

Chapter 16 Practice Test 2

Part 1—English Language Arts

Suggested Time—90 Minutes

57 QUESTIONS

REVISING/EDITING

QUESTIONS 1-11

IMPORTANT NOTE

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

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.

1. Read this sentence.

Indeed, why do most people throughout the world, people of every religion and culture play and enjoy music?

Which edit should be made to this sentence?

- **A.** insert a comma after *culture*
- B. delete the comma after indeed
- C. insert a comma after people
- **D.** delete the comma after *world*

2. Read this paragraph.

- (1) Insects do not have spoken communications, but they have other forms of communication that are equally effective. (2) Ants and bees, for example, are able to share large amounts of complex information without talking in two completely different, silent ways. (3) Bees did this by dancing out complex patterns that tell other bees where they can find food or water.
- (4) Ants, on the other hand, leave behind specific scent trails to mark paths to food and danger.

Which sentence should be revised to correct a verb tense error?

- **E.** sentence 1
- **F.** sentence 2
- **G.** sentence 3
- H. sentence 4

3. Read these sentences.

- (1) As you see, going to the amusement park is no trivial or simple fun-filled event.
- (2) Going to the amusement park is a harrowing and serious series of important decisions.

What is the best way to join these sentences in order to highlight the relationship between the ideas?

- **A.** Going to the amusement park is no trivial or simple fun-filled event, but, on the one hand, a harrowing and serious series of important decisions.
- **B.** Going to the amusement park is no trivial or simple fun-filled event, but rather a harrowing and serious series of important decisions.
- C. Going to the amusement park is a harrowing and serious series of important decisions, and it is no trivial or simple fun-filled event, also.
- **D.** Going to the amusement park is no trivial or simple fun-filled event, or a harrowing and serious series of important decisions.

4. Read this sentence.

Born in the late nineteenth century, the public official Robert Moses was responsible for many improvements to New York City.

What is the most precise revision of this sentence?

- E. Born in 1888, New York City Parks Commissioner Robert Moses was responsible for many of the highways, bridges, tunnels, and parks that New Yorkers use on a daily
- F. Born in the late nineteenth century, New York City Parks Commissioner Robert Moses was responsible for many of the highways, bridges, tunnels, and parks that New Yorkers use on a daily basis.
- **G.** Born in 1888, the public official Robert Moses was responsible for many improvements to New York City.
- **H.** Born in the late nineteenth century, the public official Robert Moses was responsible for many of the highways, bridges, tunnels, and parks that New Yorkers use on a daily basis.

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.

Bitcoin: Past, Present, and Future

- (1) One of the biggest financial stories in the last few years has been the rise of Bitcoin. (2) Some speculators are trying to buy as much Bitcoin as they can; some economists see Bitcoin as a trend that will fade; and some engineers are racing to build software to make Bitcoin more accessible to the public. (3) Undoubtedly, Bitcoin is a hot commodity that investors are chasing after, but how wise is it to purchase Bitcoin?
- (4) Bitcoin is a digital currency launched in the 2000s by a person whose real identity is not known. (5) It is fitting that Nakamoto has shrouded his identity, since so much of Bitcoin revolves around privacy. (6) Before the advent of Bitcoin, every transaction you made with your credit card online could be monitored by a bank or government. (7) Most banks charge customers high fees to send money internationally over the Internet. (8) The promise of Bitcoin is a low- or nofee, untraceable, encrypted currency (or cryptocurrency) that is completely decentralized from any bank. (9) Bitcoin allows individuals to quickly send payments to one another without dealing with a third party. (10) Whereas this process done the traditional way can take several days to complete, with Bitcoin it occurs within minutes.
- (11) But what is Bitcoin? (12) What's unique about Bitcoin is not the currency itself, but rather the network it lives on. (13) You can think of Bitcoin like a digital token that can be bought or sold. (14) That in itself is not revolutionary. (15) Most currencies are controlled by a central bank or authority, (16) Bitcoin exists on a decentralized, anonymous web of computers, (17) Additionally, participants can see and validate Bitcoin transactions that occur in an online ledger, called the blockchain.
- (18) For all its advantages, Bitcoin has drawbacks. (19) For one, its price is highly volatile, jumping up and down by thousands of dollars in mere days. (20) Moreover, many observers see the current rush to buy Bitcoin reflective of a bubble that is destined to pop. (21) Any investor looking to invest in Bitcoin should know that it comes with many risks.

- Which sentence should replace sentence 3 to best introduce the main idea of the passage?
 - **A.** Amid the global Bitcoin mania, it is best to step back and ask; where did Bitcoin come from?
 - **B.** Many people have heard of Bitcoin, but there remains widespread confusion across the world about what precisely Bitcoin is, how it began, and where it is headed in the global economy.
 - C. Bitcoin is a digital cryptocurrency, meaning it can be used securely and anonymously, but critics wonder about the significance of cryptocurrencies for democracies.
 - **D.** There are two ways one can take advantage of Bitcoin: by using it as a means of exchange, or by buying Bitcoin and hoping to sell it later at a higher price.
- What is the most precise revision of sentence 4?
 - **E.** Bitcoin—BTC is a frequently used abbreviation—is a digital currency launched in 2009 by a person whose real identity is not known.
 - F. Bitcoin is a digital currency launched in 2009 by Satoshi Nakamoto, whose real identity is not known.
 - G. Bitcoin is a digital currency launched in the 2000s by Satoshi Nakamoto, whose real identity is not known.
 - H. Bitcoin is a completely and totally digital currency launched in 2009 by Satoshi Nakamoto, whose real identity is not known.
- What transition word or phrase should be added to the beginning of sentence 7?
 - A. However
 - B. Although
 - C. Whereas
 - **D.** Additionally
- Where should sentence 12 be moved to improve the organization of the third paragraph (sentences 11–17)?
 - E. between sentences 13 and 14
 - **E.** between sentences 14 and 15
 - G. between sentences 16 and 17
 - **H.** the end of the paragraph (after sentence 17)

9. Read this sentence.

> When one person pays another, all the computers in the Bitcoin network are sent a new "block" detailing the transaction, thus eliminating the need for a third party—like a credit card company—to process the payment.

Where should this sentence be added to best support the ideas in the third paragraph?

