Chapter 2
Practice Test 1

The Digital SAT will be administered on a computer or tablet, so it is best if you take your practice tests in the online Student Tools for this book. However, if you are unable to test on a computer or if you have accommodations and will take the official test on paper, you may take the printed version of Test 1 in this book instead. Both sets of instructions are below.

To Test Online:

Register your book according to the instructions on pages xiv–xv. In your Student Tools, you will be able to access the tests associated with this book: both the two printed in this book and the additional online-only tests. Taking these online adaptive tests is a great way to prepare for taking the actual Digital SAT.

The Digital SAT has only two modules in each section, not three like the test printed in this book. The second module you get in each section will be determined by your performance on the first module in that section. The online tests follow this structure, and once you finish the test, you will get an estimated score based on the modules you saw and the questions you got right.

To Test on Paper:

For both RW and Math, the following test contains a standard first module and two options for the second module, one easier and one harder. You should take the appropriate second module based on your performance in the first module, as detailed below, but you can feel free to use the other module for extra practice later.

In order to navigate the practice test in this book, take the following steps. To record your answers, you can either indicate them as described in the directions for print tests included with each module or by entering them onto the answer sheet on pages 75–76.

- [ ] Take Reading and Writing (RW) Module 1, allowing yourself 32 minutes to complete it.
- [ ] Go to the answer key starting on page 78 and determine the number of questions you got correct in RW Module 1.
- [ ] If you get fewer than 15 questions correct, take RW Module 2 – Easier, which starts on page 27. If you get 15 or more questions correct, take RW Module 2 – Harder, which starts on page 38.
- [ ] Whichever RW Module 2 you take, start it immediately and allow yourself 32 minutes to complete it.
- [ ] Take a 10-minute break between RW Module 2 and Math Module 1.
- [ ] Take Math Module 1, allowing yourself 35 minutes to complete it.
- [ ] Go to the answer key starting on page 80 and determine the number of questions you got correct in Math Module 1.
- [ ] If you get fewer than 14 questions correct, take Math Module 2 – Easier, which starts on page 58. If you get 14 or more questions correct, take Math Module 2 – Harder, which starts on page 66.
- [ ] Whichever Math Module you take, start it immediately and allow yourself 35 minutes to complete it.
- [ ] After you finish the test, check your answers to RW Module 2 and Math Module 2.
- [ ] Only after you complete the entire test should you read the explanations for the questions, which start on page 82 and are also available online.
- [ ] Go to your online Student Tools to see the latest information about scoring and to get your estimated score.

SAT Prep Test 1—Reading and Writing
Module 1

Turn to Section 1 of your answer sheet (p. 75) to answer the questions in this section.

DIRECTIONS

The questions in this section address a number of important reading and writing skills. Each question includes one or more passages, which may include a table or graph. Read each passage and question carefully, and then choose the best answer to the question based on the passage(s).

All questions in the section are multiple-choice with four answer choices. Each question has a single best answer.

---

1 ☐ Mark for Review

Despite initial skepticism regarding the feasibility of growing crops on the tops of buildings, Dr. Dickson Despommier has remained _____ in his promotion of vertical farming. In no small part due to Dr. Despommier's persistence and dedication to the cause, cities all over the United States have embraced rooftop gardening as a means of providing fresh produce to urban areas and promoting sustainable agriculture.

Which choice completes the text with the most logical and precise word or phrase?

(A) menacing

(B) subdued

(C) resolute

(D) misunderstood

---

2 ☐ Mark for Review

The fishermen of the coastal village of Kerala, India, _____ traditional fishing methods with modern technology; for example, the fishermen use motorized boats and GPS tracking to increase the efficiency and speed of fishing expeditions while applying age-old knowledge of tides, weathers patterns, and fish migratory patterns that have supported fishing success for centuries.

Which choice completes the text with the most logical and precise word or phrase?

(A) belittle

(B) contemplate

(C) integrate

(D) replace

CONTINUE

3 ☐ Mark for Review

Spanning three different storylines set hundreds of years apart, Anthony Doerr's 2021 novel *Cloud Cuckoo Land* depicts the impact of a single story on the lives of three different protagonists living in different time periods. Because the three characters' lives at the center of the story are so _____, each with truncated yet rich and unique life experiences and histories, the reader could not be faulted for wishing each character had been given his or her own novel.

Which choice completes the text with the most logical and precise word or phrase?

(A) meaningless

(B) dynamic

(C) benign

(D) shattered

4 ☐ Mark for Review

A study conducted by Monica Gagliano and colleagues found that plants that were exposed to stressors, such as drought or intense heat, were more likely to survive future stressors compared to plants that were not previously exposed to these conditions. This evidence of plant memory challenges the common perception of plants as _____ organisms that simply respond to their environment.

Which choice completes the text with the most logical and precise word or phrase?

(A) courageous

(B) assertive

(C) passive

(D) adaptable

5 ☐ Mark for Review

In a 2020 study, Stanford University professor Nicholas Bloom and colleagues were able to demonstrate that working from home can actually increase productivity and work satisfaction, as well as reduce employee turnover rates. Based on this research, many economists have _____ the commonly held belief that remote work leads to decreased productivity.

Which choice completes the text with the most logical and precise word or phrase?

(A) muddied

(B) questioned

(C) usurped

(D) articulated

CONTINUE ➤

6 ☐ Mark for Review

The following text is adapted from Laurence Housman's 1916 play, *Bird in Hand*. Professor Braintree, a famous scientist, is examining a series of letters in his study when he is greeted by his secretary, Miss Tuckey.

MISS TUCKEY: Good-morning, Sir.

PROFESSOR: Miss Tuckey, there is something broken over there, will you please see it removed? And will you kindly make a note to write to Messrs. Spink and Wedge, and say that these new glasses don't suit me—I find them very <u>trying</u> to the—to the eyes. And I must ask you to fetch those proofs which came yesterday. I tried to catch you just now, but you had gone.

As used in the text, what does the word "trying" most nearly mean?

(A) taxing

(B) attempting

(C) soothing

(D) sampling

7 ☐ Mark for Review

In 2018, a team of researchers led by Edward Boyden of the Massachusetts Institute of Technology developed a new type of probe that could help researchers better understand the brain. The probe, called "neural dust," is a tiny, wireless sensor that can be implanted directly into the brain to monitor electrical signals. Because the dust is biocompatible, it does not damage brain tissue, and because it is wireless, it can be used to monitor the brain over long periods of time without the need for bulky external equipment.

According to the text, why would neural dust help researchers more than other types of probes?

(A) Because other probes are too small to find once implanted in the brain

(B) Because neural dust can be placed more advantageously than other probes

(C) Because neural dust reduces the amount of monitoring time needed to complete a brain tissue scan

(D) Because the electrical current carried by neural dust is less than that of other probes

CONTINUE

8 ☐ Mark for Review

In Māori culture, the Tohunga are revered figures who hold knowledge and wisdom about the history and traditions of their people. They act as healers, navigators, and spiritual leaders, and are responsible for passing on their knowledge to future generations. While modernization has impacted the role of the Tohunga in contemporary society, they remain a crucial source of guidance and guardians of cultural heritage.

What choice best states the main idea of the text?

(A) Contemporary society has less need for the Tohunga.

(B) Despite shifts to their societal function, the Tohunga remain vital to preserving their communities' shared knowledge and traditions.

(C) Although the Tohunga embrace many aspects of society, few welcome technological advancements.

(D) Tohunga traditions are passed down from generation to generation.

9 ☐ Mark for Review

The following text is excerpted from Sir Arthur Conan Doyle's 1891 novel *The White Company*. Alleyne is a young monk traveling north from his abbey in Beaulieu, England.

The youth had now journeyed considerably beyond the furthest domains of the Abbey. He was the more surprised therefore when, on coming round a turn in the path, he perceived a man clad in the familiar garb of the order, and seated in a clump of heather by the roadside. Alleyne had known every brother well, but this was a face which was new to him—a face which was very red and puffed, working this way and that, as though the man were sore perplexed in his mind.

Which choice best states the main idea of the text?

(A) Alleyne is less familiar with the man than he is with other members of his order.

(B) Alleyne has become more suspicious of others since his encounter with the man.

(C) Alleyne only trusts men who wear the familiar garb of the order.

(D) Alleyne is perplexed by the behavior of some members of the order.

CONTINUE

10 ☐ Mark for Review
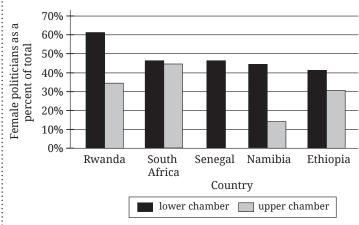
The Joy Luck Club is a 1989 novel by Amy Tan. In the novel, Tan suggests that upon smelling fragrant aromas, she felt an intuitive and sometimes unexpected sense of cultural recognition: _____

Which quotation from *The Joy Luck Club* most effectively illustrates the claim?

(A) "We had a feast of warm pork with lettuce, dumplings, tender fish still tasting of lake weeds, red-bean soup with long dumplings, warm sesame-seed cake dotted with watermelon seeds."

(B) "There is so much about my mother I do not understand. And though the food I cook now is not the same as my mother's, when I cook it, when I taste it, I feel a powerful connection to her."

(C) "Ever since I was a child, the smell of that dish stirred me strangely. It carried the flavors of my ancestors, the love and traditions that went into making it."

(D) "Suyaun began to talk about Chinese people who eat dumplings on the last day of the old year and the first day of the new year. She said dumplings were like hopes – little pieces of filling wrapped up in a dough, with the corners twisted tight."

11 ☐ Mark for Review

Percentage of Women Serving in Upper and Lower Chamber of Parliament in Five African Countries

The Inter-Parliamentary Union monitors the percentage of women elected to serve in national parliaments around the world in order to report on the gap between the number of men and women serving in politics. In Africa, the top five countries with the highest number of female politicians are Rwanda, South Africa, Senegal (which only has a lower chamber), Namibia and Ethiopia. In some cases, the percentage of women serving in parliaments was found to be especially prominent; for instance, _____

Which choice most effectively uses data from the graph to complete the example?

(A) a relatively equal percentage of women served in the lower chambers of Rwanda, Senegal, Namibia, and Ethiopia.

(B) most of the members of both chambers of parliament in Ethiopia are women.

(C) approximately equal percentages of women served in the upper and lower chambers in South Africa.

(D) most of the people serving in the lower chamber of parliament in Rwanda are women.

CONTINUE

12 ☐ Mark for Review

Literary critics have argued that Mary Shelley's novel *Frankenstein* was deeply influenced by her marriage to Percy Shelley, who was known for his radical and progressive views, including his ideas about the potential of science and technology, the nature of life and the social implications of scientific advancements. Indeed, Percy's beliefs may have inspired Mary's exploration of consequences and ethical dilemmas in *Frankenstein,* but *Frankenstein* stands on its own as a work of literary genius. Thus, those who ascribe Percy's influence as the primary motivation for *Frankenstein* _____

What choice most logically completes the text?

- (A) tend to view the writings of Percy and Mary Shelley through too personal of a lens.

- (B) neglect the influence of many other individuals on Mary Shelley's writings.

- (C) risk oversimplifying the motivating factors for Mary Shelley's novel.

- (D) may make incorrect assumptions about Percy and Mary Shelley's relationship.

13 ☐ Mark for Review

The purpose of Stonehenge, a famous prehistoric monument, has long been debated by archaeologists. Some historians propose it was an astronomical observatory, but there is no conclusive evidence of this assertion. While certain stone alignments within the structure coincide with celestial events associated with astronomy, Stonehenge's design and construction span different time periods, suggesting shifting scientific, religious, ceremonial, and social functions depending on the era. Our understanding of the true purpose of Stonehenge remains an enigmatic puzzle, suggesting that _____

Which choice most logically completes the text?

- (A) Stonehenge likely would not have been used for such diverse purposes had it existed in a less central location.

- (B) alterations to structural design affect different types of monuments in different ways.

- (C) the development of Stonehenge over multiple eras makes its original function a point of contention for archaeologists and historians.

- (D) the design of Stonehenge made it more useful for religious and ceremonial purposes than for astronomy.

