Chapter 4
Practice Test 1

PSAT Prep Test 1—Reading and Writing

Module 1

Turn to Section 1 of your answer sheet 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

Spanish neuroscientist Joaquin M. Fuster's work on memory and the prefrontal cortex has been widely acclaimed. Accordingly, he was _____ by the Fussen Foundation for his excellence in neuroscience research.

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

(A) criticized

(B) surprised

(C) recognized

(D) worshiped

2 Mark for Review

Performer Nastio Mosquito is a multifaceted artist who explores the power of language through online videos, large-scale art installations, poetry, and song. Mosquito delivers _____ performances that blend art, politics, and entertainment while still remaining true to his main theme of African cultural inheritance.

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

(A) diverse

(B) costly

(C) humorous

(D) brief

CONTINUE

3 Mark for Review

The following text is from Henry Guy Carleton's 1884 short story "The Thompson Street Poker Club."

> When Mr. Tooter Williams entered the gilded halls of the Thompson Street Poker Club Saturday evening it was evident that fortune had smeared him with prosperity. He wore a straw hat with a blue ribbon, an expression of serene content, and a glass amethyst on his third finger whose effulgence irradiated the whole room and made the envious eyes of Mr. Cyanide Whiffles stand out like a crab's.

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

(A) Deceived

(B) Gifted

(C) Assaulted

(D) Criticized

4 Mark for Review

As a member of the non-profit group Servas International, writer and poet Susan Deer Cloud regularly hosts travelers from abroad at her home in the Catskill Mountains. Through the group's mission of hospitality and through her own writings, Deer Cloud hopes to _____ a sense of peace and cross-cultural understanding in those she interacts with.

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

(A) demand

(B) fabricate

(C) instill

(D) concede

5 Mark for Review

National metrication is an ongoing proposal by an array of diverse organizations within the United States to convert the country's measurement standards from customary to metric. Proponents of the proposal have criticized what they view as limited efforts initiated by the national government to educate the public regarding the benefits of the metric system, which they believe would _____ the competitiveness of American products and services in world markets.

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

(A) refute

(B) dilute

(C) uphold

(D) buttress

CONTINUE

6 Mark for Review

The modern public is probably more familiar with the wives of Henry VIII than with any other queens in history—or at least with the respective pictures that history has painted of them. Anne Boleyn, Henry's admittedly ambitious second wife, was the self-promoting social climber, while his first wife, Catherine of Aragon, has all but been canonized as the pious innocent victim of Henry's tyranny. Third wife Jane Seymour is typically only considered in contrast to her predecessor: Anne was brazen while Jane was demure. Anne of Cleves was unattractive, Catherine Howard was a flighty teenager, and Catherine Parr was the sensible one who escaped Henry's wrath unscathed. If one looks beyond these reductive descriptions, one might be surprised to learn that Catherine of Aragon had been a ruthless military leader and Anne Boleyn fought nobly for charitable causes: quite contrary to their traditional depictions.

Which choices best states the main purpose of the text?

(A) To draw attention to information not commonly known about Catherine of Aragon and Anne Boleyn

(B) To deny that all of Henry VIII's wives possessed the character traits traditionally ascribed to them

(C) To criticize the tendency to view each of Henry VIII's wives solely in terms of their usefulness to Henry himself

(D) To discuss both the traditionally associated and uncommonly known character traits of Henry VIII's wives

7 Mark for Review

Text 1

What can contribute to climate change besides the already well-documented impact of human-caused, or anthropogenic, carbon dioxide production? Some scientists caution that, while long-term human impact on global temperatures cannot be understated, sudden environmental events in a specific region can have global implications that are no less critical to understand and thus must be as carefully monitored as anthropogenic events are.

Text 2

A team of researchers led by Lilly Damany-Pearce at the University of Exeter conducted a series of satellite and surface-based observations to determine the effect of a series of Australian wildfires on the temperature of Earth's lower stratosphere. By observing photos from the satellites and inputting atmospheric data in a cutting-edge climate model, Damany-Pearce and her team were able to establish a causal connection between the ignition of the wildfires and the subsequent rise in mean lower stratosphere temperature during the exact same period.

Based on the texts, how would Damany-Pearce and her team most likely describe the view of the scientists presented in Text 1?

(A) It likely is only relevant to wildfires rather than other environmental events.

(B) It has merit as a viewpoint due to the evidence collected by Damany-Pearce and her team.

(C) It has dubious value even though Damany-Pearce and her team seem to have discovered corroborating evidence.

(D) It may seem appealing, but it is contradictory to Damany-Pearce and her team's findings.

CONTINUE

8 Mark for Review

The following text is adapted from Robert Louis Stevenson's 1886 novel *Kidnapped.* The narrator has just delivered a letter to his uncle, whom he describes in this excerpt.