- **A.** between sentences 13 and 14
- **B.** between sentences 14 and 15
- C. between sentences 16 and 17
- **D.** the end of the paragraph (after sentence 17)
- 10. What is the best way to combine sentences 15 and 16 in order to establish the relationship between the ideas?
 - **E.** While most currencies are controlled by a central bank or authority, Bitcoin exists on a decentralized, anonymous web of computers.
 - **F.** Bitcoin exists on a decentralized, anonymous web of computers because most currencies are controlled by a central bank or authority.
 - **G.** Despite most currencies being controlled by a central bank or authority, yet Bitcoin exists on a decentralized, anonymous web of computers.
 - **H.** Bitcoin exists on a decentralized, anonymous web of computers, so most currencies are controlled by a central bank or authority.
- 11. Which conclusion sentence should be added after sentence 21 to support the ideas raised in the passage as a whole?
 - **A.** Ultimately, until the true identity of Satoshi Nakamoto is revealed, the uncertainty in Bitcoin's future is likely to continue.
 - **B.** In the end, the future is Bitcoin's; the digital currency will most likely surpass traditional currencies like dollars, euros, and ven in a matter of decades.
 - C. Nonetheless, if properly understood and managed, Bitcoin may be an innovative way to send, receive, and even make money in the digital century.
 - **D.** The risks associated with Bitcoin are currently too high, and, in conclusion, investors should avoid the digital currency at all costs.

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.

Crete was settled around the year 5000 B.C. by travelers from Greece who journeyed across sixty miles of open water to reach this island in the Mediterranean

- Sea. With a jagged spine of mountains cutting across the land, the settlers realized that the potential for farming was very limited. As a means of survival, the people of Crete focused their attention
- on their geographical assets: the waters surrounding the island, their strategic position in the Mediterranean, and the natural harbors of the gently sloping northern coasts. Thus, the Cretans were
- the first people to develop a modern commercial economy based mainly on seafaring and trade.

Using evidence from several sources, we can understand some of the details of Cretan life. Archaeological findings support the legend that the people of

Crete were skillful builders. The island's forests provided timber for building ships. Their ships were sea-worthy and must have required careful design and

- expert construction. Their ships had high, sharply curved bows and sterns. and keels covered in bronze that stood out beyond the prow, a design which
- shows that the boats were intended for ramming into enemy ships. This naval tactic, developed in Crete, dominated sea warfare during this time.
- By the time of the Minoan civilization 35 (2700 to 1450 B.C., the Bronze Age), Crete had become an important center of civilization. The buildings were tall for their time (several stories high), and

- their architecture was known for massive columns, courtvards, and grand staircases. Sometime around 1700 B.C., many of the palaces were destroyed, perhaps as a result of an earthquake or war, but the Cretans rebuilt them. The
- ruins of many of these grand palaces have been discovered and restored.
- The success of the Cretans in trading gave people leisure time which could be spent doing amusing things; bullfights
- are one example of a popular pastime. Art works show people dressed in colorful clothes, large decorated hats, and fancy jewelry. As the culture developed, Crete became known for its
- sculpture, pottery and fresco painting. The remains of villages suggest that the society was middle-class. The palace of the priest-kings, the Minos, was as much a commercial center as it was a
- palace, demonstrating the importance of trade in the Cretan culture. Because it is relatively poor in resources, however, Crete's history of reliance upon trade has continued, even to the modern day.
- Today, Crete—the largest Greek island and fifth largest island in the Mediterranean Sea—is a popular tourist destination, partly because so many remains from ancient Crete have been discov-
- ered. Knossos, the largest architectural site on Crete and likely the political and cultural center of Crete during the Bronze Age, is among the most visited sites on the island.

- Which of the following best tells what this passage is about?
 - **E.** a description of an early culture
 - a demonstration of how ships are
 - **G.** a proof of the origin of the settlers of Crete
 - **H.** a study of the advantages of a trade-oriented economy
- According to the passage, which of the **13.** following statements about Crete is **not** true?
 - **A.** The land was not suitable for the development of an agricultural economy.
 - **B.** The location of the island helped settlers to make a good living by trade.
 - **C.** The island is surrounded by a border of jagged cliffs.
 - **D.** The island provided a large supply of timber.
- According to the passage, the people of Crete were known as skillful builders because
 - **E.** they dressed well.
 - they designed a keel which was used in sea warfare.
 - **G.** the population had no leisure
 - **H.** the palace of Minos was a big building.

- According to the passage, which of the following describes the most important characteristic of the civilization of Crete?
 - **A.** It was the first to develop bullfighting as a sport.
 - **B.** It was an upper-middle class society.
 - **C.** It was the first to start an economy based on trade and seafaring.
 - **D.** It was preoccupied with war.
- According to the passage, the function 16. of "keels covered in bronze" was
 - **E.** to show religious devotions.
 - **F.** to replace wood in building ships.
 - **G.** to improve the land for farming.
 - **H.** to ram enemy ships.
- 17. The final paragraph of the passage suggests that
 - **A.** modern Cretans' reliance on trade is due as much to necessity as to ingenuity.
 - B. modern Cretans do not rely on trade to the extent that ancient Cretans did.
 - **C.** modern Cretans rely on trade only to sell manufactured goods.
 - **D.** modern Cretans deeply respect the tradition and history of maritime trade.

The following excerpt, from Jack London's 1904 novel The Sea-Wolf, depicts the narrator's harrowing experience aboard a ferry near the San Francisco Bay.

Then everything happened, and with inconceivable rapidity. The fog seemed to break away as though split by a wedge, and the bow of a steamboat

- emerged, trailing fog-wreaths on either side like seaweed on the snout of Leviathan. I could see the pilot-house and a white-bearded man leaning partly out of it, on his elbows. He was clad in a
- blue uniform, and I remember noting how trim and quiet he was. His quietness, under the circumstances, was terrible. He accepted Destiny, marched hand in hand with it, and coolly mea-
- sured the stroke. As he leaned there, he ran a calm and speculative eye over us, as though to determine the precise point of the collision, and took no notice whatever when our pilot, white with rage, shouted, "Now you've done it!"

On looking back, I realize that the remark was too obvious to make rejoinder necessary.

"Grab hold of something and hang on." the red-faced man said to me. All his bluster had gone, and he seemed to have caught the contagion of preternatural calm. "And listen to the women scream," he said grimly-almost bitterly, I thought, as though he had been through the experience before.

The vessels came together before I could follow his advice. We must have been struck squarely amidships, for I saw nothing, the strange steamboat having passed beyond my line of vision. The *Martinez* heeled over, sharply, and there was a crashing and rending of timber. I was thrown flat on the

wet deck, and before I could scramble to my feet I heard the scream of the women. This it was, I am certain,—the

most indescribable of blood-curdling sounds,—that threw me into a panic. I remembered the life-preservers stored in the cabin, but was met at the door and swept backward by a wild rush of men and women.

What happened in the next few minutes I do not recollect, though I have a clear remembrance of pulling down life-preservers from the overhead racks, while the red-faced man fastened them about the bodies of an hysterical group of women. This memory is as distinct and sharp as that of any picture I have seen. It is a picture, and I can see it now.—the jagged edges of the hole in the side of the cabin, through which the grey fog swirled and eddied; the empty upholstered seats, littered with all the evidences of sudden flight, such as packages, hand satchels, umbrellas, and wraps; the red-faced man, stumping gallantly around on his artificial legs and buckling life-preservers on all comers; and finally, the screaming bedlam of women. This it was, the screaming of the women, that most tried my nerves.