CONTINUE ➔

14 ⌖ Mark for Review

Lisa Fenk and her team at The Rockefeller University used a combination of approaches to understand more precisely how fruit _____ allow for the tracking of visual patterns.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) flies retinal movements

(B) flies' retinal movement's

(C) flies' retinal movements

(D) fly's retinal movements'

15 ⌖ Mark for Review

Using commonplace items such as wooden furniture and clothing, Doris _____ created her art installations *Unland: The Orphan's Tunic* and *La Casa Viuda*, memory sculptures that capture the history of her home country Colombia as well as her own personal experiences.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) Salcedo:

(B) Salcedo—

(C) Salcedo

(D) Salcedo,

16 ⌖ Mark for Review

The National Day of Listening, started by the national oral history project StoryCorps in 2008, is a day encouraging Americans to record the stories of their loved _____ people interested in participating can access resources and recommendations about the interview process through the StoryCorps website or app.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) ones,

(B) ones;

(C) ones

(D) ones and

17 ⌖ Mark for Review

In 1839, English artist Frederick Catherwood joined an expedition to Central America, where he saw over forty sites full of _____ creating detailed drawings and paintings of the ruins, Catherwood helped to reintroduce the Mayan civilization to the Western world.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) ruins by

(B) ruins, by

(C) ruins. By

(D) ruins and by

CONTINUE

18 ☐ Mark for Review

Paleontologist Keyron Hickman-Lewis's analysis of 3.48-billion-year-old rocks, which contain the oldest evidence of life on Earth, from the Dresser Formation in Western Australia _____ scientists analyze rocks that the *Perseverance* rover is collecting on Mars.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) will help

(B) to have helped

(C) to help

(D) helping

19 ☐ Mark for Review

During Japan's Heian period (794–1185), the Heian Palace was located in Heian-kyō, the capital during those years. Within the palace _____ several administration buildings and the living quarters of the emperor.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) has been

(B) is

(C) was

(D) were

20 ☐ Mark for Review

In 1956, American physicists Clyde L. Cowan and Frederick Reines determined that _____ exist by observing the neutrinos' interactions with protons in water.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) neutrinos—subatomic particles that have no electric charge, very small mass, and a spin of one-half—

(B) neutrinos, subatomic particles that have: no electric charge, very small mass, and a spin of one-half,

(C) neutrinos—subatomic particles—that have no electric charge, very small mass, and a spin of one-half,

(D) neutrinos, subatomic particles that have no electric charge, very small mass, and a spin of one-half

CONTINUE ➤

21 ☐ Mark for Review

In 1967, the US Supreme Court ruled that American citizens could not be relieved of their citizenship without their consent in the case *Afroyim v. Rusk.* This case overruled another important case, *Perez v. Brownell*, which mandated the loss of citizenship after voting in an election in another country. _____*Perez v. Brownell* prompted a discussion about voluntary versus involuntary choices; according to the ruling, citizenship could not be removed for unintentional actions.

Which choice completes the text with the most logical transition?

Ⓐ Actually,

Ⓑ Nevertheless,

Ⓒ Additionally,

Ⓓ For instance,

22 ☐ Mark for Review

While researching a topic, a student has taken the following notes:

- Megalodons were ancient sharks that lived between 23 million and 2.6 million years ago.
- In a 2022 study, paleobiologist Catalina Pimiento and colleagues analyzed fossil evidence of the megalodon.
- They hoped to learn more about the megalodon's life, as little is known because very few fossils of the species are available.
- They used rare megalodon fossils and scans of modern great white sharks to create a 3D model of the megalodon, which revealed the shark to be around 50 feet long.
- They also found that the megalodon could swim faster than a great white shark, could travel across multiple oceans, and could have consumed an orca in five bites.

The student wants to present the study and its findings. Which choice most effectively uses relevant information from the notes to accomplish this goal?

Ⓐ In a 2022 study, Catalina Pimiento and colleagues used both records of ancient fossils and scans of modern sharks to determine that the megalodon was around 50 feet long, could travel across multiple oceans, and could consume an orca.

Ⓑ In 2022, Catalina Pimiento and colleagues studied rare megalodon fossils as well as scans of contemporary great white sharks in order to learn more about the megalodon's life.

Ⓒ Megalodon fossils and scans of modern great white sharks were the focus of a 2022 study.

Ⓓ In a 2022 study, Catalina Pimiento and colleagues analyzed fossils of the megalodon, an ancient shark that lived up to 23 million years ago.

CONTINUE

23 ☐ Mark for Review

While researching a topic, a student has taken the following notes:

- Franz Joseph Haydn was an Austrian-born classical composer of symphonies and concertos.
- In 1798, he completed the composition *The Creation*, which depicts biblical stories from the Book of Genesis.
- A prominent feature of the composition is that different choral soloists represent Adam and Eve.
- Another prominent feature is tone painting, a technique by which music depicts narrative elements.

The student wants to introduce the composition *The Creation* to an audience already familiar with Franz Joseph Haydn. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) *The Creation* was not the only piece written by Austrian-born composer Franz Joseph Haydn.

(B) Franz Joseph Haydn employed the use of both soloists and tone paintings in his work.

(C) In addition to his composition *The Creation*, which was completed in 1798, Austrian-born composer Franz Joseph Haydn produced other symphonies and concertos.

(D) Franz Joseph Haydn's *The Creation* retells biblical stories from the Book of Genesis with choral soloists and tone painting to convey the story.

24 ☐ Mark for Review

While researching a topic, a student has taken the following notes:

- There are 118 elements on the periodic table.
- Six elements are classified as the alkaline earth metals.
- One of those elements is beryllium.
- Its chemical symbol is Be.
- Another of those elements is strontium.
- Its chemical symbol is Sr.

The student wants to emphasize a similarity between the two elements. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) Beryllium (Be) and strontium (Sr) are different elements.

(B) Among the 118 elements on the periodic table is strontium, which is an alkaline earth metal.

(C) Beryllium's chemical symbol is Be, while strontium's chemical symbol is Sr.

(D) Both beryllium and strontium are classified as alkaline earth metals.

CONTINUE ▶

25 ☐ Mark for Review

While researching a topic, a student has taken the following notes:

- Maya Deren was a Ukrainian-born American filmmaker.
- The 1943 experimental short film *Meshes of the Afternoon* was one of her most acclaimed films.
- The film was completely silent and featured no music until 1959, when a score was added.
- The film repeatedly features various shots of the same few objects, including a knife, a key, a flower, and a record spinning on a turntable.
- The film depicts the same events several times from different points of view.

The student wants to introduce Maya Deren and her film *Meshes of the Afternoon* to a new audience. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) *Meshes of the Afternoon* was a highly acclaimed experimental short directed by a Ukrainian-born American filmmaker.

(B) In 1943, American filmmaker Maya Deren released one of her most acclaimed films, *Meshes of the Afternoon*, an experimental silent film that features repeated shots of the same objects as well as repeated events shot from different points of view.

(C) Maya Deren directed *Meshes of the Afternoon* in 1943.

(D) *Meshes of the Afternoon*, an acclaimed experimental film, was completely silent and featured repeated shots of a knife, a key, a flower, and a spinning record.

26 ☐ Mark for Review

While researching a topic, a student has taken the following notes:

- Agnès Varda was a Belgian-born French director.
- In 2015, she was the first woman to receive an honorary Palme d'Or, the highest prize awarded by the Cannes Film Festival.
- Her film *Cléo from 5 to 7*, one of her most acclaimed and notable works, shows two hours in the life of a pop singer.
- The film mixes documentary and fiction elements, and its events are depicted in real time.

The student wants to introduce *Cléo from 5 to 7* to an audience unfamiliar with the film and its director. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) *Cléo from 5 to 7* is a film that mixes documentary with fiction elements and depicts two hours in the life of a pop singer.

(B) Agnès Varda, who directed *Cléo from 5 to 7* and received an honorary Palme d'Or at the Cannes Film Festival, was born in Belgium and then moved to France.

(C) Agnès Varda's film *Cléo from 5 to 7* is highly acclaimed for its portrayal of two hours in the life of a pop singer.

(D) A highly acclaimed film that mixes elements of documentary and fiction, *Cléo from 5 to 7* was directed by Agnès Varda, the first woman to receive an honorary Palme d'Or at the Cannes Film Festival.

CONTINUE ➤

---

27 ⚐ Mark for Review

While researching a topic, a student has taken the following notes:

- In 2022, Ruth Peters and colleagues in Australia and the UK studied the relationship between blood pressure and risk of dementia in older age.

- They found that a decrease in blood pressure was correlated with a decrease in dementia risk.

- When systolic blood pressure was 100 millimeters of mercury (mmHg), the risk of dementia was 0.02.

- When systolic blood pressure was 140 mmHg, the risk of dementia was 0.03.

- When systolic blood pressure was 180 mmHg, the risk of dementia was 0.04.

The student wants to summarize the study. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) Ruth Peters's 2022 study concerning the relationship between blood pressure and risk of dementia found that as blood pressure increased, the risk of dementia increased.

(B) For a 2022 study, researchers from Australia and the UK gathered data on the blood pressure and risk of dementia in older-age subjects.

(C) Ruth Peters and her colleagues sought to understand the relationship between blood pressure and risk of dementia, so they conducted a study.

(D) Knowing that there was a link between blood pressure and dementia risk, Ruth Peters measured people's risk of dementia, which was as high as 0.04 in some cases.

YIELD

Once you've finished (or run out of time for) this section, use the answer key to determine how many questions you got right. If you got fewer than 15 questions right, move on to Module 2—Easier, otherwise move on to Module 2—Harder.

SAT Prep Test 1—Reading and Writing
Module 2—Easier

Turn to Section 1 of your answer sheet (p. 75) to answer the questions in this section.

---

1 ☐ Mark for Review

The electric vehicle market experienced a surge in popularity in the 2010s, with sales increasing from just a few thousand at the start of the decade to more than two million by the end of the decade. As more countries implement policies to reduce carbon emissions, experts _____ that electric vehicle sales will continue to eclipse previous records each year.

Which choice completes the text with the most logical and precise word or phrase?

(A) project

(B) guarantee

(C) reject

(D) deny

---

2 ☐ Mark for Review

According to psychologists, mindfulness—the simple practice of being present and fully engaged in the moment—can improve physical and cognitive function. The _____ of mindfulness have been found to lead to improvements in overall well-being.

Which choice completes the text with the most logical and precise word or phrase?

(A) benefits

(B) drawbacks

(C) basics

(D) physics

CONTINUE

3 ☐ Mark for Review

Astrophysicist Kip Thorne received the Nobel Prize in Physics for his work to detect ripples in space-time, confirming one of the last major predictions of Albert Einstein's general theory of relativity. This discovery both _____ our understanding of the universe and provided astronomers with a firmer ground upon which to make further inquiries.

Which choice completes the text with the most logical and precise word or phrase?

Ⓐ confused

Ⓑ clarified

Ⓒ revolutionized

Ⓓ belittled

4 ☐ Mark for Review

The Navajo Nation, a sovereign Native American territory occupying parts of Arizona, Utah, and New Mexico, has its own judicial system. The judicial branch consists of different courts, with judges appointed by the Nation president and confirmed by the Navajo Nation Council, and is responsible for protecting the civil rights of Navajo citizens and _____ the established principles of the constitution.

Which choice completes the text with the most logical and precise word or phrase?

Ⓐ copying

Ⓑ maintaining

Ⓒ determining

Ⓓ dismissing

5 ☐ Mark for Review

In 2019, an international team of scientists led by Victor Vescovo _____ four new species of gelatinous animals in the Mariana Trench, the deepest point in the world's oceans. This finding gave marine biologists further information regarding the diversity of animals that live and thrive in the extreme ocean depths.

Which choice completes the text with the most logical and precise word or phrase?

Ⓐ reintroduced

Ⓑ discounted

Ⓒ discovered

Ⓓ explored

6 ☐ Mark for Review

Psychologist Kurt Gray led a 2019 study demonstrating that human emotions are often _____ animals by the humans observing them. The findings from this study suggest that humans can empathize with a broader diversity of creatures than previously believed.

Which choice completes the text with the most logical and precise word or phrase?