> As soon as the last chain was up, the man rejoined me. He was a mean, stooping, narrow-shouldered, clay-faced creature; and his age might have been anything between fifty and seventy. His nightcap was of flannel, and so was the nightgown that he wore, instead of coat and waistcoat, over his ragged shirt. He was long unshaved; but what most distressed and even daunted me, he would neither take his eyes away from me nor look me fairly in the face. What he was, whether by trade or birth, was more than I could fathom; but he seemed most like an old, unprofitable serving-man, who should have been left in charge of that big house upon board wages.

According to the text, what is true about the narrator's uncle?

(A) He reacts jovially and greets the narrator joyfully despite the late hour.

(B) He is surprised by the narrator's visit and is ill-prepared for it.

(C) He instills a sense of familial pride in the narrator.

(D) He presents himself in a manner the narrator finds unfavorable.

9 Mark for Review

Dolphin-assisted therapy, or DAT, utilizes the concept of swimming with dolphins to improve a patient's mental and physical well-being. A team of researchers has posited that, while the influence of DAT on neurodevelopmental disorders, such as autism, remains unknown, the therapy is likely beneficial for non-neurodevelopmental conditions, such as anxiety disorder, as the calming influence of water and positive dolphin responsiveness to distress in humans have both been well-documented.

Which finding, if true, would most support the researchers' hypothesis?

(A) Individuals diagnosed with anxiety disorder reported lower levels of anxiety at the end of DAT treatment.

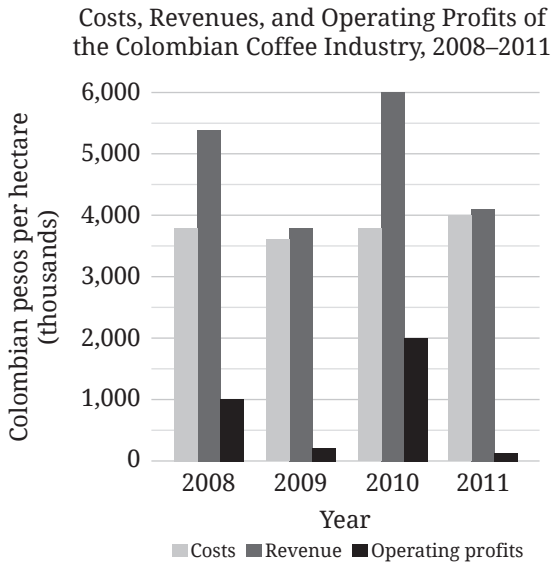
(B) Individuals diagnosed with autism reported the same levels of anxiety at the start and end of DAT treatment.

(C) The anxiety levels of those diagnosed with anxiety disorder fluctuated with no general trend throughout DAT treatment.

(D) The anxiety levels of those diagnosed with anxiety disorder increased while the anxiety levels of those diagnosed with autism decreased throughout DAT treatment.

CONTINUE

10 Mark for Review



Relative to other producers, coffee producers must often cope with a particularly volatile market, due to unforeseen gluts, climate change, and economic conditions in coffee-consuming countries. Researchers have tried to help growers and producers control their markets and decrease volatility by examining the growth and loss of costs, revenues, and operating profits in the long- and short-term. A group of economists examined coffee production in the nation of Colombia, a traditionally strong coffee producing country, from 2008 through 2011. It concluded that, even with the volatility in the market, so long as coffee producers could increase their revenues, their efforts would remain profitable.

Which choice best describes data from the graph that supports the study's conclusion?

(A) Both costs and revenues increased every year from 2008 to 2011.

(B) When revenues increased from 2009 to 2010, so did operating profits.

(C) Costs remained relatively stable each year from 2008 to 2011.

(D) When costs decreased from 2008 to 2009, so did operating profits.

11 Mark for Review

Born in 1877 in New York City, Rosalie Edge was an environmentalist who sought to improve conservation efforts towards many species, especially birds. During an interview regarding her 1962 book *Silent Spring*, scientist Rachel Carson claimed that Edge's work was instrumental in facilitating her own ornithological research, particularly concerning birds of prey such as hawks.

Which statement, if true, would most directly support Carson's claim?

(A) Some of the birds that Carson studied had previously been studied by Edge and her fellow environmentalists.

(B) Edge established Hawk Mountain Sanctuary, the world's first nature preserve for birds of prey, and Carson is recorded as having visited the preserve several times prior to 1962.

(C) Edge's conservation work demonstrated an extremely proficient level of ornithological knowledge, as seen in her many detailed books on birds of prey.

(D) During her career, Edge was widely acclaimed by her colleagues, as one colleague called her one of the only truly honest and selfish forces in conservation.

CONTINUE

12 Mark for Review

"Marianne's Dream" is an 1817 poem by Percy Bryce Shelley. In the poem, a lady named Marianne experiences unpleasant sights and sounds while having a nightmare: _____

Which quotation from "Marianne's Dream" most effectively illustrates this claim?

(A) "At first all deadly shapes were driven / Tumultuously across her sleep, / And o'er the vast cope of bending heaven / All ghastly-visaged clouds did sweep;"

(B) "On two dread mountains, from whose crest, / Might seem, the eagle, for her brood, / Would ne'er have hung her dizzy nest, / Those tower-encircled cities stood."