I remember the scene impelled me to sudden laughter, and in the next instant I realized I was becoming hysterical myself; for these were women of my own kind, like my mother and sisters, with the fear of death upon them and unwilling to die. And I remember that the sounds they made reminded me of the squealing of pigs under the knife of the butcher, and I was struck with horror at the vividness of the analogy. They wanted to live, they were helpless, like rats in a trap, and they screamed.

I descended to the lower deck. The Martinez was sinking fast, for the water was very near. Numbers of the passengers were leaping overboard. Others, in the water, were clamouring to be taken aboard again. No one heeded them. A cry arose that we were

- sinking. I was seized by the consequent panic, and went over the side in a surge of bodies. How I went over I do not know, though I did know, and instantly, why those in the water were so desirous of getting back on the steamer. The water was cold—so cold that it was painful. The pang, as I plunged into it, was as quick and sharp as that of fire. It bit to the marrow. It was like the grip of death. I gasped with the an-
- guish and shock of it, filling my lungs before the life-preserver popped me to the surface. The taste of the salt was strong in my mouth, and I was strangling with the acrid stuff in my throat

and lungs.

- But it was the cold that was most distressing. I felt that I could survive but a few minutes. People were struggling and floundering in the water about me. I could hear them crying out to one another. And I heard, also, the sound of oars. Evidently the strange steamboat had lowered its boats. As the time went by I marveled that I was still alive. I had no sensation whatever in my lower limbs, while a chilling numbness was wrapping about my heart and creeping into it.
- The noises grew indistinct, though I heard a final and despairing chorus of screams in the distance, and knew that the *Martinez* had gone down. Later, how much later I have no knowledge,— I came to myself with a start of fear. I was alone. I could hear no calls or cries—only the sound of the waves, made weirdly hollow and reverberant by the fog.

- This passage can best be summarized
 - **E.** a ferry passenger's recollections of a tragedy.
 - a play-by-play account of how a ship sinks when struck by an-
 - **G.** an unreliable report on a mythic disappearance.
 - **H.** one passenger's journal entry that replays a horrifying collision.
- According to the passage, what was most likely the cause of the shipwreck?
 - **A.** ill intent on the part of the steam-
 - **B.** poor weather conditions
 - **C.** the inexperience of the *Martinez's* crew
 - **D.** the hand of fate
- 20. What does the red-faced man's response to the collision suggest?
 - **E.** He is not a stranger to maritime disasters.
 - He is extremely uneasy about the situation.
 - **G.** He looks forward to hearing the women's screams.
 - **H.** He believes the *Martinez* can be saved and acts to do so.
- The narrator is not alarmed by the collision until
 - **A.** the red-faced man informs him that the ship will certainly sink.
 - **B.** he struggles to locate the life
 - **C.** he hears the women shrieking.
 - **D.** the ship begins taking on some water.

- **22.** Why does the narrator start laughing?
 - E. He finds the panic of others genuinely amusing.
 - F. He sees the red-faced man laughing, and follows his lead.
 - **G.** He imagines the shipwreck as a cruel joke.
 - **H.** It is a brief, involuntary reaction to the chaos on deck.
- 23. The author describes the water as so cold that "the pang, as I plunged into it, was as quick and sharp as that of fire" (lines 97–98) in order to
 - **A.** give the reader a sense of how painfully warm the water was.
 - **B.** highlight the irony in cold water feeling like hot fire.
 - **C.** educate the reader on typical water temperatures in the Pacific
 - **D.** demonstrate how dangerous the ocean is for humans.

- In the final two paragraphs, how can the attitude of the narrator best be described?
 - E. resigned
 - **F.** enraged
 - G. resentful
 - **H.** entrapped
- **25.** The passage suggests that in times of crisis
 - **A.** people become their true selves, despite all efforts to behave other-
 - **B.** all people shriek in terror.
 - C. time seems to slow down or speed up at will, and one can feel outside of one's body.
 - **D.** humans' survival instinct automatically kicks in and leads them to make wise choices.

Kangaroos are fascinating creatures because they are so different from our usual idea of a mammal. Unlike most mammals, kangaroos rear their young in a pouch, and hop to get around. Their long, powerful hind legs are used for jumping, and their thick tail gives them balance. Their forelimbs are used almost like human hands. Despite these wellknown characteristics, prevalant among all species of kangaroos, there are many lesser-known variations; species vary tremendously in such distinguishing characteristics as habitat, color, social patterns and size (they range in length

Kangaroos are marsupials, a type of mammal characterized by the pouch in which females carry their young. It is believed that marsupials evolved separately from so-called placental mammals, such as humans. The earliest known marsupial lived in China about 125 million years ago. While some marsupials of that time remained in Asia, many traveled across great distances.

In most continents, marsupials were

not able to compete successfully

from nine inches to more than eight feet).

with placental mammals, so many marsupials became extinct. The opossum, found in the Americas, is a notable exception. In Australia, on the other hand, marsupials thrived, none more so than the kangaroo. Indeed, there are more than 60 species of kangaroo, ranging in size from many small species to the red kangaroo, the largest of the species. One reason kangaroos were able to evolve and survive is that they had few predators in Australia. The kangaroo is such a unique evolutionary success that it is the national emblem of Australia.

Some people consider marsupials, including the kangaroo, to be a primitive form of mammal, and they point to the opossum in support of their claim. Their view is reflected in the statements they make about the Virginia opossum, the only marsupial native to North America. There is some evidence for such statements: fossils of marsupials that existed at the same time as dinosaurs, some 100 million years ago, have been classified as belonging to the same group as the Virginia opossum.

But even if the opossum can in some ways be considered a "living fossil," the same cannot be said about the kangaroo. These Australian marsupials of the Macropodidae ("big feet") family have changed recently in order to adapt to a changing environment. This is a very common occurrence in the evolutionary patterns of all animals. In fact, almost every family of animals, from fish to insects to mammals, has changed in some way since its ancient ancestors roamed the earth. Even plants and trees, seemingly the same as they were eons ago, exhibit characteristics that are relatively new. In the case of Macropodidae, they evolved from small forest animals into ones that live mainly in open spaces. This development was probably related to the spread of grassland areas in Australia between ten and fifteen thousand years ago.

- 26. Which of the following best tells what this passage is about?
 - **E.** a comparison of the opossum and the kangaroo
 - the competition between marsupials and dinosaurs
 - **G.** the evolutionary background of kangaroos
 - **H.** how kangaroos are not really mammals

- The author of the passage most likely agrees with which of the following statements?
 - **A.** Opossums are smarter than kangaroos.
 - **B.** Dinosaurs ate kangaroo meat.
 - **C.** Kangaroos were once extinct.
 - **D.** Kangaroos are interesting animals.
- 28. The author of the passage is most likely
 - **E.** a scientist.
 - **F.** a businessman.
 - **G.** a cowboy.
 - H. an Australian.
- 29. The author most likely quotes the exact size ranges in lines 15–16 in order to
 - **A.** shock the reader.
 - B. demonstrate one way in which different species of kangaroos vary greatly.
 - C. contradict earlier research.
 - **D.** prove that not all kangaroos are important.