Ⓐ conflated with

Ⓑ demanded of

Ⓒ united with

Ⓓ attributed to

CONTINUE

7 ☐ Mark for Review

Female emperor penguins do not care for their own eggs. Instead, after the female lays her egg, she transfers the egg to the male's care. The male emperor penguin uses a fold of skin called a brood pouch to balance the egg on his feet and keep it warm. During the two-month window in which the male penguin cares for the egg amidst often harsh conditions, the female penguin sets out to feed and replenish her energy reserves, thus enabling her to return to the colony and care for the chick once it hatches.

Which choice best describes the function of the underlined sentence in the text as a whole?

Ⓐ It explains how female penguins are able to leave their egg and restore their energy to care for their young.

Ⓑ It introduces a physical feature of male penguins alluded to earlier in the text.

Ⓒ It describes the harsh conditions under which the male penguin cares for the egg.

Ⓓ It offers information about how male penguins carry out the function described in the text.

8 ☐ Mark for Review

The following text is adapted from Susan Glaspell's 1917 short story "A Jury of Her Peers." The women in the story, Mrs. Peters and Mrs. Hale, discover an important clue about a murder case with which they have become involved.

And then again the eyes of the two women met— this time clung together in a look of dawning comprehension, of growing horror. Mrs. Peters looked from the dead bird to the broken door of the cage. Again their eyes met. And just then there was a sound at the outside door. Mrs. Hale slipped the box under the quilt pieces in the basket, and sank into the chair before it. Mrs. Peters stood holding to the table. The county attorney and the sheriff came in from outside.

Which choices best states the main purpose of the text?

Ⓐ To describe the features of the quilt that set it apart from other quilts

Ⓑ To detail the women's sudden realization and reaction to that realization

Ⓒ To demonstrate the women's dislike toward the county attorney

Ⓓ To indicate which possession the women most strongly cherish

CONTINUE ▶

9 ☐ Mark for Review

Text 1

It can be argued that there is a sharp disparity between traditional music composition and the use of computer-based technology to compose music. Computer-based programs remove the requirement for certain musical compositional skills, and the program offers shortcuts and features that can help a computer-based "composer" resolve issues within the composition instantaneously.
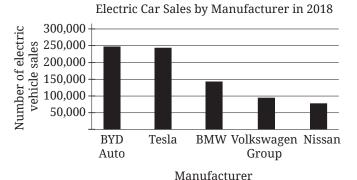
Text 2

While composing music digitally may seem as if it only requires a few clicks of the mouse, it does not require fewer skills than does traditional music composition. Computer-based composers must know both the foundations of music theory and the intricacies of the programs that they use to create their works. Rather than merely booting up a computer, these composers almost always build their melodies as a traditional composition first, and then transpose the work onto the computer for further editing—in the end, their final products require just as much experimentation as traditional compositions.

Based on the texts, how would the author of Text 2 most likely respond to the claims of the author of Text 1?

(A) By conceding that computer-based composers don't spend time learning the foundations of music theory

(B) By emphasizing that the performance of a musical work is more important than the vehicle used for its creation

(C) By clarifying that it is much easier to produce notes using a traditional instrument than it is using a mouse

(D) By stating that computer-based compositions still require some traditional skills even if the medium of creation is less traditional

10 ☐ Mark for Review

Electric Car Sales by Manufacturer in 2018

Electric cars are vehicles powered by electricity stored in onboard batteries and offer a clean and efficient alternative to traditional internal combustion engine vehicles. Electric vehicle sales are still a small percentage of total vehicle sales, but each of the five major electric car manufacturers posted strong numbers in 2018. For example, _____

Which choice most effectively uses data from the graph to complete the text?

(A) BYD Auto had more than 250,000 electric vehicle sales.

(B) Nissan had between 50,000 and 100,000 electric vehicle sales.

(C) Tesla had fewer than 200,000 electric vehicle sales.

(D) BMW and Volkswagen Group each had between 100,000 and 150,000 electric vehicle sales.

CONTINUE

11 🔖 Mark for Review

"The Set of China" is an 1835 short story by Eliza Leslie. In the story, the narrator describes Mr. Gummage as being an art teacher who actively encourages his students to improve upon the fundamentals that he teaches: _____

Which quotation from "The Set of China" most effectively illustrates the claim?

Ⓐ "Mr. Gummage immediately supplied her with two bristle brushes, and sundry little shallow earthen cups, each containing a modicum of some sort of body color, massicot, flake-white, etc., prepared by himself and charged at a quarter of a dollar apiece, and which he told her she would want when she came to do landscapes and figures."

Ⓑ "All the dark shadows in every part of the picture were done with a mixture of Persian blue and bistre, and of these two colors there was consequently a vast consumption in Mr. Gummage's school."

Ⓒ "Mr. Gummage's style was to put in the sky, water and distances with opaque paints, and the most prominent objects with transparent colors. This was probably the reason that his foregrounds seemed always to be sunk in his backgrounds."

Ⓓ "The model was scarcely considered as a guide, for he continually told his pupils that they must try to excel it; and he helped them to do so by making all his skies deep red fire at the bottom, and dark blue smoke at the top; and exactly reversing the colors on the water, by putting red at the top and the blue at the bottom."

12 🔖 Mark for Review

"Stopping by Woods on a Snowy Evening" is a 1923 poem by Robert Frost, which presents a frozen lake on a winter evening while the snow falls. Frost describes his prioritization of personal obligations over admiring the beauty of the winter scene, writing: _____

Which quotation from "Stopping by Woods on a Snowy Evening" most effectively illustrates the claim?

Ⓐ "He will not see me stopping here / To watch his woods fill up with snow"

Ⓑ "The woods are lovely, dark and deep / But I have promises to keep"

Ⓒ "The only other sound's the sweep / Of easy wind and downy flake"

Ⓓ "Between the woods and frozen lake / The darkest evening of the year"

CONTINUE ▶

---

13 ☐ Mark for Review

Number of Citations of Eight Plant Species
in Low and High Vegetation Areas

Plant species	Number of citations in Area I	Number of citations in Area II
C. pyramidale	35	46
S. tuberosa	27	45
C. blanctenianus	31	43
M. glaziovi	11	43
Z. joazeiro	30	43
M. urundeuva	27	41
M. tenuiflora	4	40
S. obtusifolium	32	38

Sonaly Silva da Cunha et. al examined two Brazilian semiarid areas to investigate which plant species were collected by agro-pastoralists (people who live in communities centered around livestock and agriculture) during their foraging expeditions. The researchers predicted that if vegetation were uniform across both areas examined, the average number of citations per species would be 30. The agro-pastoralists cited the number of each of eight species found in an area with low vegetation cover (Area I) and an area with high vegetation cover (Area II). Based on these results, the researchers claim that agro-pastoralists living in Area II were able to gather significant quantities of all eight species due to the area's high vegetation cover.

Which choice best describes data from the table that support the researchers' claim?

A For all of the different plant species, the number of citations from Area II was higher than the researchers' predicted average.

B For all eight plant species, there were fewer than 50 citations from Area II.

C The plant species with the lowest number of citations in Area II was *C. pyramidale.*

D For *M. glaziovi* and *M. tenuiflora,* the number of citations from Area I was significantly higher than the researchers' predicted average.

14 ☐ Mark for Review

"Hieroglyphics" is a 1902 essay by Arthur Machen, a Welsh author and critic. In the essay, Machen addresses the reader as if the two were having a conversation, during which Machen challenges a comparison regarding literary quality that he believes the reader has made: _____

Which quotation from "Hieroglyphics" most effectively illustrates the claim?

A "There is no more madness in *that* notion than in the other one—that one has only to print an amusing, interesting, life-like, or pathetic tale to make it into fine literature."

B "I am afraid, that in your heart of hearts, you still believe that the 'Odyssey' is fine literature, and that 'Pride and Prejudice' is fine literature, though the 'Odyssey' is 'better' than 'Pride and Prejudice.' It is that 'better' that I want to get out of your head, that monstrous fallacy of comparing Westminster Abbey with the charming old houses in Queen Square."

C "Did any cook ever think that he could change a turkey into a bird of paradise by careful attention to the *farse* and the sauce? The farmer might as well expect to breed early phœnixes for Leadenhall Market by the simple process of lighting a bonfire in the farmyard. The young ducks would jump into the blaze, and the transformation would be the work of a second!"

D "At least I hope you would see, though, as I told you a few weeks ago, I doubt very much whether many people realise the distinction between the 'Odyssey' and a political pamphlet. The general opinion, I expect, is that both belong to the same class, though the Greek poem is much more 'important' than the pamphlet."

CONTINUE

15 ☐ Mark for Review

The Inca Empire existed from the thirteenth to sixteenth century in what is now the Andes Mountains in South America. The high altitude and harsh, dry climate kept the Incans relatively safe from external threats but made farming challenging. So, they created a system of terraces that allowed them to grow crops on the mountainside and practiced preserving their crops by "freeze-drying" the crops in the cold, overnight temperatures. These methods worked well enough to produce enough crops to not only support a large population but also _____

Which choice most logically completes the text?

(A) to store crops despite adverse conditions.

(B) to harvest crops during all times of year.

(C) to prolong the life spans of its citizens.

(D) to protect their crops from snow and freezing temperatures.

16 ☐ Mark for Review

In a study of the relationship between sleep and memory consolidation—the process by which memories are embedded in our subconscious after initial acquisition—neuroscientist Matthew Walker and his team measured the brain activity of sleeping participants. They discovered that memory consolidation happens during deep sleep as the brain replays memories and stores them more effectively. They also found that the amount and quality of sleep are vital to memory consolidation. Consequently, an increased amount of high-quality sleep is likely to _____

Which choice most logically completes the text?

(A) decrease an individual's ability to access the subconscious mind.

(B) decrease an individual's ability to achieve deep sleep.

(C) increase an individual's ability to recognize connections between similar memories.

(D) increase an individual's ability to better retain memories.

CONTINUE

---

17 ☐ Mark for Review

Using different parts of his body and incorporating sound effects into his final pieces, sculptor and performance artist Kevin Beasley creates his sculptures _____ found materials (such as clothes) and casting materials (such as resin and foam).

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ with:

Ⓑ with

Ⓒ with,

Ⓓ with—

18 ☐ Mark for Review

Abuwtiyuw was an Egyptian royal hunting dog that lived in the Sixth Dynasty and is thought to have been one of the first domesticated animals. A stone depicting gifts donated for the dog's funeral was discovered in 1935, and researchers _____ that these gifts provide evidence that Abuwtiyuw was mummified.

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ to believe

Ⓑ believing

Ⓒ believe

Ⓓ having believed

19 ☐ Mark for Review

Journalist Rob Capriccioso founded the publication *Indigenous Wire* to combat the lack of Indigenous representation in the media. He aims to write hard-hitting articles that share the _____ in an authentic and realistic way.

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ experiences' of Native American tribe member's

Ⓑ experience's of Native American tribe members

Ⓒ experience's of Native American tribe members'

Ⓓ experiences of Native American tribe members

20 ☐ Mark for Review

Artificial organic dyes, such as phthalocyanines, are used in a wide range of industries, but they are often made using solvents that are harmful to the environment. A team at Aalto University _____ a better method: using solid-state synthesis to minimize the use of dangerous solvents.

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ to recommend

Ⓑ recommends

Ⓒ recommending

Ⓓ having recommended

CONTINUE ▶

21 ☐ Mark for Review

Comets, objects made of ice and dust that orbit the Sun, can be visible to the naked eye. Some comets, such as Halley's Comet, can be seen more than once in a _____ others, such as Comet Shoemaker-Levy 9, are visible only once.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) lifetime, while

(B) lifetime: while

(C) lifetime. While

(D) lifetime; while

22 ☐ Mark for Review

The Myriad year clock, one of the Japanese clocks known as *wadokei*, is a universal clock powered by elastic energy. Once the spring inside of it is fully wound, the clock can power _____ for one year without needing another winding.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) themselves

(B) it

(C) itself

(D) them

23 ☐ Mark for Review

May Berenbaum of the University of Illinois's Department of Entomology _____ a research seminar on chemical ecology when she developed an interest in honey and its role in the lives of bees. She later proved that honey contains chemical compounds that help bees resist illness and live longer.

Which choice completes the text so that it conforms to the conventions of Standard English?

(A) was attending

(B) attends

(C) has been attending

(D) will attend

CONTINUE ➤

24 ▢ Mark for Review

Sheela Gowda is an Indian artist who creates pieces focused on processes, such as people working everyday jobs. Trained as a painter at the Royal College of Art in London, Gowda expanded into sculpting methods in response to India's shifting political dynamics. She has portrayed Indian political themes in her work. _____ Gowda has incorporated themes of dangerous labor practices and the unfair treatment of women into her pieces.