(C) "She looked, the flames were dim, the flood / Grew tranquil as a woodland river / Winding through hills in solitude; / Those marble shapes then seemed to quiver,"

(D) "The Lady grew sick with a weight of fear / To see that Anchor ever hanging, / And veiled her eyes; she then did hear / The sound as of a dim low clanging,"

13 Mark for Review

The *door-in-the-face* technique involves initially making an outrageous or unappealing request or offer, which the other person is highly likely to refuse, then following up with a more reasonable one. The subject is more likely to look favorably upon this second request or offer because it seems acceptable compared to the initial proposition. So, if an employee wants the best raise in annual salary from her boss that she can get, she might succeed by asking for a _____

Which choice most logically completes the text?

(A) 50% raise, then asking for a 5% raise.

(B) 3% raise, then asking for a 2% raise.

(C) 10% raise, then asking for a 50% raise.

(D) 3% raise, then asking for a 3% raise again.

CONTINUE

14 Mark for Review

There have been rumors of "sea serpents" in Scotland's Loch Ness for centuries, which some have theorized are actually aquatic animals that are "undiscovered" by science (at least in living form) that somehow survived their apparent extinctions millions of years ago. Many believe these elusive creatures are *plesiosaurs*—Mesozoic marine reptiles with extremely long necks. However, plesiosaurs are believed to have been cold-blooded, and a cold-blooded animal could never survive in the frigid waters of Loch Ness. So, _____

Which choice most logically completes the text?

(A) unless plesiosaurs were warm-blooded, there are no undiscovered aquatic animals in Loch Ness.

(B) unless plesiosaurs were cold-blooded, there are no undiscovered aquatic animals in Loch Ness.

(C) if plesiosaurs are cold-blooded, there are no plesiosaurs in Loch Ness.

(D) if there are no plesiosaurs in Loch Ness, there are no undiscovered aquatic animals in Loch Ness.

15 Mark for Review

According to research, people tend to attribute positive personality traits to those who are physically attractive. When people were rated as physically attractive by participants, _____ personalities were also rated as confident, intelligent, responsible, and sociable.

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

(A) they're

(B) their

(C) it's

(D) its

16 Mark for Review

A writer and performer famous for numerous spoken solo performances, Margo Kane highlights the lives of youth in Native American communities. Her theater company strives to provide opportunities for First Nations _____ to share their experiences and promote their traditions.

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

(A) artists,

(B) artists—

(C) artists:

(D) artists

CONTINUE

17 Mark for Review

While focusing on number theory and cryptography, Shafi Goldwasser became a professor at multiple universities simultaneously and earned the Turing Award in 2012. By 2020, she _____ a leader of Project CETI, an initiative focused on sperm whale communication.

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

(A) will become

(B) becomes

(C) has become

(D) had become

18 Mark for Review

Charles Drew was a blood transfusion medical researcher and surgeon during World War _____ work developed the first blood banks and saved the lives of thousands of Allied soldiers.

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

(A) II his

(B) II and his

(C) II, his

(D) II. His

19 Mark for Review

Lab-grown diamonds are made up of the same compound as natural diamonds (pure carbon), and they exhibit similar properties. Modern researchers have improved upon the initial _____ to make the lab-growing process more efficient.

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

(A) method, developed by Percy Bridgman,

(B) method, developed by Percy Bridgman

(C) method developed by Percy Bridgman,

(D) method developed by Percy Bridgman

20 Mark for Review

Douglas Kearney is a poet and opera-writer from the US. *Crescent City*, one of his most famous operas, _____ extensive recognition, and he has since earned the Campbell Opera Librettist Prize.

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

(A) have received

(B) has received

(C) receive

(D) are receiving

CONTINUE

21 Mark for Review

Achromatopsia, a heritable genetic condition, causes photosensitivity and color blindness due to inactive cones in the eyes. Scientists used gene therapy on one eye of children with the condition to determine whether the inactive cones could be restored. In each patient, the treated eye was able to detect some colors, and _____ able to perform other cone-related tasks.

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

(A) one was

(B) it was

(C) they were

(D) we were

22 Mark for Review

Researchers in California have found that a lack of sleep reduces humans' natural drive to help other people. In states with Daylight Saving Time, donations to charities were reduced by 10% the week after the time change, when many people lose an hour of sleep; _____ this reduction was not seen in states that do not observe Daylight Saving Time.

Which choice completes the text with the most logical transition?

(A) in addition,

(B) however,

(C) initially,

(D) otherwise,

23 Mark for Review

Dominican artist Firelei Báez, known for creating complex pieces on old maps and documents, explores Western thought through the lens of non-Western media. She combines symbols and abstract images with figures from folklore, literature, and living plants to represent historical events and themes. _____ Báez created a sculpture in 2021 that reimagined Haitian ruins as if they had been discovered in East Boston in modern times.

