.
  - H.** to shock the reader by inexplicably calling out to inanimate objects.

CONTINUE ON TO THE NEXT PAGE ►

The latter half of the eighteenth century was to chemistry what Galileo's time had been to physics. The outstanding achievement was basing chemistry on sound, precise, quantitative measurement. The balance, symbol of the modern chemist of the late 1700s, enabled chemists to substitute precise weights for the crude approximations of the medieval alchemist.

This refined approach helped lead to a number of important discoveries. One of the most significant was the clarification of the distinction between a true chemical reaction and the mere process of mixing. This distinction had been dimly perceived before; mixtures displayed a blend of the properties of their components, depending on the relative proportions making up the mixture. A chemical reaction, however, might produce a substance totally unlike the materials that went into its formation. For example, common water arises from the union of two gases: oxygen and hydrogen. Similarly, the putty-like metal sodium reacts with the green gas chlorine to form ordinary table salt. But the explanation for the difference seemed hazy until the analytic balance revealed the key. By careful weighing, chemists found that mixtures could be formed in any desired proportions, but chemical reactions were produced by an exact recipe. The constituents had to be present in some exact proportion of weight; if the proportions were not exact, less of the resultant substance was produced.

Finally, the founders of modern chemistry clarified yet another distinction between types of substances. They classified some as elements, which could not be broken down into other substances, and others as compounds, which could.

The whole picture was terribly inviting to an atomist. All one needed to do was identify the elements as representing

the different kinds of atoms, chemical compounds as substances formed by attaching atoms of different elements together, and mixtures as a free mingling of independent atoms without any ties between them. But atomism, and indeed the whole intellectual style of imaginary model building that lay behind it, was mainly the province of physicists. One such, the Italian Amedeo Avogadro, pushed the atomic idea in chemistry well before the end of the eighteenth century. But while his arguments satisfied many of his own colleagues, the vast majority of chemists remained skeptical of such wild talk. Throughout its history, chemistry has tended to be a far more conservative science than physics, sticking close to its empirical roots and disdaining abstractions and speculations. The chemists paid little attention to atomism until one of their own, the English chemist Thomas Dalton, brought it forcefully to their attention by showing that the atomic structure of matter could explain the peculiar regularities that kept popping up in the recipes uncovered by the analytic balance.

51. Which of the following best tells what this passage is about?
- A. the contrast between chemistry and physics
  - B. the contributions of Amedeo Avogadro to chemistry
  - C. the importance of the interdependence of chemistry and physics
  - D. a summary of some key innovations in chemistry in the late 1700s

CONTINUE ON TO THE NEXT PAGE ►

52. The phrase “precise, quantitative measurement” (lines 5–6) refers to the
- E. mathematical nature of physics.
  - F. new discoveries in chemical research in the eighteenth century.
  - G. better methods of weighing and measuring in the eighteenth century.
  - H. reliance upon the measurements of alchemists.
53. According to the passage, a chemical reaction
- A. produces water.
  - B. results from mixing.
  - C. can produce a substance different from its original materials.
  - D. can be made without an exact recipe.
54. The term “exact recipe” in line 34 is used by the author in order to
- E. show how mixtures and chemical reactions are the same.
  - F. illustrate the difference between quantitative and proportional measurements.
  - G. demonstrate that the crude methods of early chemists were more like cooking than science.
  - H. show the important distinction between a simple mixture and a chemical reaction.
55. The author would agree with which of the following about atomists?
- A. Their theories were readily accepted by chemists.
  - B. They discovered that elements could not be broken down.
  - C. Their theories were not studied until the nineteenth century.
  - D. Historically, they were often at odds with chemists.
56. Which of the following is **not** discussed in the passage?
- E. the difference between simple mixtures and chemical reactions
  - F. the differences between elements and compounds
  - G. the early developments of modern chemistry
  - H. methods by which scientists could split the atom
57. Why does the author mention the Italian physicist Amedeo Avogadro?
- A. to discredit the wild ideas that Avogadro put forth at the end of the eighteenth century
  - B. to provide an example of an early advocate of atomism
  - C. to introduce the scientist who discovered the distinction between a true chemical reaction and the process of mixing
  - D. to offer a dissenting opinion from the prevailing ideas of the chemist Thomas Dalton