Which choice completes the text with the most logical transition?

Ⓐ Regardless,

Ⓑ In contrast,

Ⓒ Indeed,

Ⓓ In addition,

25 ▢ Mark for Review

Autism is often associated with unique speech patterns, and some of these patterns can be identified reliably throughout different languages. In a study, speech rhythm, or the volume and timing of speech, could identify participants with autism reliably across English- and Cantonese-speaking groups. _____ speech intonation, or the variation of the pitch of speech, could only reliably identify participants with autism in the English-speaking group.

Which choice completes the text with the most logical transition?

Ⓐ In addition,

Ⓑ For example,

Ⓒ By contrast,

Ⓓ Still,

26 ▢ Mark for Review

There have been numerous attempts to allow greater input by America voters with regard to participating in a war. A failed amendment to the Constitution was proposed in 1916 that would have mandated a public referendum to declare war, with anyone voting "yes" being required to enlist and serve. _____ another proposal was made in 1935 and again in 1940 to require a public vote to declare war unless the country had been attacked first.

Which choice completes the text with the most logical transition?

Ⓐ Specifically,

Ⓑ Similarly,

Ⓒ For instance,

Ⓓ In sum,

CONTINUE ▶

27 ☐ Mark for Review

While researching a topic, a student has taken the following notes:

- Terrance Hayes is an American poet.
- He created the "golden shovel" poetic form in which the last word of each line in the poem forms part or all of an existing poem.
- He was inspired by the work of poet Gwendolyn Brooks.
- His poem "The Golden Shovel" uses the words from Brooks's poem "We Real Cool."
- The "golden shovel" form was named after "The Golden Shovel," the first to use this form.

The student wants to provide an explanation and example of a "golden shovel" poem. Which choice most effectively uses relevant information from the notes to accomplish this goal?

Ⓐ The title of the poem "The Golden Shovel" is also the name of the poetic form poet Terrance Hayes created.

Ⓑ Terrance Hayes, who wrote "The Golden Shovel," created the "golden shovel" poetic form.

Ⓒ Terrance Hayes created the "golden shovel" poetic form, inspired by the work of poet Gwendolyn Brooks, in which the last word of each line forms part or all of an existing poem, as seen in his poem "The Golden Shovel."

Ⓓ The "golden shovel" poetic form, created by American poet Terrance Hayes, was inspired by the work of poet Gwendolyn Brooks.

STOP
If you finish before time is called, you may check your work on this module only.
Do not turn to any other module in the test.

SAT Prep Test 1—Reading and Writing
Module 2—Harder

Turn to Section 1 of your answer sheet (p. 75) to answer the questions in this section.

---

1 ☐ Mark for Review

In studying the ability to discern differences in pitch in music, psychologist Diana Deutsch found that native speakers of tonal languages, such as Mandarin or Cantonese, are more apt to recognize pitch differences than native speakers of non-tonal languages, such as English or French, as tonal languages _____ words and phrases using pitch changes, giving speakers of these languages heightened sensitivity.

Which choice completes the text with the most logical and precise word or phrase?

- (A) enunciate
- (B) suggest
- (C) distinguish
- (D) camouflage

---

2 ☐ Mark for Review

Groundbreaking research conducted by James Peebles and his team is motivated by their belief that though the importance of the properties of dark matter are widely accepted, there is an _____ the influence of dark matter on the universe that continues to elude the scientific community.

Which choice completes the text with the most logical and precise word or phrase?

- (A) acknowledgment of
- (B) argument about
- (C) understanding of
- (D) allegiance to

CONTINUE

3 ☐ Mark for Review

Whether the success of a business venture, such as a startup or an established company, can be sustained long-term or is merely temporary is closely related to the concept of credibility and therefore necessitates a comprehensive understanding of the elements that contribute to a business's ability to _____ trust among its potential consumers.

Which choice completes the text with the most logical and precise word or phrase?

(A) invalidate

(B) fortify

(C) demarcate

(D) foster

4 ☐ Mark for Review

Psychologist Angela Duckworth's studies found that individuals who possess high levels of perseverance are more likely to _____ their long-term objectives. Through her work, Duckworth found that the ability to sustain high levels of effort is as important as talent or intelligence in determining success.

Which choice completes the text with the most logical and precise word or phrase?

(A) neglect

(B) analyze

(C) recall

(D) attain

5 ☐ Mark for Review

The following text is translated from "When Father Brought Home the Lamp," an 1883 short story by Finnish author Juhani Aho. The narrator's father has just decided he will set out on a journey the next morning to acquire a lamp, an item no other family in the village owns.

And that same evening father brought in from the storehouse the big travelling chest in which grandfather, in his time, had stowed his provisions when he came from Uleaborg, and bade mother fill it with hay and lay a little cotton-wool in the middle of it. We children asked why they put nothing in the box but hay and a little wool in the middle, but she bade us hold our tongues, the whole lot of us. Father was in a better humor, and explained that he was going to bring a lamp from the storekeeper, and that it was of glass, and might be broken to bits if he stumbled or if the sledge bumped too much.

Which choice best states the function of the underlined sentence in the text as a whole?

(A) It describes a point of curiosity regarding an object that the children would like explained.

(B) It demonstrates the conflicting emotions displayed by various members of the family.

(C) It clarifies the loving relationship between the children and their mother.

(D) It examines how the inquisitive nature of children can be encouraged by a parent.

CONTINUE ▶

The following text is from Jane Austen's 1813 novel *Pride and Prejudice*. The narrator is describing Elizabeth's feelings toward Mr. Darcy.

She began now to comprehend that he was exactly the man who, in disposition and talents, would most suit her. His understanding and temper, though unlike her own, would have answered all her wishes. It was an union that must have been to the advantage of both; by her ease and liveliness, his mind might have been softened, his manners improved; and from his judgement, information, and knowledge of the world, she must have received benefit of greater importance.

Which choice best states the main purpose of the text?

(A) To describe Elizabeth's determination to find a suitable romantic partner

(B) To highlight the benefits of having differing qualities from one's partner

(C) To emphasize Elizabeth's desires in a romantic relationship

(D) To demonstrate that Elizabeth finds her current relationship both enriching and confusing

Novelist Wright Morris, who was also a photographer, complemented his written works with photographs that encapsulated the worlds and characters he created. In his novel *The Home Place* (1948), Morris included a series of photographs throughout the narrative. The images bring to life the people and places Morris described in the text, enhancing the reader's immersion in the story. In that novel, Morris provides perspective on the themes of family, memory, and rural America–ideas that are all reinforced by the imagery contained within the novel.

Which choice best describes the overall structure of the text?

(A) It details the photographs that make up *The Home Place*, then explains how they relate to Morris's convictions.

(B) It makes a claim about Morris, then offers an example that supports that claim.

(C) It describes Morris's impact on the art of storytelling, then discusses Morris's impact on other storytellers.

(D) It notes an artist's unique style, then offers a counterexample of that style.

CONTINUE

8 ☐ Mark for Review

Research conducted by neuroscientist Dr. Lisa Feldman Barrett suggests that emotions are based on the way that the brain interprets sensory inputs. <u>Over a period of sixty days in 2004, Barrett and her team asked study participants to self-report their emotional experiences by ranking to what extent they felt base emotions such as anger, anxiety, and happiness.</u> Researchers found that individuals who reported emotional states that accurately correlated with existing data concerning emotional state and heartbeat rhythm typically had lower levels of depression and anxiety compared to those who are less able to report specific emotional states.

Which choice best states the function of the underlined sentence in the overall structure of the text?

(A) To highlight an obstacle the researchers had to overcome to conduct its study

(B) To summarize the findings of a research study

(C) To offer a concrete example that contextualizes the study's findings

(D) To partially explain the method used in a research study

9 ☐ Mark for Review

Text 1

Many physicists believe in determinism, which states that reality is strictly physical and everything that happens results from physical forces. But if determinism is taken as fact and not theory, the choices we make become not our own decisions. Some psychologists have offered a somewhat comforting response to this hypothetical loss of free will: if we accept the concept that things are as they must be, we can reduce anxiety in our daily lives.

Text 2

When the philosophy of determinism was first standardized in the twentieth century, it was readily accepted by many within the scientific community. However, science journalist John Horgan argues that the human mind operates differently than the simplified way that scientists prefer their theories. Horgan has compared determinism to a rigid track laid down at the beginning of time but states that the human brain is too complex to accept that it cannot alter that track.

Based on the texts, what would the author of Text 2 most likely say about Text 1's characterization of the psychologists' response regarding determinism?

(A) It is overly critical given the complexity of the human brain referenced by Horgan.

(B) It is logical given that Horgan has offered a comparison that may help individuals accept the theory.

(C) It is overly positive given the comments made about the complexity of the human brain by Horgan.

(D) It is surprising given that Horgan's comments were readily accepted by the scientific community.

CONTINUE ▶

10 ☐ Mark for Review

Credited Literary Contributions of Zora Neale Hurston, Nella Larsen, Jessie Redmon Fauset, and Anita Loos

Individual	Years active	Number of credited works published
Zora Neale Hurston	1921–1960	4 novels, 60 short stories, 4 plays
Nella Larsen	1928–1929	2 novels, 5 short stories
Jessie Redmon Fauset	1921–1945	4 novels, 100–200 works as editor
Anita Loos	1910–1970	10 novels, 100–200 short stories, 60 screenplays

Some historians studying African American women literary figures have focused on the early- to mid-1900s, when authors such as Zora Neale Hurston, Nella Larsen, Jessie Redmon Fauset, and Anita Loos were involved in one way or another with numerous literary works. Unfortunately, poor record keeping from this era makes it likely that the numbers of these four authors' contributions to literary canon should not be considered comprehensive; it's entirely possible, for example, that _____

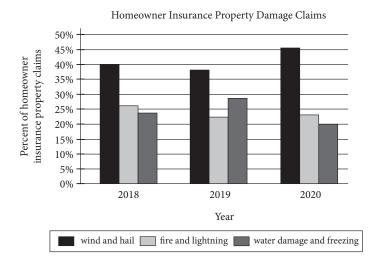Which choice most effectively uses the data from the table to complete the example?

Ⓐ Zora Neale Hurston wrote exactly 60 short stories and two novels.

Ⓑ Nella Larsen wrote significantly fewer short stories than Zora Neale Hurston, who is credited with 60.

Ⓒ Jessie Redmon Fauset's four credited novels include those written after 1945.

Ⓓ Anita Loos wrote more than 60 screenplays and Nella Larsen wrote more than five short stories.

11 ☐ Mark for Review

Researchers Mary Johnson, John Davis, and Robert Smith have studied the effects of exercise on cognitive function in elderly individuals. To effectively conduct these studies, the researchers separated participants aged 65 and older into two groups: one group engaged in a regular exercise program, while the other group remained sedentary. After six months, the exercise group showed significant improvements in memory, attention, and overall cognitive performance compared to the sedentary group. Johnson, Davis, and Smith concluded that regular exercise can have a positive impact on cognitive abilities in older adults.

Which finding, if true, would most directly support Johnson, Davis, and Smith's conclusion?

Ⓐ During periods of activity, elderly adults tend to get more sunshine and fresh air, both of which have a direct correlation to overall cognitive performance.

Ⓑ Overall cognitive performance is easier to ascertain in elderly populations that are physically active than in those that are not.

Ⓒ Cognitive performance in both active and sedentary elderly populations have been found to normalize and be hardly discernible after 12 months of observation.

Ⓓ Active elderly populations have been shown to slow, and sometimes reverse, the effects of aging on cognitive ability, while sedentary elderly populations tend to experience the cognitive effects of aging more rapidly.

CONTINUE ▶

12 Mark for Review

Homeowner Insurance Property Damage Claims

Considering all homeowner's insurance property claims, the Insurance Information Institute assessed the leading causes for property damage claims over a three-year period. According to its report, the Institute determined that the percentage by which different factors caused claims largely fluctuated over the period studied.

Which choice best describes data from the graph that support the Insurance Information Institute's conclusion?

(A) The percentage contribution of water damage and freezing to homeowner's insurance property claims changed every year.