- **30.** The phrase "living fossil" in line 59 refers to which of the following?
 - E. a dinosaur
 - F. a kangaroo
 - **G.** an opossum
 - H. an Australian marsupial
- 31. What does the passage imply about the kangaroo's development?
 - **A.** The kangaroo has adapted to its surroundings more than some other marsupials.
 - **B.** The kangaroo had a development almost identical to that of the opossum.
 - **C.** The kangaroo is similar to a dino-
 - **D.** The native habitat of the kangaroo is North America.

In 1989, the Civil Rights memorial was dedicated in Montgomery, Alabama. The memorial, the first dedicated to the civil rights movement, consists of two distinct pieces of black Canadian granite. One piece carries this quote from Martin Luther King, Jr.: "until justice rolls down like waters and righteousness like a mighty stream." The other piece is a circular slab, placed low enough to be touched by visiting children. On this slab is a time line chronicling the major events of the movement, from the Supreme Court's Brown vs. the Board of Education ruling in 1954 to assassination of Martin Luther King, Jr. in 1968. Other events noted on the memorial include the Montgomery Alabama Bus Boycott, the March on Washington (the "I Have a Dream" speech), and the signing of the Civil Rights Act.

The names of 40 men, women, and children killed during the civil rights movement also appear on the circular slab. Three types of martyrs are commemorated: those who were killed during acts of non-violent protest, those whose deaths were embraced by civil rights leaders to help create momentum for further change, and those who were murdered by anti-movement agitators in order to intimidate other civil rights activists. The intention of those who built the memorial was to represent how each martyr added to the momentum of the struggle, and therefore did not die in vain.

The memorial was designed by Maya Lin, a Chinese-American woman from Ohio. At the age of 21, while a student at Yale, Lin won a competition to design the Vietnam Veterans Memorial in Washington, D.C. Eight years later, Lin was asked to design the Civil Rights Memorial. In creating her design for the memorial, Lin was inspired by King's "mighty stream" quote. The form of the

monument and the time-line concept took shape: water flows from a fountain over the names of the 40 martyrs.

The monument was commissioned by the Southern Poverty Law Center. The center was founded in the sixties by two lawyers and provided legal defense for the men and women of the civil rights movement. Today, the center is a not-forprofit organization. The main function of the center is to remind the world of what has passed and educate our future leaders. The memorial is a symbol of these goals.

The Memorial is located on an open plaza near two historically important buildings: the capitol steps where the 1965 voting rights march ended, and the church at which King was pastor during the Montgomery Bus Boycott of 1955-1956. According to the Southern Poverty Law Center, "The plaza is a contemplative area—a place to remember the Movement, to honor those killed during the struggle, to appreciate how far the country has come in its quest for equality and consider how far it has to go."

When the monument was dedicated, family members of the 40 martyrs touched the names. Many of the family members, public officials, and onlookers, including Maya Lin, were deeply moved on the occasion—and still today, many visitors to the Civil Rights Memorial speak of it as an emotional and powerful experience.

- Which of the following best tells what this passage is about?
 - **E.** the civil rights movement and its winners and losers
 - a unique institution called the Southern Poverty Law Center
 - **G.** a description of one important memorial of the civil rights movement
 - **H.** an analysis of the impact of Brown vs. the Board of Education
- 33. Which of the following events is most probably commemorated on the time line of the Civil Rights Memorial?
 - **A.** the end of the Civil War in 1865
 - **B.** the passage of the 14th Amendment to the Constitution in 1868
 - C. the passage of the 19th Amendment to the Constitution in 1920
 - **D.** the March on Washington in 1963
- According to the passage, the 40 people whose names appear on the monument all share in common the fact that
 - **E.** they were killed during acts of non-violent protest.
 - **F.** they were all personal friends of Martin Luther King, Jr.
 - **G.** their deaths were related to the civil rights movement in some
 - **H.** all of them had children who frequently visit the memorial.

- According to the passage, anti-civil rights agitators murdered some civil rights activists in order to
 - **A.** provide civil rights leaders with martyrs around which to rally their cause.
 - **B.** influence the Supreme Court to overturn their decision in Brown vs. the Board of Education.
 - **C.** add to the momentum of the civil rights struggle.
 - **D.** scare others who were involved in the civil rights movement.
- 36. The author would most likely agree with which statement?
 - **E.** There is more prejudice today than in the sixties.
 - It is important to continue to educate people about the civil rights movement.
 - **G.** All participants in the civil rights movement were guilty.
 - **H.** There are no other important memorials to the civil rights movement.
- The Southern Poverty Law Center is
 - **A.** a construction company.
 - **B.** an educational institution.
 - C. a museum.
 - **D.** an art center.

Paul Broca was a major figure in the development of both medicine and anthropology in the mid-nineteenth century. He performed distinguished work on cancer pathology and treatment of aneurysms, and made a landmark contribution to understanding the origins of aphasia—an impairment of the ability to articulate ideas.

Broca was a superb brain anatomist and made important investigations of the limbic region, earlier called the rhinencephalon (the "smell brain"), which we know to be profoundly involved in human emotion. But Broca is today probably best known for his discovery of a small region in the third convolution of the left frontal lobe of the cerebral cortex, a region known as Broca's area. Articulate speech, it turns out, as Broca inferred on only fragmentary evidence, is to an important extent localized in and controlled by Broca's area. It was one of the first discoveries of a separation of function between the left and right hemispheres of the brain. But most importantly, it was one of the first indications that specific brain functions exist in particular locales in the brain, and that there is a connection between the anatomy of the brain and what the brain does.

Paul Broca died in 1880, perhaps of the very sort of aneurysm that he had studied so brilliantly. At the moment of his death he was working on a comprehensive study of brain anatomy.

It is difficult to hold Broca's brain without wondering whether in some sense Broca was still in there—his wit, his skeptical mind, his abrupt gesticulations when he talked, his quiet and sentimental moments. Might there be preserved in the configuration of neurons a recollection of the triumphant moment when he argued before the combined medical

faculties (and his father, overflowing with pride) on the origins of aphasia?

Where do we go when we die? Is Paul Broca still there in his formalin-filled bottle? Perhaps the memory traces have decayed, although there is good evidence from modern brain investigations

that a given memory is redundantly stored in many different places in the brain. Might it be possible at some future time, when neurophysiology has advanced substantially, to reconstruct

the memories or insights of someone long dead? And would that be a good thing? It would be the ultimate breach of privacy. But it would also be a kind of practical immortality, because,

especially for a man like Broca, our minds are clearly a major aspect of who we are.