Which choice completes the text with the most logical transition?

(A) For example,

(B) Additionally,

(C) Consequently,

(D) However,

24 Mark for Review

Borobudur, located in Indonesia, is the largest Buddhist temple in the world. The temple was likely built sometime in the 9th century, but the Hindu kingdoms declined in the 14th century when Islam became much more popular as a religion. _____ the temple was abandoned.

Which choice completes the text with the most logical transition?

(A) For instance,

(B) Besides that,

(C) Subsequently,

(D) Also,

CONTINUE

25 Mark for Review

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

- Cirrus clouds are a type of high cloud.
- They form between 4,000 and 20,000 meters above sea level.
- They look wispy and delicate.
- Cumulus clouds are a type of low cloud.
- They form less than 2,000 meters above sea level.
- They look fluffy and cotton-like.

The student wants to highlight the differences between cirrus and cumulus clouds. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) Cirrus clouds look wispy and delicate.

(B) Cirrus clouds are a type of high cloud and form between 4,000 and 20,000 meters above sea level, and cumulus clouds are a type of low cloud and form less than 2,000 meters above sea level.

(C) Low clouds can form less than 2,000 meters above sea level, but high clouds can form between 4,000 and 20,000 meters above sea level.

(D) Cumulus clouds, which appear fluffy and cotton-like, are a type of low cloud.

26 Mark for Review

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

- Weddell seals are extraordinary divers and can dive for twenty minutes and sometimes up to ninety minutes.
- Even Weddell seal pups can dive for long periods.
- To be able to dive for long periods, Weddell seal pups need high levels of iron to carry oxygen while they are underwater.
- Weddell seals have a longer lactation period, six to seven weeks, than that of other seals, which made researchers curious.
- When they analyzed Weddell seal mothers' milk, they found large amounts of iron.
- The longer lactation period allows seal mothers to give their pups large amounts of iron.

The student wants to emphasize how Weddell seal mothers provide a benefit to their seal pups. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) Weddell seal pups receive large amounts of iron from their mothers' milk, which enables them to dive for long periods.

(B) Weddell seals need high levels of iron to dive for up to ninety minutes.

(C) Weddell seal mothers have longer lactation periods for their pups than do other true seals.

(D) Large amounts of iron are found in the milk of Weddell seal mothers.

CONTINUE

27 Mark for Review

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

- Lloma de Betxí was a Bronze Age settlement near Paterna.
- Paterna is in northeastern Spain, on the left bank of the Turia River near Valencia.
- Lloma de Betxí was used between 1800 and 1300 BCE.
- During this time, inhabitants grew grain crops and raised cattle.
- Inhabitants during this time used bronze tools in farming.

The student wants to introduce the timeframe of Lloma de Betxí to an audience unfamiliar with the location of Paterna. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) In northeastern Spain, near Valencia, is Lloma de Betxí, a Bronze Age settlement inhabited between 1800 and 1300 BCE.

(B) Paterna is located on the left bank of the Turia River near Valencia, Spain.

(C) Between 1800 and 1300 BCE, inhabitants of Lloma de Betxí near Paterna grew grain crops and raised cattle.

(D) Lloma de Betxí is an example of the use of bronze tools in farming in northeastern Spain.

CONTINUE

PSAT Prep Test 1—Reading and Writing

Module 2—Easier

Turn to Section 1 of your answer sheet 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

The following text is from Jane Porter's 1809 novel *The Scottish Chiefs*. The excerpt describes Lady Wallace, a central character, describing her emotions towards her husband, Edward.

> Wherever Lady Wallace moved,—whether looking out from her window on the accidental passenger, or taking her morning or moonlight walks through the glen, leaning on the arm of her husband,—she had the rapture of hearing his steps greeted and followed by the blessings of the poor destitute, and the prayers of them who were ready to perish.

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

(A) Joyful

(B) Random

(C) Angry

(D) Jealous

2 Mark for Review

Photographer Deana Lawson is an American artist and photographer whose work has been praised for its ability to convey intimate details of the African American experience. As a young college student hoping to learn more about African American artists, she was _____ by the lack of available texts about artists, specifically photographers, of color in her university library. Lawson was motivated to fill this void herself by independently learning about these artists, such as photographer Lorna Simpson, whose work inspired Lawson to become a photographer herself.

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

(A) excited

(B) unaffected

(C) encouraged

(D) surprised

CONTINUE

3 Mark for Review

In addition to John Mawurndjul's many accomplishments as an artist, he has also achieved great success as a _____. He has tutored his wife and daughter, both accomplished painters themselves, and founded his own school to teach the next generation of Aboriginal artists.

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

(A) mentor

(B) muralist

(C) technician

(D) painter

4 Mark for Review

Poet William Ernest Henley often described the resilience of the human spirit in the face of adversity. In his 1975 poem "Invictus," he describes the _____ of a character who perseveres even in the face of certain death.