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# PART 2—MATHEMATICS

*Suggested Time—90 Minutes*

57 QUESTIONS

## IMPORTANT NOTES:

- (1) Formulas and definitions of mathematical terms and symbols are **not** provided.
  - (2) Diagrams other than graphs are **not** necessarily drawn to scale. Do not assume any relationship in a diagram unless it is specifically stated or can be figured out from the information given.
  - (3) Assume that a diagram is in one plane unless the problem specifically states that it is not.
  - (4) Graphs are drawn to scale. Unless stated otherwise, you can assume relationships according to appearance. For example, (on a graph) lines that appear to be parallel can be assumed to be parallel; likewise for concurrent lines, straight lines, collinear points, right angles, etc.
  - (5) Reduce all fractions to the lowest terms.
- 

## GRID-IN PROBLEMS

QUESTIONS 58–62

**DIRECTIONS:** Solve each problem. On the answer sheet, write your answer in the boxes at the top of the grid. Start on the left side of each grid. Print only one number or symbol in each box. **DO NOT LEAVE A BOX BLANK IN THE MIDDLE OF AN ANSWER.** Under each box, fill in the circle that matches the number or symbol you wrote above. **DO NOT FILL IN A CIRCLE UNDER AN UNUSED BOX.**

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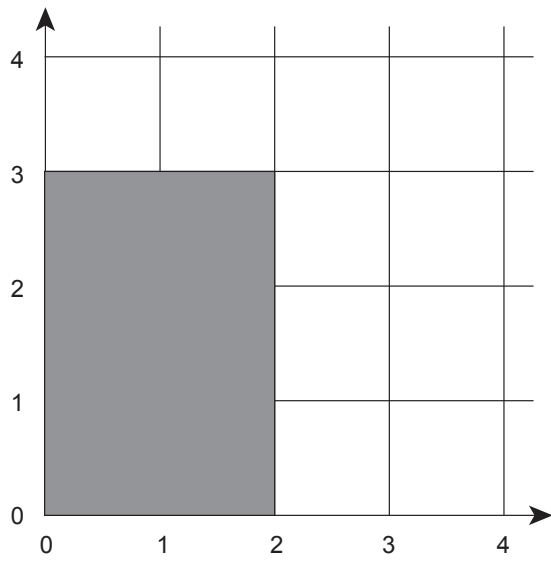
58. In an inventory of 100 sodas, 65 are diet and 30 are caffeine-free. Of the diet sodas, 22 are caffeine-free. If a soda in the inventory is selected at random, what is the probability that it is neither diet nor caffeine-free?

59.  $\frac{1}{2} \times \frac{8}{40} \times \frac{15}{25} \times \frac{3}{2} =$

60. What is the sum of all the distinct prime factors of 48?

CONTINUE ON TO THE NEXT PAGE ►

61.



What is the area of the shaded region above?

62. A rectangular box has a base with length 4 and width 5. If the height of the box is twice its length, what is the surface area of the box?

CONTINUE ON TO THE NEXT PAGE ►



## MULTIPLE CHOICE PROBLEMS

QUESTIONS 63–114

**DIRECTIONS:** Solve each problem. Select the **best** answer from the choices given. Mark the letter of your answer on the answer sheet. You can do your figuring in the test booklet or on paper provided by the proctor. **DO NOT MAKE ANY MARKS ON YOUR ANSWER SHEET OTHER THAN FILLING IN YOUR ANSWER CHOICES.**

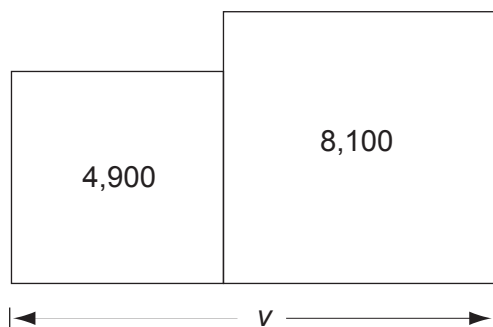
63. A pair of shoes was marked down by 20% on Monday. On Friday the price was reduced by 10%. If the original price of the shoes was \$60.00, what was the final sale price?