- 38. Which of the following best tells what this passage is about?
 - **E.** the author's reflections on Paul Broca
 - the importance of specific brain functions being attributed to specific parts of the brain
 - G. the overlap of medicine and anthropology
 - **H.** the location of memory within the brain and some implications of his work
- 39. From lines 15–20, it can be determined that Broca is most famous today for
 - **A.** his work as an anthropologist.
 - **B.** his discovery of an area of the brain that controls speech.
 - **C.** his investigations of the limbic area.
 - **D.** his invention of the tiny region to the left of the cerebral cortex.

- From the discussion of Broca's research on articulate speech (lines 20-24), it can be inferred that
 - E. Broca would have arrived at a different conclusion had he not relied on fragmentary evidence.
 - Broca's inference was incomplete and insignificant.
 - **G.** Broca was successful in locating the part of the brain responsible for articulate speech.
 - **H.** because of only fragmentary evidence, Broca was unable to find the part of the brain that controlled speech.
- Which of the following is not discussed in the passage?
 - **A.** Broca's significant contribution to the study of the brain
 - **B.** the growing indications that specific brain functions exist in particular sections of the brain
 - **C.** memories being stored in various places in the brain
 - **D.** Broca's discoveries, which solved all of the mysteries of the brain

- In what way was Paul Broca's death ironic?
 - **E.** Although he studied infant mortality for many years, he died an old man.
 - He was killed by the very people he was trying to save.
 - **G.** After devoting most of his life to medicine, he made an unexpected switch to anthropology.
 - **H.** He seems to have died from the same disorder that he was studying.
- **43.** The questions posed in lines 44–52 demonstrate the author's interest in
 - **A.** the physical preservation of memory and identity within the brain.
 - **B.** Broca's victory over the combined medical faculties in the debate over aphasia.
 - **C.** the appreciation of Broca's father in neurophysiology.
 - **D.** the arrangements of neurons that cause aphasia.

John Philip Sousa was no Beethoven. Nevertheless, he made a contribution to music. When you say "a Sousa march," almost everyone will know what you are talking about. All of his marches bear the stamp of a vigorous, clear-cut, original musical personality. Above all they are intensely practical. Sousa began studying traditional music theory when he was six. As a teenager, it looked as if he would follow in the footsteps of his father, a trombonist. In 1880, as a member of the U.S. Marine Corps, he became the bandmaster of the Marine Band, where he gradually became known as a bandmaster of incredible precision. The marches he wrote, first for the Marine Band and later for his own band, were intended to set the pace for marching men.

A march is a piece of music with a strong rhythm, usually written for the express purpose of playing while people (often military personnel) march. A march's tempo is usually set at the rate established during Napoleon's reign: 120 beats per minute, although funeral marches are half as fast. Notable composers of marches include Beethoven, Mozart, Mahler, and Wagner, but the person whose name is most commonly associated with marches is Sousa.

Sousa marches are simple. Their tunes are so uncomplicated, so easy to catch, so melodic, that you can easily underrate them. Simple as they may be, they are unmistakably Sousa's. It took inspiration to write them, even if it was only a small amount of inspiration. Perhaps this simplicity accounts for Sousa's marches' popularity. After all, of the many great but complicated marches Wagner wrote for his massive operas. most people are familiar with only one: the wedding march from *Lohengrin* is the source of the familiar "here comes the bride" music played at many weddings. Not coincidentally, that march may be Wagner's most simple.

On the other hand, many of Sousa's marches are instantly recognizable, even if we don't know their names or even that Sousa wrote them. Among Sousa's most famous marches are "Stars and Stripes Forever," "The Washington Post," and the Marine Corp's official march, "Semper Fideles."

It can be added that a Sousa march does stir one important thing—national pride. Today, John Philip Sousa's marches can be heard at a variety of patriotic events. When you attend a Memorial Day parade, or a spectacular Fourth of July fireworks display, you notice that the tunes of Sousa are the overwhelming favorites of marching bands. When played, even the most unpatriotic of people suddenly rise to the occasion, sometimes marching along with the beat and whistling the simple yet moving melodies. If one's music were the measure of one's pride in a nation, then John Philip Sousa can be recognized as being intensely proud of America. Likewise, if listening to music can inspire patriotism, then when we listen to Sousa's marches we almost automatically become enveloped with a patriotism unheard of, except perhaps in times of national emergencies.

- 44. Which of the following best tells what this passage is about?
 - **E.** It sets forth a new definition of artistic greatness.
 - It describes the worth of the music of John Philip Sousa.
 - **G.** It emphasizes the importance of band music.
 - **H.** It proves that Sousa was one of the greatest musicians of all time.

- The author would be most likely to use which of the following terms in describing the music of John Philip Sousa?
 - A. memorable
 - **B.** peaceful
 - **C.** jazzy
 - **D.** stupid
- Sousa's work is "practical" (line 8) in the sense that it is
 - **E.** often imitated by classical musicians.
 - **F.** easy to forget.
 - **G.** easily learned by children.
 - **H.** used for actual military marching.
- **47.** The discussion of the simplicity of Sousa's marches in lines 33–39 suggests that
 - **A.** Sousa's marches are childish.
 - **B.** the simplicity of Sousa's marches is unnecessary.
 - C. simple music is superior to complex music.
 - **D.** the simplicity of Sousa's marches does not make them any less admirable.
- 48. What does the passage imply about the quality of Sousa's work?
 - **E.** It is inferior to composers such as Beethoven and Wagner.
 - **F.** Despite their simplicity, his marches merit consideration as true national classics.
 - **G.** It is a highly complex combination of rhythm, melody, and beat.
 - **H.** The works are good to listen to, but have little practical application.

- Which of the following is not mentioned as an aspect of Sousa's compositions?
 - **A.** Marching bands use them very frequently.
 - **B.** They are not equal to the complexity of works by Beethoven.
 - **C.** The music is original and clearly the work of Sousa.
 - **D.** Wagner's marches were an early influence on Sousa's works.
- 50. The final paragraph of the passage suggests that
 - **E.** Sousa's music can unleash a patriotism in the listener.
 - most people would prefer to listen to Mozart.
 - G. Sousa's music encourages citizens to join the military.
 - **H.** everyone recognizes and enjoys "Semper Fideles."

The poem "My Lost Youth," written in 1855 by Henry Wadsworth Longfellow, lyrically describes the poet's childhood.

Often I think of the beautiful town
That is seated by the sea;
Often in thought go up and down
The pleasant streets of that dear old
town,

And my youth comes back to me.
And a verse of a Lapland song
Is haunting my memory still:

"A boy's will is the wind's will,

And the thoughts of youth are long, long thoughts."

I can see the shadowy lines of its trees, And catch, in sudden gleams, The sheen of the far-surrounding seas, And islands that were the Hesperides

od islands that were the Hesperides Of all my boyish dreams.

And the burden of that old song, It murmurs and whispers still:

"A boy's will is the wind's will,

And the thoughts of youth are long, long thoughts."