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

(A) tenacity

(B) cheerfulness

(C) artistry

(D) sorrow

5 Mark for Review

Intrauterine adhesion is _____ by the appearance of fibrosis in the uterine cavity. While routine examinations may reveal the presence of fibrosis in patients, undetected and untreated intrauterine adhesion can cause immense difficulty for reproductive health.

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

(A) diminished

(B) nullified

(C) altered

(D) typified

CONTINUE

6 Mark for Review

Wind turbines generate electricity in remote locations but can be hazardous to birds, which get caught in their turbines. Researchers identified six pairs of adjacent wind turbines and painted one turbine in each pair black, leaving the other white, trying to determine whether distinct colors might deter birds and prevent casualties. They tallied the number of birds killed in each of the turbines for 5 years and compared the data to a prior 5-year period, finding that fatalities for the painted turbines were down 72%. Noting that collisions with unpainted turbines actually increased, they posited that perhaps the birds were avoiding the painted turbines but moving toward the unpainted turbines.

Which choice best describes the function of the fourth sentence of the text?

(A) It clarifies how the findings of the study differed from those of earlier studies.

(B) It explains how the central hypothesis was fundamentally flawed.

(C) It presents an adjustment to the researchers' theory based on an unexpected outcome.

(D) It describes an initial challenge that the researchers eventually overcame.

7 Mark for Review

The following text is from Victor Cherbuliez's 1863 novel *Count Kostia.* This excerpt describes the events which set the rest of the novel into motion.

> At the beginning of the summer of 1850, a Russian nobleman, Count Kostia Petrovitch Leminof, had the misfortune to lose his wife suddenly, and in the flower of her beauty. She was his junior by twelve years. This cruel loss, for which he was totally unprepared, threw him into a state of profound melancholy; and some months later, seeking to mitigate his grief by the distractions of travel, he left his domains near Moscow, never intending to return. Accompanied by his twin children, ten years of age, a priest who had served them as tutor, and a serf named Ivan, he repaired to Odessa, and then took passage on a merchant ship for Martinique. Disembarking at St. Pierre, he took lodgings in a remote part of the suburbs.

Which choice best states the main purpose of the text?

(A) To discuss an emotional event and its consequences for a family

(B) To highlight the popular travel destinations of Russian nobility

(C) To explain the cultural enrichment that one can experience through overseas travel

(D) To criticize Count Kostia for moving on from the death of his wife too quickly

CONTINUE

8 Mark for Review

The following text is adapted from Sir Arthur Conan Doyle's 1902 short story "The Leather Funnel." The narrator is approaching the home of an old friend who lives in Paris, France.

> My friend, Lionel Dacre, lived in the Avenue de Wagram, Paris. His house was that small one, with the iron railings and grass plot in front of it, on the left-hand side as you pass down from the Arc de Triomphe. I fancy that it had been there long before the avenue was constructed, for the grey tiles were stained with lichens, and the walls were mildewed and discoloured with age. It looked a small house from the street, five windows in front, if I remember right, but it deepened into a single long chamber at the back.

According to the text, what is true about the house of Lionel Dacre?

(A) It is one of the oldest houses in Paris.

(B) It is larger than it appears from the street.

(C) It has a front yard and a back yard.

(D) It is overgrown with lichens and other plants.

9 Mark for Review

Andy Goldsworthy is an environmental artist who has used objects formed by nature as a point of inspiration to create large-scale sculptures. His piece *Cairn* features rock balancing, a method by which one selects small rocks and looks for points in which they 'lock' into each other to create a larger unique form. The act of balancing rocks is often found to be relaxing and meditative, qualities which Goldsworthy has cited in his own artistic process. He has even compared his style of work to picking potatoes, believing that the repetition and rhythm are integral to his final product.

What choice states the main idea of the text?

(A) Rock balancing is a new art form that places natural elements into large outdoor settings.

(B) Goldsworthy appreciates certain qualities of rock balancing in composing some of his work.

(C) Goldsworthy's *Cairn* is unlike any other piece of environmental art because it uses balancing rocks.

(D) Repeating actions such as picking vegetables often influences the work of environmental artists.

CONTINUE

10 Mark for Review

A Lady of Quality is an 1896 novel by Frances Hodgson Burnett. Mistress Clorinda Wildairs, the main character, has settled on a spouse, an elderly Earl. During a disagreement with her sister, Anne, Mistress Clorinda defends her feelings towards her chosen partner, declaring, _____

Which quotation from *A Lady of Quality* most effectively illustrates this claim?

(A) "From this night all men must bend so—all men on whom I deign to cast my eyes."

(B) "I love my Lord of Dunstanwolde as well as any other man, and better than some, for I do not hate him."

(C) "*I* am a woman and I do not suffer—for I *will* not, that I swear!"

(D) "Do not be a fool, Anne, and carry yourself too humbly before the world."