A. \$48.00  
B. \$43.20  
C. \$42.20  
D. \$42.00

65. A recipe for 27 servings of punch calls for 12 gallons of orange juice. How many gallons of orange juice would be needed for 45 servings of the same punch?

A. 16  
B. 20  
C. 24  
D. 33

64.



The above figure is composed of two squares with areas as shown. What is the value of  $v$ ?

E. 70  
F. 90  
G. 140  
H. 160

66. A mint has two machines for making coins. One machine can make a coin every 5 seconds and the other machine can make a coin every 6 seconds. How many coins can be made by the two machines combined in 1 minute?

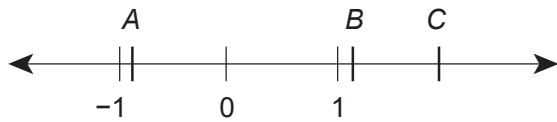
E. 12  
F. 22  
G. 24  
H. 36

67. If  $q + r + s = 117$ , and  $q = s = 4r$ , then  $r =$

A. 13  
B. 18  
C. 30  
D. 42

CONTINUE ON TO THE NEXT PAGE ►

68.



Based on the number line above, which of the following statements must be true?

- E.  $A + B > 2$
- F.  $A + C > 2$
- G.  $C - B > 1$
- H.  $C - A > 1$

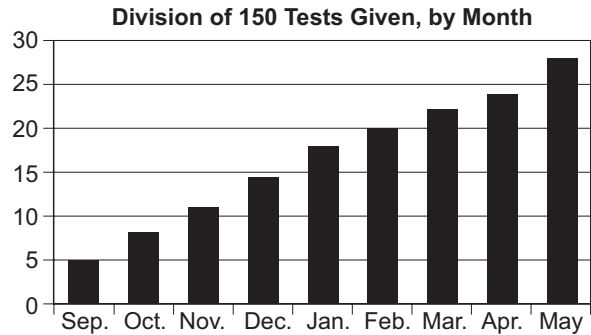
69. If the sum of two numbers is 29 and their difference is 7, what is the larger of the two numbers?

- A. -11
- B. 11
- C. 12
- D. 18

70. A compact disc is placed in a player that randomly selects and plays songs from the compact disc. The compact disc contains 3 ballads, 4 instrumental pieces,  $x$  dance tracks and no other pieces. If the probability that the first song played will be a ballad is  $\frac{1}{4}$ , what is the value of  $x$ ?

- E. 4
- F. 5
- G. 9
- H. 12

71.



Based on the graph above, what was the first month in which, by the end of that month, at least one-third of the 150 tests had been given?

- A. December
- B. January
- C. February
- D. March

72. If  $5q = 3r = 30$ , then  $qr =$

- E. 32
- F. 40
- G. 50
- H. 60

73. A teacher has a class of 12 students. She must select 4 to which to give a year-end award certificate. How many groups of 4 students can the teacher select?

- A. 24
- B. 495
- C. 6,720
- D. 11,880

CONTINUE ON TO THE NEXT PAGE ►

74.  $\frac{5^2 + 5}{5} =$

- E. 5
- F. 6
- G. 25
- H. 26

75. Alexis traveled in a car at an average speed of 130 kilometers per hour for 6 hours and 24 minutes. What distance did she travel?

- A. 780 km
- B. 806 km
- C. 811 km
- D. 832 km

76. Michele is assigned to do 50 pushups in gym class. She has done 20 in 40 seconds. Assuming the same rate, how many **more** seconds will it take Michele to complete the assignment?

- E. 40
- F. 60
- G. 80
- H. 100

77. Kai rides his bicycle up the hill to school and back every day. He travels twice as fast downhill as uphill, and it takes 30 minutes round-trip. If he travels at a rate of 18 miles per hour on the trip home, how far away is his school?