I remember the black wharves and the slips,

And the sea-tides tossing free; And Spanish sailors with bearded lips, And the beauty and mystery of the ships, And the magic of the sea.

And the voice of that wayward song

Is singing and saying still:
"A boy's will is the wind's will,
And the thoughts of youth are long, long thoughts."

30

40

I remember the bulwarks by the shore,
And the fort upon the hill;
The sunrise gun, with its hollow roar,
The drum-beat repeated o'er and o'er,
And the bugle wild and shrill.

And the music of that old song Throbs in my memory still:

"A boy's will is the wind's will, And the thoughts of youth are long, long thoughts." I remember the sea-fight far away,
How it thundered o'er the tide!
And the dead captains, as they lay

In their graves, o'erlooking the tranquil bay,

Where they in battle died.

And the sound of that mournful

song

50

70

75

Goes through me with a thrill: "A boy's will is the wind's will,
And the thoughts of youth are long, long thoughts."

I can see the breezy dome of groves, The shadows of Deering's Woods; And the friendships old and the early loves

Come back with a Sabbath sound, as of doves

In quiet neighborhoods.

And the verse of that sweet old song,

It flutters and murmurs still:
"A boy's will is the wind's will,
And the thoughts of youth are long, long thoughts."

I remember the gleams and glooms that dart

Across the school-boy's brain;
The song and the silence in the heart,
That in part are prophecies, and in part
Are longings wild and vain.

And the voice of that fitful song Sings on, and is never still:

"A boy's will is the wind's will, And the thoughts of youth are long, long thoughts."

There are things of which I may not speak;

There are dreams that cannot die; There are thoughts that make the strong heart weak,

And bring a pallor into the cheek,

And a mist before the eye.

And the words of that fatal song Come over me like a chill:

"A boy's will is the wind's will,

And the thoughts of youth are long, long thoughts."

Strange to me now are the forms I meet When I visit the dear old town: But the native air is pure and sweet. And the trees that o'ershadow each wellknown street,

> As they balance up and down, Are singing the beautiful song, Are sighing and whispering still:

"A boy's will is the wind's will, And the thoughts of youth are long, long thoughts."

And Deering's Woods are fresh and fair, And with joy that is almost pain My heart goes back to wander there, And among the dreams of the days that were,

I find my lost youth again. And the strange and beautiful song,

The groves are repeating it still: "A boy's will is the wind's will, And the thoughts of youth are long, long thoughts."

- What is the best way to describe the **51.** tone of this poem?
 - A. romantic
 - B. nostalgic
 - C. tragic

100

110

- D. comedic
- **52.** A "Lapland song" (line 7) most likely refers to
 - **E.** a song from the narrator's child-
 - **F.** a song that is native to the narrator's family.
 - **G.** a mournful, bleak song.
 - H. a song meant for traditional dancing.

Consider the following excerpt (lines 56-61).

> I can see the breezy dome of groves,

The shadows of Deering's Woods:

And the friendships old and the early loves

Come back with a Sabbath sound, as of doves

In these lines, the author describes

- **A.** his memories coming back as birds flying in the wind.
- **B.** the comforting religious practices of his youth.
- **C.** the menacing presence of a local forest.
- **D.** the graves of his lost loved ones.
- **54.** What is suggested by the second to last stanza?
 - **E.** The air quality of the speaker's hometown has gained a new sweetness.
 - The shadows of the trees hide the true beauty of the speaker's hometown.
 - G. Returning to his hometown makes the speaker cry.
 - **H.** Many things have changed about the speaker's hometown, but its natural environment has not.
- **55.** What is most likely the reason for the repetition of the refrain ("A boy's will is the wind's will")?
 - **A.** ensure the reader not forget the text of the Lapland song
 - echo the structure of a song, which is fittingly the topic of the poem itself
 - **C.** adhere to the required poetic structure of Longfellow's era
 - **D.** let the reader know when each stanza is coming to an end

- The phrase "And with joy that is almost pain / My heart goes back to wander there," (lines 104–105) expresses
 - **E.** how joyous it always is to see one's hometown after a long time
 - **F.** the bittersweet feeling of living in the past.
 - G. the rejuvenating quality of a long walk in the woods.
 - **H.** the narrator's desire to move on from his past and live fully in the present, despite the costs.

- **57.** The narrator can best be described as
 - A. someone thinking about his hometown and remembering his youth.
 - **B.** a person who is very fond of old songs.
 - C. an older person who has a deeply personal and emotional connection to nature.
 - **D.** someone who is realizing he has been very lucky in his life.

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.

- **58.** A car drives at a rate of 40 miles per hour. The car must drive a total of 350 miles. How many hours will it take the car to finish the trip?
- **59.** If $36a = 45 \div b$, then ab =

60. Malcolm Little High School has sophomores, juniors, and seniors, but no freshmen. The ratio of sophomores to juniors is 5 to 4, and the ratio of juniors to seniors is 3 to 2. If there are 300 sophomores, how many seniors are there?

- 61. A class must select a president, a vicepresident, and a treasurer from among 10 students. No student can hold more than one position. How many arrangements of the three positions can the class make?
- **62.** If $\frac{a}{b} < \frac{b}{a}$, $a^2 = -2a$, and ab = 18, what is the value of *b*?

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. What is the decimal representation of $1,000 + 1 + \frac{1}{1,000}$?
 - **A.** 1,001.01
 - **B.** 1,001.001
 - **C.** 1,000.101
 - **D.** 1,001.0001
- **64.** A track runner records his times on the 400 meter dash. If the range of his times is 9 seconds and one of his times is 58 seconds, then which of the following cannot be one of his times?
 - E. 48 seconds
 - F. 50 seconds
 - G. 66 seconds
 - H. 67 seconds

- **65.**
- 1 dollar = 0.96 klurbs1 dollar = 0.64 flourns

Using the conversion above, how many klurbs is equal to 1 flourn?

- **A.** 0.66
- **B.** 0.75
- **C.** 1.33
- **D.** 1.50
- **66.** A square has an area of 4 square yards. What is the area of the square in square feet? (1 yard = 3 feet)
 - **E.** 6
 - **F.** 12
 - **G.** 16
 - **H.** 36

67.

Plant Type	% of Plant Species in Region <i>A</i>	% of Plant Species in Region <i>B</i>
symbiotic	0.65	34
parasitic	0.337	10
coniferous	72	0.65
deciduous	27	36
epiphytic	0.013	19.35
TOTAL	100	100

What fraction of the plant species in Region A are parasitic?

A.
$$\frac{337}{100}$$

B.
$$\frac{337}{1,000}$$

C.
$$\frac{337}{10,000}$$

D.
$$\frac{337}{100,000}$$

70.

$$\frac{2a-6}{a+3}$$

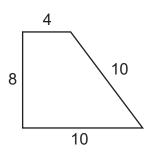
the larger fences?