11 Mark for Review

Weight, BMI, and Serum Homocysteine Levels of Patients Suffering from NAFLD

	Weight (kg)	BMI (kg/m^2)	Serum homocysteine levels
B12 Group initial	87.25	31.42	15.1
B12 Group final	85.7	30.74	11.5
Placebo group initial	92.7	30.67	14.5
Placebo group final	91.61	32.31	14.1

A group of scientists conducted a study to determine whether vitamin B12 could reduce serum homocysteine levels in patients suffering from non-alcoholic fatty liver disease (NAFLD). Forty patients were split into two equal groups: an experimental group was given a daily dose of 1000 mg of vitamin B12 for 12 weeks, and the control group was given only a placebo. After measuring these levels for 12 weeks, researchers noted a reduction in serum homocysteine levels, weight, and BMI (Body Mass Index) for the vitamin B12 group only. This led the researchers to conclude that vitamin B12 may be effective in helping patients with NAFLD.

Which choice best describes data from the table that supports the researchers' conclusion?

(A) The serum homocysteine levels in the placebo group decreased from 14.5 to 14.1 during the study.

(B) The weight levels and BMI decreased for the placebo group during the study.

(C) The serum homocysteine levels in the B12 group decreased from 15.1 to 11.5 during the study.

(D) The weight levels increased for the B12 group but decreased for the placebo group during the study.

CONTINUE

12 Mark for Review

"A Piece of Bread" is an 1887 short story by Francois Coppee. In the story, a soldier named Jean-Victor, who experienced a difficult upbringing at an asylum, or orphanage, shares one of his only positive memories from his childhood with his comrade: _____

Which quotation from "A Piece of Bread" most effectively illustrates this claim?

(A) "Fortunately for me; at these times I have always remembered the good Sister at the Asylum, who so often told me to be honest, and I seemed to feel her warm little hand upon my forehead."

(B) "The master and mistress, two old Limousins—afterwards murdered, were terrible misers, and the bread, cut in tiny pieces for each meal, was kept under lock and key the rest of the time."

(C) "But the managers could not know everything, and had no suspicion that the children were abused."

(D) "I am used to that for I have picked up enough of it; and crusts from the dust, and when they were too hard and dry, I would soak them all night in my basin."

13 Mark for Review

Nutritional Content in One Standard Serving of Four Common Breakfast Foods

Food	Serving size (g)	Total sugars (g)	Calories
Plain bagel	105	5.3	271
Corn flake cereal	28	2.9	100
Frosted cake doughnut	67	21.4	296
Blueberry muffin	113	16.7	470

Excess sugar consumption is often derided by health professionals for several reasons, among which are increased risk of high blood pressure and increased risk of diabetes. Some foods with high sugar content are popular American breakfast foods, and traditionally it was thought that higher sugar content would naturally correspond with higher caloric content as the latter was linked to increased risk of obesity as well. However, a recent study conducted by researchers Jennifer Erickson and Joanne Slavin, who focused on USDA dietary recommendations, demonstrated that caloric and sugar levels within a food item should not necessarily be correlated. For example, whereas a frosted cake doughnut has 296 calories and 21.4 grams of sugar, _____

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

(A) a plain bagel has 271 calories, and a serving of cornflake cereal has 100 calories.

(B) a serving of corn flake cereal has 100 calories and 2.9 grams of sugar.

(C) a blueberry muffin has 470 calories, but a plain bagel only has 271 calories.

(D) a blueberry muffin has 470 calories but only 16.7 grams of sugar.

CONTINUE

14 Mark for Review

John William Godward (1861–1922) was a British artist known for his *neoclassical* paintings—those that feature subjects from ancient Greece and Rome. His greatest works depict elegant women dressed in brightly colored classical clothing posed in front of stunning ancient architecture. Godward abhorred the modern art movement of the late nineteenth and twentieth centuries, during which avant-garde painters such as Picasso dominated the art world with their nontraditional works. The abstract character of the modern movement lay in stark contrast to Godward's vision of what beauty is and what art should be. One can therefore infer that _____

Which choice most logically completes the text?

(A) Picasso took no inspiration from Godward's work.

(B) modernist painters did not typically use bright colors.

(C) Godward did not approve of developments in the art world towards the end of his life.

(D) famous neoclassical paintings steadily lost their value as the twentieth century progressed.

15 Mark for Review

High schools in Rhode Island have the highest national average student-teacher ratio of any state at 22:1. While it is reasonable to think that students in Rhode Island should therefore produce similarly higher than average standardized test results, standardized test scores in the state vary wildly. However, the average GPA at Rhode Island high schools is nearly 0.6 higher than the national average GPA of 3.0. Therefore, _____

Which choice most logically completes the text?

(A) high schools in Rhode Island with lower than average standardized test scores must also have lower-than-average GPAs.

(B) the student-teacher ratio at high schools in Rhode Island has a more noticeable effect on standardized test scores than does GPA.

(C) the student-teacher ratio at high schools in Rhode Island may have a stronger correlation with GPA than it does with standardized test scores.

(D) the student-teacher ratio at high schools in Rhode Island is not a critical factor for producing higher standardized test scores or GPAs.