- A. 3
- B. 6
- C. 9
- D. 12

78. During a rainstorm, an empty swimming pool with rectangular dimensions of 9 feet long and 20 feet wide was filled to a depth of 6 inches. What volume of water, in feet, rained into the pool?

- E. 60 cu ft
- F. 90 cu ft
- G. 180 cu ft
- H. 1,080 cu ft

79.

Subject	Grade
Math	A
English	
Chemistry	D
Physics	
French	B

Conversions: A = 4, B = 3, C = 2, D = 1, Fail = 0.

The chart above is a partially completed report card for Karen. If grade point average is defined as the average of the Conversions (listed above) associated with each grade, what is the minimum grade point average she can receive if she took all the subjects listed above and did not fail any of them?

- A. 1.6
- B. 2.0
- C. 2.4
- D. 2.8

CONTINUE ON TO THE NEXT PAGE ►

80. An eight-sided die with faces numbered 1 through 8 is rolled twice. What is the probability that the first roll will be 3 and the second roll will be 8 if the die can never be rolled as a 6?

- E.  $\frac{1}{8}$   
F.  $\frac{2}{7}$   
G.  $\frac{1}{49}$   
H.  $\frac{2}{49}$

81. A car dealer sells  $b$  blue cars and  $r$  red cars in one day. Which of the following equations represents the statement, "The number of blue cars sold is three times the number of red cars sold?"

- A.  $3r = b$   
B.  $3b = r$   
C.  $b + 3 = r$   
D.  $b = r + 3$

- 82.



Line segment  $RT$  has a length of 12.

Segment  $ST$  is  $\frac{1}{6}$  of  $RT$ . What is the ratio of the length of segment  $ST$  to the length of segment  $RS$ ?

- E.  $\frac{1}{6}$   
F.  $\frac{1}{5}$   
G.  $\frac{5}{6}$   
H. 5

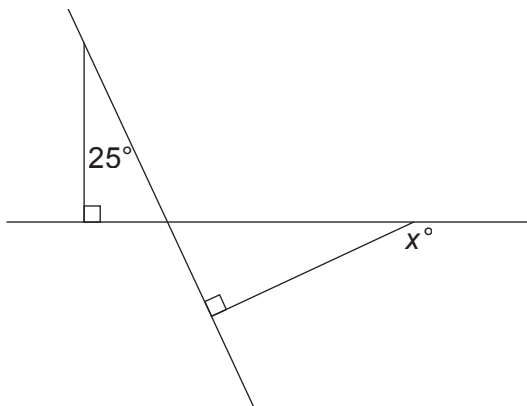
83. Points  $A$  and  $G$  on a number line are 16 units apart, and point  $D$  is the midpoint of  $AG$ . Point  $X$ , which is located at  $-3$  on the number line, is the midpoint of  $AD$ . Which of the following is a possible midpoint of  $XG$ ?

- A. 6  
B. 5  
C. 3  
D. 1

CONTINUE ON TO THE NEXT PAGE ►

84. A store orders an awning with 16 inch lettering. The store is willing to accept lettering size within 4% of the ordered size. What is the maximum size of lettering that the store will accept?
- E. 17.28  
 F. 16.64  
 G. 15.36  
 H. 0.64

85.



In the figure above,  $x =$

- A.  $25^\circ$   
 B.  $65^\circ$   
 C.  $155^\circ$   
 D.  $165^\circ$
86. The number of minutes in 3.4 hours is which of the following?
- E. 204  
 F. 214  
 G. 215  
 H. 224

87.  $(2a^3b^2t^5)^3 =$
- A.  $2a^6b^8t^8$   
 B.  $6a^6b^5t^8$   
 C.  $8a^9b^6t^{15}$   
 D.  $8a^{27}b^8t^{125}$

88. A fair die with numbers from 1 to 6 is rolled twice. What is the probability that the result of both rolls will be 1 ?

- E.  $\frac{1}{36}$   
 F.  $\frac{1}{12}$   
 G.  $\frac{1}{6}$   
 H.  $\frac{1}{3}$

89.