(B) The percentage of homeowner's insurance property claims caused by fire and lightning remained unchanged during the three-year period.

(C) The percentage of homeowner's insurance property claims caused by wind and hail was highest in 2019.

(D) The percentage of homeowner's insurance property claims caused by wind and hail was higher than the percentage for fire and lightning or water damage and freezing in each year.

13 Mark for Review

If *FoxA*, the primary gene that enables some insects to regenerate limbs or even entire bodies, also exists in humans, some biologists have posited that humans may also have the ability to regenerate limbs naturally if stimulated correctly. This concept is also bolstered by evidence that the supplemental genes that interact with *FoxA* during the regeneration process are also found in humans.

Which finding, if true, would most directly weaken the biologists' claim?

(A) The process for determining the genetic makeup of insects is determined to be more effective when used to analyze other types of living organisms.

(B) The genetic makeup of most animal species contains *FoxA*, but when analyzed they contain numerous other genes also found in insects.

(C) A genetically similar species to human beings is revealed to have the same ratio of *FoxA* in its genetic sequence as do insects.

(D) A new study finds that only some of the supplemental genes necessary for aiding *FoxA* in the regeneration process are found in humans.

CONTINUE

———

While studying art history, Neil MacGregor developed a belief that despite museums' displays of objects from different civilizations, the power of objects to tell stories had not been fully explored. According to a museum expert, during his career as an influential art historian and curator, MacGregor sought to address this issue, not by organizing displays limited to a single culture as was the industry standard, but by presenting the objects as pieces of a larger story, so that people from diverse ethnicities might find the exhibit more accessible.

Which finding, if true, would most directly support the museum expert's claim?

A) MacGregor organized the exhibition *Living with Gods: People, Places, and Worlds Beyond* not to emphasize a particular religious belief but to demonstrate the diverse spiritual and religious beliefs.

B) MacGregor curated *Shakespeare: Staging the World* in collaboration with the Royal Shakespeare Company, which explored the historical context during which Shakespeare's plays were written.

C) As director and curator for the British museum, MacGregor curated *A History of the World In 100 Objects*, which allowed visitors from around the world to explore human history through objects from the museum's collection.

D) MacGregor's work as curator of the 2015 exhibition *Australia* explored themes such as indigenous heritage, colonization, and environmental challenges in the context of contemporary Australian society.

A central challenge when studying the impact of leadership positions on everyday behavior is establishing a suitable control group. Any study aiming to investigate the impact of leadership positions on everyday behavior needs to compare individuals in positions of leadership to those who are not but who otherwise possess similar characteristics. Because it is often hard to anticipate who will rise to leadership positions, researchers _____

Which choice most logically completes the text?

A) will find it challenging to execute an accurate comparative analysis.

B) struggle to find reputable data about the changes in behavior in those who currently hold leadership positions.

C) can only conduct valid studies on individuals who have recently left leadership positions.

D) should select a large control group of diverse people.

CONTINUE ➤

16 ☐ Mark for Review

Transcribed in the sixteenth century in Classical Quiché by an unknown Mayan scribe, *Popol Vuh* is one of the most significant surviving sources of ancient Mayan culture. The text reflects pre-colonial Mayan beliefs about cosmology, religion, and morality. Nonetheless, some of the passages in *Popol Vuh* included Catholic and European influence, which suggests that the Mayans may have had interactions with those religious and regional groups. Consequently, scholars contend that _____

Which choice most logically completes the text?

Ⓐ any references to beliefs influenced cultural aspects of the Mayan civilization found in the text should be considered distinct from the original Mayan belief.

Ⓑ while most of ancient Mayan culture and traditions predates colonialization, some elements of culture were shaped after contact with European and Catholic ideals.

Ⓒ although the scribe who transcribed *Popol Vuh* was fluent in Classical Quiché, they also had a functional knowledge of European languages.

Ⓓ before colonization, Mayan beliefs about cosmology, religion, and morality were unique to the civilization.

17 ☐ Mark for Review

Directed by filmmaker Tony Silver, *Style Wars*, a documentary about New York City street artists, _____ contrasting views on graffiti, including those of the artists themselves, who explain their motivations for creating art that is illegal.

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ present

Ⓑ have presented

Ⓒ are presenting

Ⓓ presents

18 ☐ Mark for Review

Unlike all other waterfowl, the black-headed duck does not build a _____ it deposits its eggs into other birds' nests, where they are incubated along with the parents' own eggs. According to biologist John Eadie, the duck's choice of coots for their host nests may be in response to the presence of egg-eating predators, since coots vigorously defend their clutches against predation.

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ nest; instead,

Ⓑ nest, instead;

Ⓒ nest instead,

Ⓓ nest, instead,

CONTINUE

19 ☐ Mark for Review

Chemist Stephanie Kwolek _____ tire materials for the DuPont chemical company when she unexpectedly found a new polymer with fibers that aligned themselves parallel to each other, making this polymer exceptionally strong; later trademarked as Kevlar, her discovery is now used in products from phones to body armor.

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ will research

Ⓑ was researching

Ⓒ has been researching

Ⓓ researches

20 ☐ Mark for Review

Located on the eastern slopes of the Andes Mountains, the Yungas cloud forests of Bolivia are home to many endemic plants and animals. Herpetologist Teresa Camacho Badani led an expedition into the Yungas to collect specimens of an endangered species of _____ known only from a single individual found in 2009 and nicknamed Romeo, the Sehuencas water frog (*Telmatobius yucarare*) is now being bred in captivity in an effort to restore the population.

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ amphibian previously

Ⓑ amphibian but previously

Ⓒ amphibian. Previously

Ⓓ amphibian, previously

21 ☐ Mark for Review

In 2022, a helicopter landed in Palm Springs, California, after completing a pioneering 24-mile _____ by a rechargeable battery and carrying a 50-pound weight (which was added in order to simulate the weight of a transport care system for organ transplants), the fully electric helicopter was copiloted by Martine Rothblatt and Ric Webb.

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ flight, powered

Ⓑ flight and powered

Ⓒ flight powered

Ⓓ flight. Powered

22 ☐ Mark for Review

The *Voyager 2* spacecraft was launched by NASA in 1977 in order to take close-up pictures of Uranus and _____ find the furthest extent of the Solar System; and collect data about the interstellar space beyond the Solar System.

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ Neptune, the previously unexplored outer planets;

Ⓑ Neptune the previously unexplored outer planets,

Ⓒ Neptune, the previously unexplored outer planets,

Ⓓ Neptune; the previously unexplored outer planets,

CONTINUE ▶

23 ▢ Mark for Review

Ethiopian American artist Julie Mehretu paints by projecting a visual image such as an architectural blueprint or a photograph from a newspaper article onto a canvas and then converting the projection into abstract forms, working in a style that art _____ "a complex dance between abstraction and representation."

Which choice completes the text so that it conforms to the conventions of Standard English?

Ⓐ journalist Maximiliáno Durón, calls,

Ⓑ journalist Maximiliáno Durón calls

Ⓒ journalist, Maximiliáno Durón, calls

Ⓓ journalist, Maximiliáno Durón, calls,

24 ▢ Mark for Review

While a local legend credits French cheesemaker Marie Harel with the invention of Camembert cheese, she likely learned the technique from a priest, Abbot Charles-Jean Bonvoust, who passed along the recipe while in hiding during the French Revolution. _____ Harel will likely continue to receive recognition for the cheese, as her descendants created a large-scale cheese factory to mass-produce the variety to share with the rest of the world.

Which choice completes the text with the most logical transition?

Ⓐ Nevertheless

Ⓑ Furthermore,

Ⓒ Indeed,

Ⓓ Consequently,

25 ▢ Mark for Review

The Chicxulub crater, located in Mexico, was discovered by Antonio Camargo and Glen Penfield and is believed to be the result of an asteroid impact. Many researchers have found evidence to support the hypothesis that the impact caused the Cretaceous-Paleogene extinction event. _____ the surrounding areas contain shocked quartz that is only formed through high pressure and tektites that are often ejected from meteorites.

Which choice completes the text with the most logical transition?

Ⓐ As a result,

Ⓑ However,

Ⓒ In other words,

Ⓓ Specifically,

CONTINUE

26 ☐ Mark for Review

Fingerprinting is often used to settle fraud cases, but a suspect could claim that he or she handled a piece of paper before the fraudulent material was printed on it. By placing a layer of gelatin over a fingerprint and reacting it in a vacuum chamber, the fingerprint will appear "masked" if it was placed before anything was printed on the paper. _____ using this new technique, court cases will have more reliable evidence regarding a suspect's knowledge of the fraud that was committed.

Which choice completes the text with the most logical transition?

(A) Nevertheless,

(B) Thus,

(C) Similarly,

(D) However,

27 ☐ Mark for Review

While researching a topic, a student has taken the following notes:

- Researchers have been investigating the effects of sports-related concussions on the brain.
- Biomarkers in the blood indicative of tissue injury were found in participants two weeks following their last injuries.
- Extensive white matter damage deeper in the brain was found in participants six months following their last injuries.
- Many participants had more than one sports-related concussion.

The student wants to make and support a generalization about sports-related concussions. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) There are short- and long-term consequences of a sports-related concussion on the brain: two weeks following injury there are biomarkers in the blood indicative of tissue injury, while six months following injury there is damage to the white matter deeper in the brain.

(B) There are many effects of sports-related concussions on the brain, especially in participants with more than one sports-related concussion.

(C) One example of a long-term consequence of sports-related concussions is the damage to white matter deeper in the brain found in participants six months following their last injury.

(D) Many participants had more than one sports-related concussion, and blood biomarkers showed signs of tissue injury two weeks following their sports-related concussions.

STOP
If you finish before time is called, you may check your work on this module only.
Do not turn to any other module in the test.

SAT Prep Test 1—Math
Module 1

Turn to Section 2 of your answer sheet (p. 76) to answer the questions in this section.

DIRECTIONS

The questions in this section address a number of important math skills.
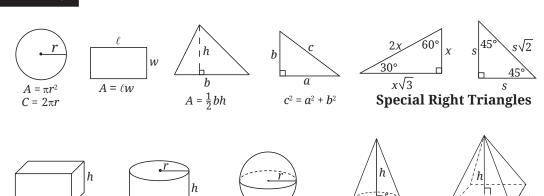Use of a calculator is permitted for all questions.

NOTES

Unless otherwise indicated:

- All variables and expressions represent real numbers.
- Figures provided are drawn to scale.
- All figures lie in a plane.
- The domain of a given function f is the set of all real numbers x for which $f(x)$ is a real number.

REFERENCE

$A = \pi r^2$
$C = 2\pi r$

$A = \ell w$

$A = \frac{1}{2}bh$

$c^2 = a^2 + b^2$

Special Right Triangles

$V = \ell wh$

$V = \pi r^2 h$

$V = \frac{4}{3}\pi r^3$

$V = \frac{1}{3}\pi r^2 h$

$V = \frac{1}{3}\ell wh$

The number of degrees of arc in a circle is 360.
The number of radians of arc in a circle is 2π.
The sum of the measures in degrees of the angles of a triangle is 180.

CONTINUE

For multiple-choice questions, solve each problem, choose the correct answer from the choices provided, and then circle your answer in this book. Circle only one answer for each question. If you change your mind, completely erase the circle. You will not get credit for questions with more than one answer circled or for questions with no answers circled.

For student-produced response questions, solve each problem and write your answer next to or under the question in the test book as described below.

- Once you've written your answer, circle it clearly. You will not receive credit for anything written outside the circle or for any questions with more than one circled answer.
- If you find **more than one correct answer**, write and circle only one answer.
- Your answer can be up to 5 characters for a **positive** answer and up to 6 characters (including the negative sign) for a **negative** answer, but no more.
- If your answer is a **fraction** that is too long (over 5 characters for positive, 6 characters for negative), write the decimal equivalent.
- If your answer is a **decimal** that is too long (over 5 characters for positive, 6 characters for negative), truncate it or round at the fourth digit.
- If your answer is a **mixed number** (such as $3\frac{1}{2}$), write it as an improper fraction (7/2) or its decimal equivalent (3.5).
- Don't enter **symbols** such as a percent sign, comma, or dollar sign in your circled answer.

1   ☐ Mark for Review

Data set S: 2, 3, 8, 8, 11, 24

Data set T: 3, 8, 8, 11, 24

The values in data sets S and T are given. Which of the following is a true statement comparing the means of the two data sets?