CONTINUE

16 Mark for Review

Canisia Lubrin published a collection of poems in 2017, *Voodoo Hypothesis*, that _____ the stereotypes that certain demographics of people are inferior to others.

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

(A) attacking

(B) to attack

(C) attacked

(D) having attacked

17 Mark for Review

Lorina Naci, a neurologist and psychologist from Albania, studied how to communicate with patients in comas using functional magnetic resonance imagery. Naci aimed to answer a specific question with her research: if patients in a vegetative state were shown a horror film, _____

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

(A) would they exhibit increased brain activity?

(B) would they exhibit increased brain activity.

(C) increased brain activity would be exhibited.

(D) increased brain activity would be exhibited?

18 Mark for Review

Zhang Heng was a scientist in China during the Han dynasty who filled the role of astronomer, mathematician, cartographer, and literary expert. Today, Heng _____ considered the equivalent of Ptolemy in terms of academic expertise.

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

(A) was

(B) is

(C) will be

(D) had been

19 Mark for Review

In his memoir, *Heavy*, Black southern author Kiese Laymon writes about his complicated relationship with his mother _____ the struggles he experienced as he grew into young adulthood.

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

(A) is revealing

(B) to reveal

(C) reveals

(D) revealed

CONTINUE

20 Mark for Review

A respected artist and senior figure in the Kintore women's movements in Australia, Naata Nungurrayi created works that displayed important sites for women and their ceremonies. One of _____ was chosen for an Australian Post International stamp, and she was identified as one of the most collectible artists of Australia in 2004.

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

(A) Nungurrayis painting's

(B) Nungurrayi's painting's

(C) Nungurrayis paintings

(D) Nungurrayi's paintings

21 Mark for Review

The Perseverance rover, a robotic vehicle, completed the first ground-penetrating survey using radar on _____ layers of magnetic material and buried structures.

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

(A) Mars revealing

(B) Mars; revealing

(C) Mars. Revealing

(D) Mars, revealing

22 Mark for Review

Using her ambidexterity and ability to use her mouth to complete tasks, physical therapist Bessie Blount Griffin strove to help soldiers who had lost a limb in battle return to a normal life after World War II. She taught veterans how to perform everyday tasks with their feet and teeth and _____ a self-feeding assistive device to feed soldiers who had lost their hands.

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

(A) inventing

(B) invent

(C) invents

(D) invented

23 Mark for Review

Shen Kuo was a Chinese scientist of the Song dynasty in the 12th century. Kuo explored _____ greatly influenced society, such as mathematics, astronomy, meteorology, and anatomy, throughout his time as the head official for the Bureau of Astronomy. He also invented the first magnetic needle compass.

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

(A) fields that

(B) fields

(C) fields,

(D) fields, that

CONTINUE

24 Mark for Review

A folly is a garden building typically built to provide a decorative and extravagant feature to a landscape. Fonthill Abbey, owned by William Thomas Beckford and built in England around the year 1800, is one of the most famous examples. Beckford focused on building the folly as quickly as possible, and, _____ the building was structurally unsound and collapsed in 1825.

Which choice completes the text with the most logical transition?

(A) in contrast,

(B) however,

(C) for example,

(D) as a result,

25 Mark for Review

June and Jennifer Gibbons were identical twins born in 1963 who utilized a form of cryptophasia, or twin language, and only communicated with each other. The twins spent years isolated together and created elaborate scenarios with toys and dolls. _____ the twins wrote fictional novels using these scenarios.

Which choice completes the text with the most logical transition?

(A) Nevertheless,

(B) However,

(C) Fortunately,

(D) In addition,

26 Mark for Review

Artist Emeka Ogboh creates soundscapes of city life in Nigeria. He uses real recordings of typical city events and activities, such as taxis and crowds at bus stops, and sets up the recordings in museums and art galleries. _____ interested parties are able to visit these locations and use headphones to enjoy an immersive artistic experience.

Which choice completes the text with the most logical transition?

(A) Similarly,

(B) Consequently,

(C) Still,

(D) Regardless,

CONTINUE

27 Mark for Review

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

- Preening is a type of behavior that birds engage in to maintain their feathers.
- Feathers are important for flight, insulation, and waterproofing.
- Birds spend time each day preening.
- When preening, birds gather preen oil from a special gland and spread the oil through their feathers.
- Preening can also have secondary functions, such as courtship displays.

The student wants to emphasize the importance of preening. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) Birds preen to maintain their feathers, which are important for flight, insulation, and waterproofing.

(B) Preening can have primary and secondary functions.

(C) Preen oil is used by birds to help maintain their feathers.

(D) Birds spend time preening each day and sometimes use the behavior in courtship displays.

CONTINUE

PSAT Prep Test 1—Reading and Writing

Module 2—Harder

Turn to Section 1 of your answer sheet 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

According to the opinion of many historians, the 1911 Triangle Shirtwaist Factory fire in the Greenwich Village garment district was _____. For months leading up the incident, workers had been formally complaining to their supervisors about various fire hazards and other unsafe working conditions in the building.