In the figure above,  $AB = 3\frac{1}{4}$ . What is the position of point  $B$  ?

- A.  $4\frac{3}{8}$   
 B.  $4\frac{7}{8}$   
 C.  $5\frac{1}{8}$   
 D.  $5\frac{3}{8}$

CONTINUE ON TO THE NEXT PAGE ►

90. In a game, players may exchange 240 garks for 180 praps. At this rate, how many garks are equal to 1 prap?

E.  $\frac{3}{4}$

F.  $\frac{1}{2}$

G.  $\frac{4}{3}$

H. 3

91. Eric has \$3.50. Of this amount, he owes his mother 14%, and his sister 76%. How much money will Eric have left after he pays his debts?

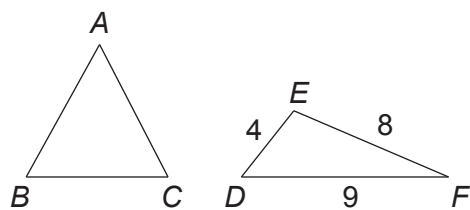
A. \$0.10

B. \$0.35

C. \$0.70

D. \$0.84

92.



For the figures above, the perimeter of triangle  $ABC$  equals the perimeter of triangle  $DEF$ . If triangle  $ABC$  is equilateral, what is the length of side  $AB$ , rounded to the nearest whole number?

E. 7

F. 10

G. 14

H. 21

93. The ratio of apples to bananas at a fruit stand is 5 to 4. The ratio of cherries to bananas is 2 to 5. What is the ratio of apples to cherries?

A. 5:2

B. 4:5

C. 25:8

D. 2:1

94. What is the least integer greater than  $-3.7$ ?

E.  $-4$

F.  $-3$

G. 0

H. 4

95. If  $x = -2$  and  $y = 4$  then  $x^2y + \frac{y}{x} =$

A.  $-18$

B.  $-14$

C. 14

D. 18

CONTINUE ON TO THE NEXT PAGE ►

96.

LOOPS AROUND THE TRACK

	Most Loops Run	Range
Team A	74	14
Team B	77	19
Team C	78	12

The Redfield Roadrunner Club is divided into three teams, A, B, and C. Each team was challenged to run around a track as many times as possible. The table shows each team's greatest number of loops run and the range of loops run within that team. What is the overall range of loops run for all three teams?

- E. 9
- F. 11
- G. 18
- H. 20

97. A fruit stand sells melons, pears and grapes in the ratio of 2:3:5, respectively. If the stand sold 45 pears, what is the total number of melons and grapes sold?

- A. 50
- B. 90
- C. 105
- D. 150

98. In Country X, there are 30,000 doctors. If 18,000 of the doctors treat children and 15,000 of the doctors perform surgery, what is the lowest possible number of doctors who treat children and perform surgery?

- E. 12,000
- F. 9,000
- G. 6,000
- H. 3,000

99. In a recent local election, between 60% and 70% of 1,100 registered voters cast a ballot. What is the minimum number of registered voters who did not cast a ballot?

- A. 330
- B. 440
- C. 660
- D. 770

100. At a baseball stadium, 2 hot dogs are sold for every 5 fans in attendance. If there are 30,000 fans in attendance, how many hot dogs are sold?

- E. 6,000
- F. 9,000
- G. 12,000
- H. 15,000

101. Express  $27.8913 \times 100$  in scientific notation.

- A.  $0.278913 \times 10^4$
- B.  $2.78913 \times 10^2$
- C.  $2.78913 \times 10^3$
- D.  $27.8913 \times 10^2$

102. If set Q contains all even integers from 4 to 36 inclusive, and set Z contains all multiples of 3, how many integers are common to both sets?

- E. 4
- F. 5
- G. 6
- H. 7

CONTINUE ON TO THE NEXT PAGE ►

103. A candy bar is advertised as costing “three for \$1.00.” If Jackie bought 21 candy bars at this price, how much money would she have saved if the price had been reduced to “seven for \$2.00”?