(A) There is not enough information to compare the means.

(B) The means of data set S and data set T are equal.

(C) The mean of data set S is less than the mean of data set T.

(D) The mean of data set S is greater than the mean of data set T.

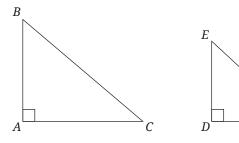**2**   ☐ Mark for Review

If $x = 8$, what is the value of $30 - x$?

(A) 14

(B) 22

(C) 30

(D) 38

3   ☐ Mark for Review

The valve of a water tank remained open for 44 seconds. The water tank contained 7,854 liters of water before the valve was opened and 1,192 liters of water once the valve was closed. Approximately how many liters of water, on average, drained from the tank each second while the valve was open?

(A) 27

(B) 151

(C) 206

(D) 6,662

4   ☐ Mark for Review

Note: Figures not drawn to scale.

Similar right triangles ABC and DEF are shown, where B corresponds to E. If the measure of angle E is 52°, what is the measure of angle C?

(A) 38°

(B) 52°

(C) 128°

(D) 142°

CONTINUE

5 ☐ Mark for Review

Last week, a softball equipment company made $26,000 from the sale of equally-priced bats and equally-priced gloves. When b is the number of bats sold and g is the number of gloves sold, the equation $500b + 300g = 26,000$ represents this situation. The sales price of each glove is how many dollars less than the sales price of each bat?

_____

6 ☐ Mark for Review

$$8x - y = -17$$
$$-7x = 14$$

The given system of equations has one solution at (x, y). What is the value of $x - y$?

Ⓐ −31

Ⓑ −3

Ⓒ 3

Ⓓ 31

7 ☐ Mark for Review

The function $f(d) = 750d + 12,000$ models the amount of money, in dollars, that an arts organization has in its account d days after starting a fundraising campaign. Based on this model, how much money, in dollars, did the organization have in its account before starting the fundraising campaign?

Ⓐ 16

Ⓑ 750

Ⓒ 11,250

Ⓓ 12,000

8 ☐ Mark for Review

Equilateral triangle T has a perimeter that is one-third the perimeter of equilateral triangle S. If one side of triangle S is 9 inches long, what is the length, in inches, of one side of triangle T?

Ⓐ 3

Ⓑ 9

Ⓒ 12

Ⓓ 27

CONTINUE

9 ⬜ Mark for Review

If $|7x + 14| = 49$, what is one possible value of $x + 2$?

----

10 ⬜ Mark for Review

x	$g(x)$
−30	−116
−24	−86
−18	−56
−12	−26
−6	4

Five values of x and their corresponding values of $g(x)$ are shown in the table. The relationship between x and $g(x)$ is linear. If the function g is defined by $g(x) = kx + 34$, what is the value of the constant k?

----

11 ⬜ Mark for Review

The expression $(-3x^4 + 13) + (-8x^4 - 9)$ is equivalent to $cx^4 + 4$, where c is a constant. What is the value of c?

----

12 ⬜ Mark for Review

$$\frac{22m}{n} = \frac{2}{3s}$$

The given equation relates the numbers m, n, and s, where n is not equal to 0 and $s > 1$. Which equation correctly expresses m in terms of n and s?

Ⓐ $m = 2n - 66s$

Ⓑ $m = 66ns$

Ⓒ $m = \frac{3ns}{44}$

Ⓓ $m = \frac{2n}{66s}$

----

13 ⬜ Mark for Review

A certain ant colony contains $96{,}000$ ants. A disease infects the colony, causing the number of ants to decrease by one-half every 4 days. How many ants remained in the colony 20 days after the infection started?

Ⓐ 3,000

Ⓑ 4,800

Ⓒ 6,000

Ⓓ 24,000

CONTINUE

14 ☐ Mark for Review

$$x < 53$$
$$x - 7y < 16$$

When the given system of inequalities is graphed in the xy-plane, one of the solutions is $(39, y)$. Which of the following could be the value of y?
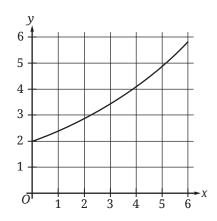
(A) -4

(B) -3

(C) 3

(D) 4

15 ☐ Mark for Review

$$\sqrt[9]{s^5 t^5}$$

If s and t are positive, which of the following expressions is equivalent to the given expression?

(A) $\left(st\right)^{\frac{5}{9}}$

(B) $\left(st\right)^{\frac{9}{5}}$

(C) $(st)^{14}$

(D) $(st)^{45}$

16 ☐ Mark for Review

A certain collector's item increased in value every month for the first six months after it was purchased. The graph shows the value, y, in hundreds of dollars, of the item x months after it was purchased, where $0 \le x \le 6$. Which of the following is the best interpretation of the y-intercept of the graph in this context?

(A) The value of the item when it was purchased was $2.

(B) The value of the item increased by $200 over the first six months after it was purchased.

(C) The value of the item when it was purchased was $200.

(D) The value of the item six months after it was purchased was $2,000.

---

17 ▢ Mark for Review

Which of the following systems of linear equations has exactly one real solution?

(A) $y = 2$
$y = 4$

(B) $y = 2x$
$y = 2x - 4$

(C) $y = 4x - 4$
$y = 4x + 4$

(D) $y = 4x - 2$
$y = 8x - 4$

18 ▢ Mark for Review

The nth term of a sequence is represented by s, and each term after the first term is one-half of the preceding term. If the first term of the sequence is 56, which of the following equations expresses s in terms of n?

(A) $s = \frac{1}{2}\left(56^{n-1}\right)$

(B) $s = \frac{1}{2}\left(56^{n}\right)$

(C) $s = 56\left(\frac{1}{2}\right)^{n-1}$

(D) $s = 56\left(\frac{1}{2}\right)^{n}$

19 ▢ Mark for Review

In 2023, a certain streaming service decreased its number of movies available by 9% from the number of movies available in 2022. If the number of movies available in 2023 is m times the number of movies available in 2022, what is the value of m?

(A) 0.09

(B) 0.91

(C) 1.09

(D) 1.91

20 ▢ Mark for Review

The maximum value of q is 14 more than 7 times the value of r. Which inequality represents the relationship between q and r?

(A) $q \le 7r + 14$

(B) $q \le 14r + 7$

(C) $q \ge 7r + 14$

(D) $q \ge 14r + 7$

CONTINUE

21 Mark for Review

The equation $5x + 3y = -8$ represents line l. Line m is obtained by shifting line l up 2 units in the xy-plane. The x-intercept of the graph of line m is (a, b). What is the value of a?

22 Mark for Review

$$AB = 42$$
$$BC = 56$$
$$CA = 70$$

Right triangle ABC is similar to triangle DEF, where A corresponds to D and B corresponds to E. The lengths of the sides of triangle ABC are given. What is the value of $\cos D$?

- (A) $\frac{3}{5}$
- (B) $\frac{3}{4}$
- (C) $\frac{4}{5}$
- (D) $\frac{4}{3}$

YIELD

Once you've finished (or run out of time for) this section, use the answer key to determine how many questions you got right. If you got fewer than 14 questions right, move on to Module 2—Easier, otherwise move on to Module 2—Harder.

SAT Prep Test 1—Math
Module 2—Easier

Turn to Section 2 of your answer sheet (p. 76) to answer the questions in this section.

CONTINUE

— —

For multiple-choice questions, solve each problem, choose the correct answer from the choices provided, and then circle your answer in this book. Circle only one answer for each question. If you change your mind, completely erase the circle. You will not get credit for questions with more than one answer circled or for questions with no answers circled.

For student-produced response questions, solve each problem and write your answer next to or under the question in the test book as described below.

- Once you've written your answer, circle it clearly. You will not receive credit for anything written outside the circle or for any questions with more than one circled answer.
- If you find **more than one correct answer**, write and circle only one answer.
- Your answer can be up to 5 characters for a **positive** answer and up to 6 characters (including the negative sign) for a **negative** answer, but no more.
- If your answer is a **fraction** that is too long (over 5 characters for positive, 6 characters for negative), write the decimal equivalent.
- If your answer is a **decimal** that is too long (over 5 characters for positive, 6 characters for negative), truncate it or round at the fourth digit.
- If your answer is a **mixed number** (such as $3\frac{1}{2}$), write it as an improper fraction (7/2) or its decimal equivalent (3.5).
- Don't enter **symbols** such as a percent sign, comma, or dollar sign in your circled answer.

- -

1 ☐ Mark for Review

An automobile factory makes $1,200$ vehicles in 1 day. If the factory operates continuously for 1 <u>week</u> at this rate, how many vehicles will it make?

☐

2 ☐ Mark for Review

If $10a = 30$, what is the value of $9a$?

Ⓐ 27

Ⓑ 40

Ⓒ 270

Ⓓ 360

3 ☐ Mark for Review

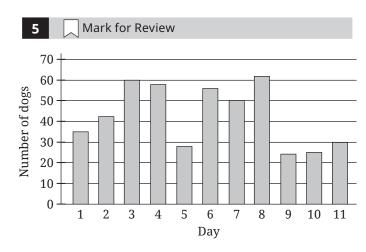Talula baked 340 cookies and gave 20% of them to her neighbors. How many of the cookies did Talula give to her neighbors?

Ⓐ 14

Ⓑ 34

Ⓒ 54

Ⓓ 68

4 ☐ Mark for Review

$$h(x) = 11x - 5$$

The function h is defined by the given equation. When $x = 6$, what is the value of $h(x)$?
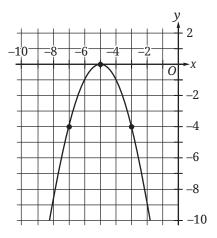
☐

CONTINUE

5 ⬚ Mark for Review

The distribution of 469 dogs that visited a dog park over an 11-day period is shown in the bar graph. How many dogs visited this dog park on day 7?

[____]

6 ⬚ Mark for Review

The graph shown intercepts the x-axis at $(x, 0)$. What is the value of x?

[____]

7 ⬚ Mark for Review
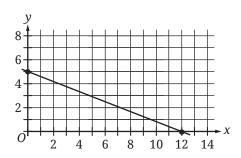
Which of the following expressions is equivalent to $14a + 7ab^2$?

Ⓐ $2a(7 + 7b^2)$

Ⓑ $7a(2 + b^2)$

Ⓒ $7a(a + 14b)$

Ⓓ $7b(2ab)$

8 ⬚ Mark for Review

Rectangle A has a length of 80 and a width of 24. What is the perimeter of rectangle A?

[____]

CONTINUE

---

9 ☐ Mark for Review

The point with coordinates $(3, n)$ lies on the line shown. What is the value of n?

(A) $\frac{13}{4}$

(B) $\frac{15}{4}$

(C) $\frac{19}{5}$

(D) $\frac{24}{7}$

10 ☐ Mark for Review

A magician has a hat with 18 cards inside. The face of each card has a number from 1 to 18 written on it, with a different number on each card. If the magician takes out a single card, what is the probability that the number written on it is <u>not</u> 6?
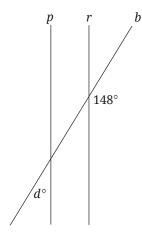
(A) $\frac{1}{18}$

(B) $\frac{6}{18}$

(C) $\frac{12}{18}$

(D) $\frac{17}{18}$

11 ☐ Mark for Review

The function g is defined by $g(x) = -2x^2$. What is the value of $g(3)$?
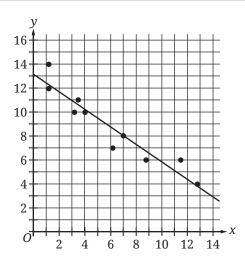
(A) -18

(B) -12

(C) -10

(D) -6

12 ☐ Mark for Review

Note: Figure not drawn to scale.

In the figure shown, line b intersects parallel lines p and r. What is the value of d?

(A) 16

(B) 32

(C) 74

(D) 148

CONTINUE

13 ☐ Mark for Review

Which of the following equations could define the line of best fit for the scatterplot shown?