A. 16 ft **B.** 29 ft **C.** 58 ft **D.** 60 ft

Four fences are connected to partially enclose a yard. Each of the four fences is 15 feet long, and two larger fences of equal length are connected to complete the enclosure. If the six fences that make the enclosure measure a total of 118 feet, what is the length of one of

How many integer values of a will allow the expression above to be an integer if $1 \le a \le 7$?

68.



What is the area of the trapezoid shown?

71. If
$$x = -5$$
, what is the value of $3x^2 - 4x + 2$?

- A student attempts to measure the length of a table using a ruler and gets a measure of 4.4 inches. However, the student later learns that the ruler is imprecise and that all actual lengths are within 10% of the measured length. What is the maximum actual length of the table, in inches?
 - **E.** 4.44
 - **F.** 4.50
 - **G.** 4.80
 - **H.** 4.84
- **73.** A painter creates a blend of green paint using blue paint and yellow paint in a ratio of 3:4. The painter creates 35 gallons of the blend. How many gallons of blue paint did the painter use?
 - **A.** 5
 - **B.** 7
 - **C.** 15
 - **D.** 20
- **74.** Nancy is selecting clothes to pack for her weekend vacation. She has 12 shirts and must pack 3. How many different sets of shirts can she pack?
 - **E.** 6
 - **F.** 220
 - **G.** 960
 - **H.** 1,320

- Eric is now 22 years old and in 5 years will be three times as old as Alan will be. How old is Alan now?
 - **A.** 4
 - **B.** 9
 - C. 11
 - **D.** 27
- All the students in a class either walk or take the bus to school on all days they attend. On a particular day, of all the students who walk to school, 30% are absent and 75% of the students who took the bus were present. If 40% of the students take the bus to school, what percent of the students were present that day?
 - **E**. 28
 - **F.** 42
 - **G.** 58
 - **H.** 72
- Four coins are flipped. What is the probability that all four coins will be heads?

 - D.

78.



The number line above shows the solution to which of the following inequalities?

$$\mathbf{E.} \quad -2 \le \frac{y}{2} \le 4$$

F.
$$-2 \le 2y \le 4$$

G.
$$-4 \le \frac{y}{2} \le 2$$

H.
$$-4 \le 2y \le 2$$

- **79.** Stephen can type 120 words per minute. At this rate, how many words can he type in 1 hour?
 - **A.** 360
 - **B.** 720
 - **C.** 3,600
 - **D.** 7,200
- 80. A fruit stands sells 3 bananas for every 5 apples it sells. If the fruit stand sells a total of 24 bananas in a day, how many apples did it sell?
 - **E.** 20
 - F. 40
 - **G.** 80
 - **H.** 120

- A rectangular solid has a volume of 350. The height of the solid is 7 and the width is twice the length. What is the width of the solid?
 - **A.** 2.5
 - **B.** 5
 - **C.** 7.5
 - **D.** 10
- 82. A jar of gumballs contains 7 red gumballs, 4 blue gumballs, and 5 green gumballs. Two gumballs are selected at random. What is probability that both gumballs are **not** green?

 - F.
 - $\frac{11}{24}$
 - 121 H. 256
- On Tuesday, $\frac{2}{3}$ of a large block of 83. ice melted. On Wednesday, $\frac{1}{2}$ of the remaining ice melted. If the block of ice then weighed 60 pounds, how much did it weigh, in pounds, at the beginning of the day on Tuesday?
 - **A.** 480
 - В. 450
 - C. 360
 - **D.** 180

84. Simplify the following expression:

$$\frac{a}{b} \left[a \left(\frac{2a - 2b}{2a + 2b} \right) \left(\frac{2a + 2b}{2a - 2b} \right) \right]$$

(Note: $a \neq b$ and $a \neq -b$.)

- \mathbf{E} . a
- $\mathbf{G.} \quad \frac{a(2a-2b)}{b}$
- **H.** $\frac{a^2(2a+2b)}{b}$
- **85.** A coin purse has 3 pennies, 5 nickels, 4 dimes, and 1 quarter. If a coin is selected at random, what is the probability that the coin selected will be a nickel?

 - В.
 - C.
 - **D.** $\frac{1}{13}$

86.

PETS PER STUDENT IN SCHOOL

Number of Pets per Student	Number of Students
0	35
1	49
2	24
3	16
4 or more	11

The table above shows the result of a poll a student conducted about the number of pets each of the students in her school has. What percent of the students polled have at least 3 pets?

- E. 27%
- F. 20%
- **G.** 11%
- **H.** 8%
- A class has 25 students, 5 of whom are wearing black sneakers. If two students are selected at random, what is the probability that both students will be wearing black sneakers?

 - C.
 - D.

88. If a = 2b + 1, then, in terms of b, what is the value of 4a - 5?

E.
$$4b-4$$

F.
$$4b + 3$$

G.
$$8b - 4$$

H.
$$8b - 1$$

89.



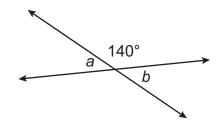
On the number line above, $AB = \frac{1}{6}$.

Which of the following is a possible

value of X?

90. If 20% of the science students at Central High study only physics, 25% study only chemistry, and the rest study only biology, what is **the smallest number** of science students who could be studying biology?

91.



If the lines in the figure above intersect as shown, what is the value of a + b?

92.



On the number line above, $A\underline{B}:\underline{B}C:CD$ is 3:8:1. What is the value of \overline{BD} ?

93. If
$$p = 5$$
 and $q = -4$, then $3p - 2pq =$

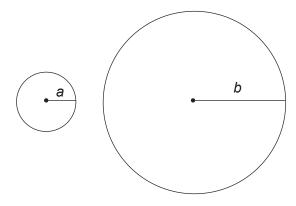
- The value of a home increases by 10% per year. What is the percent increase in the value of the home after 3 years?
 - **E.** 27.1%
 - **F.** 30.0%
 - **G.** 31.4 %
 - **H.** 33.1%
- **95.** What is the greatest prime factor of 770?
 - **A.** 5
 - **B.** 10
 - **C.** 11
 - **D.** 77
- **96.** If $\frac{3n-6}{7-4} = 11$, then n =
 - **E.** 9
 - **F.** 11
 - **G.** 13
 - **H.** 15
- A certain car salesperson receives a bonus of 2% for cars sold for \$40,000 or less and 3% for cars sold for more than \$40,000. What is the salesperson's bonus if she sells a car for \$39,000 and another car for \$41,000?
 - **A.** \$2,010
 - **B.** \$2,460
 - **C.** \$4,000
 - **D.** \$4,100

- Sade watches $2\frac{1}{2}$ hours of television **98.** each day. How many hours of television does she watch in one week?