- A. \$1.00
- B. \$1.50
- C. \$3.00
- D. \$7.00

104. A carpeting company charges \$2.50 for every square foot of carpeting. At this rate, what would be the company charge for 21 square feet of carpeting?

- E. \$8.40
- F. \$42.00
- G. \$52.50
- H. \$67.50

105. A jogger completes one lap around a circular lake with radius  $r$ . Another jogger completes one lap around a lake with a radius  $= r + 4$ . How much farther does the second jogger run?

- A. 8
- B.  $8\pi$
- C. 16
- D.  $16\pi$

106. Marcello is  $m$  years old, and Celia is 6 years younger than Marcello. In 4 years, Marcello will be twice as old as Celia will be. How old is Marcello today?

- E. 4
- F. 6
- G. 8
- H. 10

107. A telephone call costs \$1.50 for the first three minutes, and 20 cents for each additional minute. What is the cost of a nine minute call?

- A. \$2.20
- B. \$2.70
- C. \$3.30
- D. \$4.50

108. Jelena has five pictures to hang on her wall, from left to right. How many different arrangements of the pictures can she make?

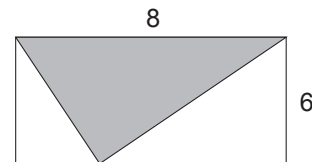
- E. 10
- F. 20
- G. 60
- H. 120

109. If  $n \geq 1$ , then

$$1^n + 1^{n+1} + 1^{n+2} + 1^{n+3} + 1^{n+4} + 1^{n+5} =$$

- A. 72
- B. 15
- C. 6
- D. 5

110.



In the rectangle shown above, what is the area of the shaded triangle?

- E. 24
- F. 32
- G. 48
- H. 64

CONTINUE ON TO THE NEXT PAGE ►



111. A building is in the shape of a rectangular solid with a square base. A scale model of the building is created with a base with sides of 5 inches and a height of 20 inches. If the height of the building is 80 feet, what is the area of the base of the building?
- A. 20 sq ft
  - B. 100 sq ft
  - C. 225 sq ft
  - D. 400 sq ft

112. If  $x + 2y = 6$ , and  $z = 7$ , what is the value of  $2x + 4y + z$ ?
- E. 12
  - F. 15
  - G. 19
  - H. 25

113.

TEMPERATURE IN CITY X ON DEC. 6	
6 a.m.	10° below zero
8 a.m.	2° below zero
10 a.m.	15° above zero

What is the average (arithmetic mean) of the temperatures shown on the table above?

- A. 3° above zero
  - B. 1° above zero
  - C. 1° below zero
  - D. 2° below zero
114. If 100 grams is half the mass of one object and twice the mass of another, the mass of the heavier object is how many grams more than the mass of the lighter object?
- E. 200
  - F. 150
  - G. 100
  - H. 50

THIS IS THE END OF THE TEST.  
IF TIME REMAINS, YOU MAY CHECK  
YOUR ANSWERS TO PART 1 AND PART 2.  
BE SURE THAT THERE ARE NO STRAY  
MARKS, PARTIALLY FILLED ANSWER  
CIRCLES, OR INCOMPLETE ERASURES  
ON YOUR ANSWER SHEET. ■

PART 1 ENGLISH LANGUAGE ARTS

- 1 (A) (B) (C) (D)
- 2 (E) (F) (G) (H)
- 3 (A) (B) (C) (D)
- 4 (E) (F) (G) (H)
- 5 (A) (B) (C) (D)
- 6 (E) (F) (G) (H)
- 7 (A) (B) (C) (D)
- 8 (E) (F) (G) (H)
- 9 (A) (B) (C) (D)
- 10 (E) (F) (G) (H)
- 11 (A) (B) (C) (D)
- 12 (E) (F) (G) (H)
- 13 (A) (B) (C) (D)
- 14 (E) (F) (G) (H)
- 15 (A) (B) (C) (D)