(A) $y = -13 - 0.7x$

(B) $y = -13 + 0.7x$

(C) $y = 13 - 0.7x$
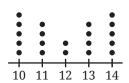
(D) $y = 13 + 0.7x$

14 ☐ Mark for Review

Data Set R

There are 20 values in data set R, represented by the dot plot shown. Data set S is created by subtracting 8 from each of the values in data set R. Which of the following correctly compares the ranges and the means of data sets R and S?

(A) The range of data set S is less than the range of data set R, and the mean of data set S is equal to the mean of data set R.

(B) The range of data set S is less than the range of data set R, and the mean of data set S is less than the mean of data set R.

(C) The range of data set S is equal to the range of data set R, and the mean of data set S is equal to the mean of data set R.

(D) The range of data set S is equal to the range of data set R, and the mean of data set S is less than the mean of data set R.

CONTINUE

15 | Mark for Review

During a video game session, a player scored a total of $1,000$ points for c cooperative missions and s solo missions. The equation $20c + 25s = 1,000$ represents this situation. Which of the following is the best interpretation of the number 25 in this context?

(A) The player completed 25 cooperative missions during this session.

(B) The player scored 25 points for each cooperative mission during this session.

(C) The player completed 25 solo missions during this session.

(D) The player scored 25 points for each solo mission during this session.

16 | Mark for Review

$$g(x) = \frac{\sqrt{x}}{2}$$

The function g is defined by the given equation. If $g(x) = 5$, what is the value of x?
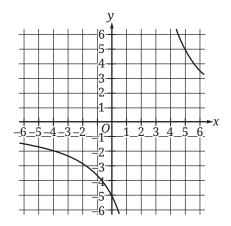
(A) 10

(B) 25

(C) 50

(D) 100

17 | Mark for Review

$$y = x^2 - 7$$
$$x = -7$$

When graphed in the xy-plane, the given equations intersect at the point (x, y). What is the value of y?

(A) -21

(B) -7

(C) 42

(D) 49

18 | Mark for Review

A partial graph of $y = f(x)$ in the xy-plane is shown. Which of the following is the value of $f(0)$?

(A) -5

(B) $-\frac{1}{4}$

(C) 0

(D) 5

CONTINUE

19 ☐ Mark for Review

Which of the following equations defines a line in the xy-plane that has a slope of $\frac{1}{6}$ and passes through the point $(12, -7)$?

(A) $y = \frac{x}{6} - 9$

(B) $y = \frac{x}{6} - 7$

(C) $y = -9x + \frac{1}{6}$

(D) $y = 12x - 7$

20 ☐ Mark for Review

How many distinct real solutions does the equation $4x^2 - 8x - 5 = 0$ have?

(A) Exactly one

(B) Exactly two

(C) Infinitely many

(D) Zero

21 ☐ Mark for Review

A jar contains a total of 37 red and blue tokens used to play a game. The mass of one red token is 90 grams, and the mass of one blue token is 120 grams. If the combined mass of the tokens is 3,810 grams, how many of the tokens in the jar are blue?

(A) 5

(B) 16

(C) 21

(D) 32

22 ☐ Mark for Review

Circle R is defined by the equation $(x + 3)^2 + y^2 = 64$. If circle S is the result of shifting the graph of circle R to the right 7 units in the xy-plane, what is the equation of circle S?

(A) $(x + 3)^2 + (y - 7)^2 = 64$

(B) $(x + 3)^2 + (y + 7)^2 = 64$

(C) $(x - 4)^2 + y^2 = 64$

(D) $(x + 10)^2 + y^2 = 64$

S T O P

If you finish before time is called, you may check your work on this module only.
Do not turn to any other module in the test.

SAT Prep Test 1—Math
Module 2—Harder

Turn to Section 2 of your answer sheet (p. 76) to answer the questions in this section.

DIRECTIONS

The questions in this section address a number of important math skills.
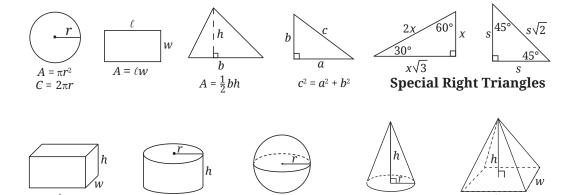Use of a calculator is permitted for all questions.

NOTES

Unless otherwise indicated:

- All variables and expressions represent real numbers.
- Figures provided are drawn to scale.
- All figures lie in a plane.
- The domain of a given function f is the set of all real numbers x for which $f(x)$ is a real number.

REFERENCE

$A = \pi r^2$
$C = 2\pi r$

$A = \ell w$

$A = \frac{1}{2}bh$

$c^2 = a^2 + b^2$

Special Right Triangles

$V = \ell wh$

$V = \pi r^2 h$

$V = \frac{4}{3}\pi r^3$

$V = \frac{1}{3}\pi r^2 h$

$V = \frac{1}{3}\ell wh$

The number of degrees of arc in a circle is 360.
The number of radians of arc in a circle is 2π.
The sum of the measures in degrees of the angles of a triangle is 180.

CONTINUE

For multiple-choice questions, solve each problem, choose the correct answer from the choices provided, and then circle your answer in this book. Circle only one answer for each question. If you change your mind, completely erase the circle. You will not get credit for questions with more than one answer circled or for questions with no answers circled.

For student-produced response questions, solve each problem and write your answer next to or under the question in the test book as described below.

- Once you've written your answer, circle it clearly. You will not receive credit for anything written outside the circle or for any questions with more than one circled answer.
- If you find **more than one correct answer**, write and circle only one answer.
- Your answer can be up to 5 characters for a **positive** answer and up to 6 characters (including the negative sign) for a **negative** answer, but no more.
- If your answer is a **fraction** that is too long (over 5 characters for positive, 6 characters for negative), write the decimal equivalent.
- If your answer is a **decimal** that is too long (over 5 characters for positive, 6 characters for negative), truncate it or round at the fourth digit.
- If your answer is a **mixed number** (such as $3\frac{1}{2}$), write it as an improper fraction (7/2) or its decimal equivalent (3.5).
- Don't enter **symbols** such as a percent sign, comma, or dollar sign in your circled answer.

1 ☐ Mark for Review

A fruit stand sells a total of 200 apples and bananas. The apples are sold in bags of 4 apples per bag, and the bananas are sold in bunches of 6 bananas each. Which of the following equations best represents the number of bags of apples, a, and bunches of bananas, b, that could be sold at the fruit stand?
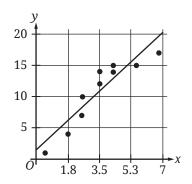
(A) $(a + b)(4 + 6) = 200$

(B) $(4 + a)(6 + b) = 200$

(C) $4a + 6b = 200$

(D) $6a + 4b = 200$

2 ☐ Mark for Review

The relationship between two variables, x and y, is shown on the scatterplot, and a line of best fit is also shown. Which of the following equations best represents the line of best fit?

(A) $y = -1.5 - 2.7x$

(B) $y = -1.5 + 2.7x$

(C) $y = 1.5 - 2.7x$

(D) $y = 1.5 + 2.7x$

3 ☐ Mark for Review

A random sample of the 120 members of a cycling club was given a survey. The survey asked the cycling club members whether they plan to compete in an upcoming race. Of those surveyed, 45% responded that they do not plan to compete in the upcoming race. Which of the following is the best estimate of the total number of cycling club members who do not plan to compete in the upcoming race, based on the survey?

(A) 45

(B) 54

(C) 66

(D) 120

4 ☐ Mark for Review

x	$g(x)$
-1	-11
0	-5
1	-7
2	-17

The table shows four values of x and their corresponding values of $g(x)$ for the quadratic function g. Which of the following equations defines function g?

(A) $g(x) = -x^2 - 4x - 5$

(B) $g(x) = -5x^2 + 3x - 5$

(C) $g(x) = -4x^2 + 2x - 5$

(D) $g(x) = -2x^2 + 4x - 5$

CONTINUE

5 ☐ Mark for Review

$$f(x) = \frac{x - 12}{8}$$

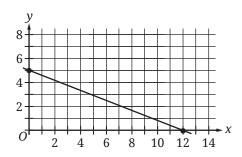The equation given defines function f. If c is a constant, for which value of c does $f(c) = 20$?

(A) 1

(B) 20

(C) 148

(D) 172

6 ☐ Mark for Review

The point with coordinates $(3, n)$ lies on the line shown. What is the value of n?

(A) $\frac{13}{4}$

(B) $\frac{15}{4}$

(C) $\frac{19}{5}$

(D) $\frac{24}{7}$

7 ☐ Mark for Review

Line l is graphed in the xy-plane and is defined by $7 + 4y = -16x$. If line m is parallel to line l, what is the slope of line m?

(A) -4

(B) $-\frac{1}{4}$

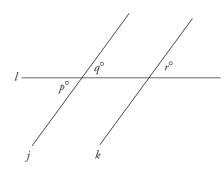(C) $\frac{1}{4}$

(D) 4

8 ☐ Mark for Review

A concrete block in the shape of a rectangular solid has a mass of $1{,}690$ kilograms. The block has a length of 1.1 meters, a width of 0.8 meters, and a height of 0.8 meters. To the nearest whole number, what is the density, in kilograms per cubic meter, of the concrete block?

(A) $1{,}082$

(B) $1{,}190$

(C) $2{,}401$

(D) $2{,}641$

CONTINUE

‐ ‐

9 ☐ Mark for Review

Note: Figure not drawn to scale.

In the figure shown, line l intersects parallel lines j and k. If $q = 10c - 11$ and $r = 15c + 41$, what is the value of p?

(A) 6

(B) 49

(C) 115

(D) 131

10 ☐ Mark for Review

$$-7(px + q) = \frac{42}{23}x + \frac{35}{9}$$

The given equation, where p and q are constants, has infinitely many solutions. If $p < 0$, what is the value of q?

☐

11 ☐ Mark for Review

During the last business quarter, the number of unique visitors to a small e-commerce website decreased by 25% from its previous average of 620 unique visitors each day. At the start of the upcoming quarter, the website will launch a promotion, and the resulting number of unique visitors per day is projected to be 180% of the number of visitors last quarter. What is the projected average number of unique visitors per day the website will receive during its promotion?

☐

12 ☐ Mark for Review

The amount, in micrograms, of a certain radioactive isotope h hours after its initial creation is modeled by the function $M(h) = 302(0.87)^{\left(\frac{4}{5}\right)h}$. According to the model, the amount of the isotope is predicted to decrease by $d\%$ every 75 minutes. What is the value of d?

(A) 0.87

(B) 13

(C) 16.25

(D) 87

CONTINUE

13 ▢ Mark for Review

Packages in a warehouse are split into two groups. Group X contains 40 packages, and group Y contains 110 packages. If the mean mass of the packages in group X is 24 kilograms (kg), and the mean mass of the packages in group Y is 9 kg, what is the mean mass, in kg, of all 150 packages?

_____

14 ▢ Mark for Review

$$11x^2 - kx + 63$$

The given expression, where k is a constant, can be rewritten as $(px - q)(x - r)$, where p, q, and r are integer constants. Which of the following must be an integer?

(A) $\dfrac{63}{r}$

(B) $\dfrac{63}{p}$

(C) $\dfrac{k}{r}$

(D) $\dfrac{k}{p}$

15 ▢ Mark for Review

The equation $3x^2 - 36x + k = 0$ has exactly two real solutions. If k is a constant and $k < m$, what is the least possible value of m?
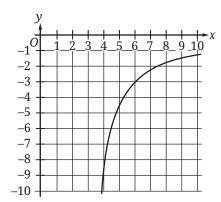
_____

16 ▢ Mark for Review

Data Set R

10 11 12 13 14

There are 20 values in data set R, represented by the dot plot shown. Data set S is created by subtracting 8 from each of the values in data set R. Which of the following correctly compares the ranges and the means of data sets R and S?

(A) The range of data set S is less than the range of data set R, and the mean of data set S is equal to the mean of data set R.

(B) The range of data set S is less than the range of data set R, and the mean of data set S is less than the mean of data set R.

(C) The range of data set S is equal to the range of data set R, and the mean of data set S is equal to the mean of data set R.

(D) The range of data set S is equal to the range of data set R, and the mean of data set S is less than the mean of data set R.

CONTINUE

17 ⚑ Mark for Review

The function g is defined by the equation $g(x) = \dfrac{c}{x-d}$, where c and d are constants. The partial graph of $y = g(x)$ is shown. Which equation could define function h if $h(x) = g(x - 3)$?