 - **H.** $17\frac{1}{2}$
- 99. Inez ran y miles. Inez and Darcy ran a total of 3y + 7 miles. How many miles, in terms of y, did Darcy run?
 - $\mathbf{A.} \quad \frac{3y+7}{y}$

 - **C.** 2y + 7
 - **D.** 2y 7
- **100.** -3a(5b-4c) =
 - \mathbf{E} . -2abc
 - **F.** 60*abc*
 - **G.** -15ab + 12c
 - **H.** -15ab + 12ac

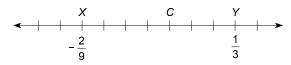
101.



In the figure above, two circles have radii of a and b. If $a = \frac{1}{3}b$, and the sum of the circumferences of the two circles is 64π , then what is the value of *b*?

- **A.** 8
- **B.** 12
- **C.** 24
- **D.** 32

102.

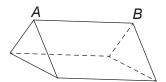


On the number line above, the hash marks are evenly spaced. What is the value of C?

- **H.** $\frac{2}{21}$

- 103. Jamie can read an article in 10 minutes. Rich can read an article in 15 minutes. At this rate, how many articles can Jamie and Rich read in 2 hours?
 - **A.** 20
 - **B.** 22
 - **C.** 24
 - **D.** 26
- **104.** Based on the approximation 1 meter = 3.281 feet, how many feet are in 4.4 kilometers?
 - **E.** 1.3411
 - **F.** 14.4364
 - **G.** 1,341.1
 - **H.** 14,436.4

105.



The prism above has bases that are equilateral triangles with perimeter 18, and AB = 9. What is the surface area of the prism, excluding the triangular bases?

- **A.** 54
- **B.** 108
- **C.** 162
- **D.** 216

106. A museum is being built to display 3,100 paintings. If each room in the museum can hold 60 paintings, what is the minimum number of rooms that the museum must contain?

E. 50

F. 51

G. 52

H. 60

107. At 4 p.m., a 6-foot tall man cast a shadow 10 feet long. At the same hour, how long would the shadow of a 15foot tall lamp post have been?

A. 9

B. 21

C. 25

D. 27

108.

$$a = 10b = 7c = 5d$$

What is the least possible value for a if b, c, and d are positive integers?

E. 50

70 F.

G. 170

H. 350

109. $15^5 \div 15^3 =$

A. 15

B. 15^2

 $\mathbf{C}. \quad 15^3$

D. 15^8

110. What is the value of n if the mean of 5, 7, 9, and *n* is 7?

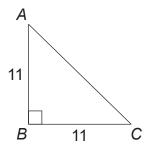
E. 6

F. 7

G. 8

H. 9

111.



In the figure above, the measure of angle C =

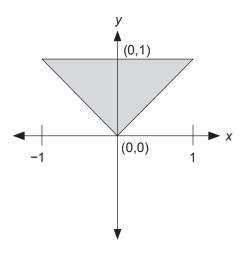
A. 90

B. 60

C. 50

D. 45

112.



Which of the following points can be found in the shaded area above?

- **E.** $\left(\frac{1}{2}, \frac{3}{4}\right)$
- $\mathbf{F.} \quad \left(\frac{1}{2}, -1\right)$
- **G.** $\left(-\frac{1}{2}, -\frac{3}{4}\right)$
- **H.** $\left(-1\frac{1}{2}, \frac{3}{4}\right)$

- 113. Andre has 5 sessions of math class for every 3 sessions of history class. If he has 24 sessions of history class, how many total sessions of math and history class does he have?
 - **A.** 8
 - **B.** 16
 - **C.** 40
 - **D.** 64
- 114. Juliet is working in a call center and receives 3 calls per minute. At this rate, how many calls does she receive per hour?
 - **E.** 20
 - F. 90
 - **G.** 180
 - **H.** 240

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. ■



NEW YORK CITY PUBLIC SCHOOLS

SPECIALIZED HIGH SCHOOLS ADMISSIONS TEST

PART 1 ENGLISH LANGUAGE ARTS

1	A	B	©	D	16	E	F	G	\bigcirc
2	E	F	G	(H)	17	A	B	©	D
3	A	B	©	D	18	E	F	G	(H)
4	E	F	G	(H)	19	A	B	©	D
5	A	B	©	D	20	E	F	G	(H)
6	E	F	G	(H)	21	A	B	©	D
7	A	B	©	D	22	E	F	G	(H)
8	E	F	G	(H)	23	A	B	©	D
9	A	B	©	D	24	E	F	G	(H)
10	E	F	G	(H)	25	A	B	©	D
11	A	B	(C)	D	26	E	F	G	(H)
12	E	F	G	(H)	27	A	B	©	D
13	A	B	(C)	D	28	E	F	G	(H)
14	E	F	G	(H)	29	A	B	©	D
15	A	B	©	D	30	E	F	G	(H)

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

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

PART 2 MATHEMATICS

58					
	Θ	0	0	\odot	\odot
		0	0	0	0
		1	1	1	1
		2	2	2	2
		3	3	3	3
		4	4	4	4
		5	5	(5)	(5)
		6	6	6	6
		7	7	7	7
		8	8	8	8
		9	9	9	9

59					
	\bigcirc	\odot	0	\odot	\odot
		0	0	0	0
		1	1	1	1
		2	2	2	2
		3	3	3	3
		4	4	4	4
		(5)	5	(5)	(5)
		6	6	6	6
		7	7	7	7
		8	8	8	8
		9	9	9	9

60				
	0	0	0	\odot
	0	0	0	0
	1	1	1	1
	2	2	2	2
	3	3	3	3
	4	4	4	4
	5	5	(5)	(5)
	6	6	6	6
	7	7	7	7
	8	8	8	8
	9	9	9	9

61					
	Θ	0	0	\odot	0
		0	0	0	0
		1	1	1	1
		2	2	2	2
		3	3	3	3
		4	4	4	4
		5	5	(5)	(5)
		6	6	6	6
		7	7	7	7
		8	8	8	8
		9	9	9	9

62					
	Θ	\odot	0	\odot	\odot
		0	0	0	0
		1	1	1	1
		2	2	2	2
		3	3	3	3
		4	4	4	4
		5	5	(5)	(5)
		6	6	6	6
		7	7	7	7
		8	8	8	8
		9	9	9	9

63	A	B	©	D
64	E	F	G	\bigcirc
65	A	B	©	D
66	E	F	G	\bigcirc
67	A	B	©	D
68	E	F	G	\bigcirc
69	A	B	©	D
70	E	F	G	\bigcirc
71	A	B	©	D
72	E	F	G	\bigcirc
73	A	B	©	D
74	E	F	G	\bigcirc
75	A	B	©	D

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

89	A	B	©	D
90	E	F	G	(H)
91	A	B	©	D
92	E	F	G	$oldsymbol{H}$
93	A	B	©	D
94	E	F	G	\bigcirc
95	A	B	©	D
96	E	F	G	\bigcirc
97	A	B	©	D
98	E	F	G	\bigcirc
99	A	B	C	D
100	E	F	G	\bigcirc
101	A	B	©	D

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