- 16 (E) (F) (G) (H)
- 17 (A) (B) (C) (D)
- 18 (E) (F) (G) (H)
- 19 (A) (B) (C) (D)
- 20 (E) (F) (G) (H)
- 21 (A) (B) (C) (D)
- 22 (E) (F) (G) (H)
- 23 (A) (B) (C) (D)
- 24 (E) (F) (G) (H)
- 25 (A) (B) (C) (D)
- 26 (E) (F) (G) (H)
- 27 (A) (B) (C) (D)
- 28 (E) (F) (G) (H)
- 29 (A) (B) (C) (D)
- 30 (E) (F) (G) (H)

- 31 (A) (B) (C) (D)
- 32 (E) (F) (G) (H)
- 33 (A) (B) (C) (D)
- 34 (E) (F) (G) (H)
- 35 (A) (B) (C) (D)
- 36 (E) (F) (G) (H)
- 37 (A) (B) (C) (D)
- 38 (E) (F) (G) (H)
- 39 (A) (B) (C) (D)
- 40 (E) (F) (G) (H)
- 41 (A) (B) (C) (D)
- 42 (E) (F) (G) (H)
- 43 (A) (B) (C) (D)
- 44 (E) (F) (G) (H)
- 45 (A) (B) (C) (D)

- 46 (E) (F) (G) (H)
- 47 (A) (B) (C) (D)
- 48 (E) (F) (G) (H)
- 49 (A) (B) (C) (D)
- 50 (E) (F) (G) (H)
- 51 (A) (B) (C) (D)
- 52 (E) (F) (G) (H)
- 53 (A) (B) (C) (D)
- 54 (E) (F) (G) (H)
- 55 (A) (B) (C) (D)
- 56 (E) (F) (G) (H)
- 57 (A) (B) (C) (D)

PART 2 MATHEMATICS

58

−	·	·	·	·
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

59

−	·	·	·	·
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

60

−	·	·	·	·
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

61

−	·	·	·	·
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

62

−	·	·	·	·
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

- 63 (A) (B) (C) (D)
- 64 (E) (F) (G) (H)
- 65 (A) (B) (C) (D)
- 66 (E) (F) (G) (H)
- 67 (A) (B) (C) (D)
- 68 (E) (F) (G) (H)
- 69 (A) (B) (C) (D)
- 70 (E) (F) (G) (H)
- 71 (A) (B) (C) (D)
- 72 (E) (F) (G) (H)
- 73 (A) (B) (C) (D)
- 74 (E) (F) (G) (H)
- 75 (A) (B) (C) (D)

- 76 (E) (F) (G) (H)
- 77 (A) (B) (C) (D)
- 78 (E) (F) (G) (H)
- 79 (A) (B) (C) (D)
- 80 (E) (F) (G) (H)
- 81 (A) (B) (C) (D)
- 82 (E) (F) (G) (H)
- 83 (A) (B) (C) (D)
- 84 (E) (F) (G) (H)
- 85 (A) (B) (C) (D)
- 86 (E) (F) (G) (H)
- 87 (A) (B) (C) (D)
- 88 (E) (F) (G) (H)

- 89 (A) (B) (C) (D)
- 90 (E) (F) (G) (H)
- 91 (A) (B) (C) (D)
- 92 (E) (F) (G) (H)
- 93 (A) (B) (C) (D)
- 94 (E) (F) (G) (H)
- 95 (A) (B) (C) (D)
- 96 (E) (F) (G) (H)
- 97 (A) (B) (C) (D)
- 98 (E) (F) (G) (H)
- 99 (A) (B) (C) (D)
- 100 (E) (F) (G) (H)
- 101 (A) (B) (C) (D)

- 102 (E) (F) (G) (H)
- 103 (A) (B) (C) (D)
- 104 (E) (F) (G) (H)
- 105 (A) (B) (C) (D)
- 106 (E) (F) (G) (H)
- 107 (A) (B) (C) (D)
- 108 (E) (F) (G) (H)
- 109 (A) (B) (C) (D)
- 110 (E) (F) (G) (H)
- 111 (A) (B) (C) (D)
- 112 (E) (F) (G) (H)
- 113 (A) (B) (C) (D)
- 114 (E) (F) (G) (H)