- (A) $h(x) = -\dfrac{9}{x-6}$

- (B) $h(x) = -\dfrac{9}{x-3}$

- (C) $h(x) = \dfrac{-9}{x}$

- (D) $h(x) = \dfrac{-9(x-3)}{x-3}$

18 ⚑ Mark for Review

$$y = x^2 - 6x - c$$
$$y = 3.5$$

If the given system of equations has exactly one real solution, and c is a negative constant, what is the value of c?

19 ⚑ Mark for Review

A circle with the equation $x^2 - \dfrac{1}{2}x + y^2 - \dfrac{1}{2}y = \dfrac{7}{8}$ is graphed in the xy-plane. What is the length of the radius of this circle?

20 ⚑ Mark for Review

In the equation $18x^2 - (18n - m)x - mn = 0$, m and n are positive constants. If the product of the solutions to the given equation is kmn, where k is a constant, what is the value of k?

- (A) -18

- (B) $-\dfrac{1}{18}$

- (C) $\dfrac{1}{9}$

- (D) 1

CONTINUE

21 ☐ Mark for Review

The equation of a parabola is written in the form $y = ax^2 + bx + c$, where a, b, and c are constants. When graphed in the xy-plane, the parabola has vertex $(-1, 4)$ and does not intersect the x-axis. Which of the following could be the value of $a - b - c$?

- (A) -5
- (B) -4
- (C) 0
- (D) 4

22 ☐ Mark for Review

A rectangular prism has a height of 50 centimeters (cm). The base of the prism is a square and the surface area of the prism is S cm^2. If the prism is divided into two identical rectangular prisms by making a cut parallel to the square base, each resulting prism has a surface area of $\frac{31}{56} S$ cm^2. What is the side length, in cm, of each square base?
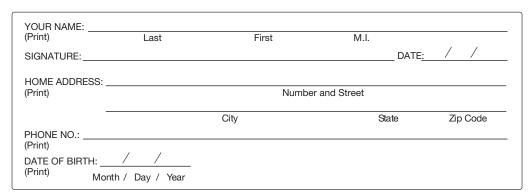
- (A) 5
- (B) 6
- (C) 12
- (D) 24

STOP

If you finish before time is called, you may check your work on this module only.
Do not turn to any other module in the test.

SAT Prep, 2025 Edition
Practice Test

The Princeton Review®

(!)

YOUR NAME: _____
(Print)   Last   First   M.I.

SIGNATURE: _____   DATE: __ / __ / __

HOME ADDRESS: _____
(Print)   Number and Street

_____
City   State   Zip Code

PHONE NO.: _____
(Print)

DATE OF BIRTH: __ / __ / __
(Print)   Month / Day / Year

For both the Reading and Writing and the Math, be sure to only fill in the bubbles for the version of Module 2 that you took. If you took the Easier Module 2, only fill in the answer in the Easier column. If you took the Harder Module 2, only fill in the answers in the Harder column.

Section 1: Module 1
Reading and Writing

1. Ⓐ Ⓑ Ⓒ Ⓓ
2. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ
4. Ⓐ Ⓑ Ⓒ Ⓓ
5. Ⓐ Ⓑ Ⓒ Ⓓ
6. Ⓐ Ⓑ Ⓒ Ⓓ
7. Ⓐ Ⓑ Ⓒ Ⓓ
8. Ⓐ Ⓑ Ⓒ Ⓓ
9. Ⓐ Ⓑ Ⓒ Ⓓ
10. Ⓐ Ⓑ Ⓒ Ⓓ
11. Ⓐ Ⓑ Ⓒ Ⓓ
12. Ⓐ Ⓑ Ⓒ Ⓓ
13. Ⓐ Ⓑ Ⓒ Ⓓ
14. Ⓐ Ⓑ Ⓒ Ⓓ
15. Ⓐ Ⓑ Ⓒ Ⓓ
16. Ⓐ Ⓑ Ⓒ Ⓓ
17. Ⓐ Ⓑ Ⓒ Ⓓ
18. Ⓐ Ⓑ Ⓒ Ⓓ
19. Ⓐ Ⓑ Ⓒ Ⓓ
20. Ⓐ Ⓑ Ⓒ Ⓓ
21. Ⓐ Ⓑ Ⓒ Ⓓ
22. Ⓐ Ⓑ Ⓒ Ⓓ
23. Ⓐ Ⓑ Ⓒ Ⓓ
24. Ⓐ Ⓑ Ⓒ Ⓓ
25. Ⓐ Ⓑ Ⓒ Ⓓ
26. Ⓐ Ⓑ Ⓒ Ⓓ
27. Ⓐ Ⓑ Ⓒ Ⓓ
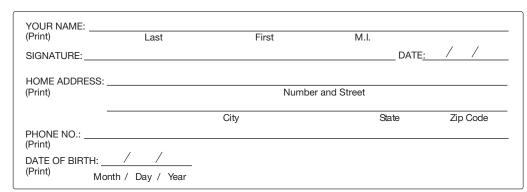
Section 1: Module 2 (Easier)
Reading and Writing

1. Ⓐ Ⓑ Ⓒ Ⓓ
2. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ
4. Ⓐ Ⓑ Ⓒ Ⓓ
5. Ⓐ Ⓑ Ⓒ Ⓓ
6. Ⓐ Ⓑ Ⓒ Ⓓ
7. Ⓐ Ⓑ Ⓒ Ⓓ
8. Ⓐ Ⓑ Ⓒ Ⓓ
9. Ⓐ Ⓑ Ⓒ Ⓓ
10. Ⓐ Ⓑ Ⓒ Ⓓ
11. Ⓐ Ⓑ Ⓒ Ⓓ
12. Ⓐ Ⓑ Ⓒ Ⓓ
13. Ⓐ Ⓑ Ⓒ Ⓓ
14. Ⓐ Ⓑ Ⓒ Ⓓ
15. Ⓐ Ⓑ Ⓒ Ⓓ
16. Ⓐ Ⓑ Ⓒ Ⓓ
17. Ⓐ Ⓑ Ⓒ Ⓓ
18. Ⓐ Ⓑ Ⓒ Ⓓ
19. Ⓐ Ⓑ Ⓒ Ⓓ
20. Ⓐ Ⓑ Ⓒ Ⓓ
21. Ⓐ Ⓑ Ⓒ Ⓓ
22. Ⓐ Ⓑ Ⓒ Ⓓ
23. Ⓐ Ⓑ Ⓒ Ⓓ
24. Ⓐ Ⓑ Ⓒ Ⓓ
25. Ⓐ Ⓑ Ⓒ Ⓓ
26. Ⓐ Ⓑ Ⓒ Ⓓ
27. Ⓐ Ⓑ Ⓒ Ⓓ

Section 1: Module 2 (Harder)
Reading and Writing

1. Ⓐ Ⓑ Ⓒ Ⓓ
2. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ
4. Ⓐ Ⓑ Ⓒ Ⓓ
5. Ⓐ Ⓑ Ⓒ Ⓓ
6. Ⓐ Ⓑ Ⓒ Ⓓ
7. Ⓐ Ⓑ Ⓒ Ⓓ
8. Ⓐ Ⓑ Ⓒ Ⓓ
9. Ⓐ Ⓑ Ⓒ Ⓓ
10. Ⓐ Ⓑ Ⓒ Ⓓ
11. Ⓐ Ⓑ Ⓒ Ⓓ
12. Ⓐ Ⓑ Ⓒ Ⓓ
13. Ⓐ Ⓑ Ⓒ Ⓓ
14. Ⓐ Ⓑ Ⓒ Ⓓ
15. Ⓐ Ⓑ Ⓒ Ⓓ
16. Ⓐ Ⓑ Ⓒ Ⓓ
17. Ⓐ Ⓑ Ⓒ Ⓓ
18. Ⓐ Ⓑ Ⓒ Ⓓ
19. Ⓐ Ⓑ Ⓒ Ⓓ
20. Ⓐ Ⓑ Ⓒ Ⓓ
21. Ⓐ Ⓑ Ⓒ Ⓓ
22. Ⓐ Ⓑ Ⓒ Ⓓ
23. Ⓐ Ⓑ Ⓒ Ⓓ
24. Ⓐ Ⓑ Ⓒ Ⓓ
25. Ⓐ Ⓑ Ⓒ Ⓓ
26. Ⓐ Ⓑ Ⓒ Ⓓ
27. Ⓐ Ⓑ Ⓒ Ⓓ

SAT Prep, 2025 Edition
Practice Test

YOUR NAME: _____
(Print)   Last   First   M.I.

SIGNATURE: _____ DATE: ___ / ___ / ___

HOME ADDRESS: _____
(Print)   Number and Street

_____
                City   State   Zip Code

PHONE NO.: _____
(Print)

DATE OF BIRTH: ___ / ___ / ___
(Print)   Month / Day / Year

For both the Reading and Writing and the Math, be sure to only fill in the bubbles for the version of Module 2 that you took. If you took the Easier Module 2, only fill in the answer in the Easier column. If you took the Harder Module 2, only fill in the answers in the Harder column.

Section 2: Module 1
Math

1. Ⓐ Ⓑ Ⓒ Ⓓ
2. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ
4. Ⓐ Ⓑ Ⓒ Ⓓ
5. _____
6. Ⓐ Ⓑ Ⓒ Ⓓ
7. Ⓐ Ⓑ Ⓒ Ⓓ
8. Ⓐ Ⓑ Ⓒ Ⓓ
9. _____
10. _____
11. _____
12. Ⓐ Ⓑ Ⓒ Ⓓ
13. Ⓐ Ⓑ Ⓒ Ⓓ
14. Ⓐ Ⓑ Ⓒ Ⓓ
15. Ⓐ Ⓑ Ⓒ Ⓓ
16. Ⓐ Ⓑ Ⓒ Ⓓ
17. Ⓐ Ⓑ Ⓒ Ⓓ
18. Ⓐ Ⓑ Ⓒ Ⓓ
19. Ⓐ Ⓑ Ⓒ Ⓓ
20. Ⓐ Ⓑ Ⓒ Ⓓ
21. _____
22. Ⓐ Ⓑ Ⓒ Ⓓ

Section 2: Module 2 (Easier)
Math

1. _____
2. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ
4. _____
5. _____
6. _____
7. Ⓐ Ⓑ Ⓒ Ⓓ
8. _____
9. Ⓐ Ⓑ Ⓒ Ⓓ
10. Ⓐ Ⓑ Ⓒ Ⓓ
11. Ⓐ Ⓑ Ⓒ Ⓓ
12. Ⓐ Ⓑ Ⓒ Ⓓ
13. Ⓐ Ⓑ Ⓒ Ⓓ
14. Ⓐ Ⓑ Ⓒ Ⓓ
15. Ⓐ Ⓑ Ⓒ Ⓓ
16. Ⓐ Ⓑ Ⓒ Ⓓ
17. Ⓐ Ⓑ Ⓒ Ⓓ
18. Ⓐ Ⓑ Ⓒ Ⓓ
19. Ⓐ Ⓑ Ⓒ Ⓓ
20. Ⓐ Ⓑ Ⓒ Ⓓ
21. Ⓐ Ⓑ Ⓒ Ⓓ
22. Ⓐ Ⓑ Ⓒ Ⓓ

Section 2: Module 2 (Harder)
Math

1. Ⓐ Ⓑ Ⓒ Ⓓ
2. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ
4. Ⓐ Ⓑ Ⓒ Ⓓ
5. Ⓐ Ⓑ Ⓒ Ⓓ
6. Ⓐ Ⓑ Ⓒ Ⓓ
7. Ⓐ Ⓑ Ⓒ Ⓓ
8. Ⓐ Ⓑ Ⓒ Ⓓ
9. Ⓐ Ⓑ Ⓒ Ⓓ
10. _____
11. _____
12. Ⓐ Ⓑ Ⓒ Ⓓ
13. _____
14. Ⓐ Ⓑ Ⓒ Ⓓ
15. _____
16. Ⓐ Ⓑ Ⓒ Ⓓ
17. Ⓐ Ⓑ Ⓒ Ⓓ
18. _____
19. _____
20. Ⓐ Ⓑ Ⓒ Ⓓ
21. Ⓐ Ⓑ Ⓒ Ⓓ
22. Ⓐ Ⓑ Ⓒ Ⓓ