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

(A) disastrous

(B) preventable

(C) routine

(D) dreadful

2 Mark for Review

While many psychosocial phenomena are obvious and even commonsensical, others are _____. For example, the *bystander effect* predicts that the likelihood that one will receive assistance in an emergency is inversely proportional to the number of individuals present at the scene. The larger the crowd, the less personal responsibility each crowd member feels toward the individual or individuals in need.

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

(A) counterintuitive

(B) predictable

(C) unfortunate

(D) falsifiable

CONTINUE

3 Mark for Review

Richard III is one of the most _____ figures in the history of the British monarchy. Many scholars condemn him as a ruthless villain who usurped the throne for his own self-aggrandizement. Others argue vehemently that he was a noble and selfless character who was tragically misunderstood.

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

(A) polarizing

(B) unifying

(C) wicked

(D) slandered

4 Mark for Review

Many scholars surmise that Shakespeare had an _____ motive for creating the irreproachable character of Banquo for *The Tragedie of Macbeth*. King James I, who had recently ascended the throne when Shakespeare wrote the play, traced his own ancestry back to the literary Banquo's historical counterpart, and the scholars suggest that Shakespeare thought the inclusion of the character might curry favor with the new king.

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

(A) unimpeachable

(B) unpredictable

(C) artistic

(D) ulterior

CONTINUE

5 Mark for Review

Historically dismissed as tall tales and the braggadocio of inebriated sailors, gargantuan freak waves known as "rogue waves" were, at least prior to the twentieth century, generally thought to be nonexistent. Modern science then conceded that waves as high as multistory buildings were theoretically possible, but statistically unlikely. Today, oceanographers now believe that as many as ten of these _____ waves could be forming somewhere in the world at any given time.

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

(A) phantasmic

(B) colossal

(C) mythical

(D) ubiquitous

6 Mark for Review

Impossible colors are hues that humans are unable to perceive through standard visual observation. Most instances of impossible colors are merely the fabrication of imaginative wordsmiths. For instance, fantasy author Terry Pratchett created the color "octarine," which could only be observed by magicians and cats in his *Discworld* universe. Nevertheless, a certain phenomenon can produce impossible colors in the mind's eye. By concentrating on a single color until some of the eye's cone cells become fatigued and then looking at a significantly dissimilar pigment, an individual can potentially "see" a color irreplicable by the eye under any normal circumstances.

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

(A) It describes a critical oversight in the process used by Pratchett in his novels.

(B) It demonstrates the imaginative nature of works by Pratchett and other fantasy authors.

(C) It details the process by which one could observe something that is not typically observable.

(D) It pinpoints a conflict between fiction and reality that remains unresolved in the scientific community.

CONTINUE

7 Mark for Review

Stanley Milgram shocked the world in 1963 when he published the results of his infamous obedience experiments. His ingenious methodology supposedly revealed that human beings will administer potentially lethal shocks (the shocks were actually fake) when instructed to do so by an authority figure. Closer scrutiny, however, compels the conclusion that the accolades for Milgram's work were perhaps too hastily given. It is now evident based on a series of more modern obedience studies that no controlled laboratory environment can precisely recreate real-life conditions or utilize participants who perfectly represent the larger population.

Which choice best describes the function of the fourth sentence in the overall structure of the text?

(A) It provides additional support for the ingenuity of Milgram's work.

(B) It offers context for a dissenting opinion given by the author.

(C) It challenges the credentials of those who still espouse the validity of Milgram's work.

(D) It is the conclusion that the author is attempting to verify through his or her own experimentation.

8 Mark for Review

When George Washington, the first President of the United States, had his portrait painted by Gilbert Stuart, he initiated a tradition that has persisted to the present. Many of the portraits of iconic presidents, such as Abraham Lincoln and John F. Kennedy, hang on the walls of the White House. Barack Obama, the country's 43rd President, made history as the first African American President, and many considered it only fitting that his portrait was done by African American artist, Kehinde Wiley.

Which choice best states the main purpose of the text?

(A) To contrast historical figures with contemporary political leaders

(B) To show how American presidents have always been supportive of the arts

(C) To juxtapose a long-standing tradition with a groundbreaking development

(D) To explain how an important representation of a nation's leaders originated

CONTINUE

9 Mark for Review

The following text is from Richard Lovelace's 1649 poem "To Lucasta, Going to the Wars."

> Tell me not (Sweet) I am unkind,
> That from the nunnery
> Of thy chaste breast and quiet mind
> To war and arms I fly.
>
> True, a new mistress now I chase,
> The first foe in the field;
> And with a stronger faith embrace
> A sword, a horse, a shield.
>
> Yet this inconstancy is such
> As you too shall adore;
> I could not love thee (Dear) so much,
> Lov'd I not Honour more.

What is the main idea of the text?

(A) The speaker no longer loves Lucasta, so he is leaving for the wars.

(B) The speaker cannot go to war because honor requires that he stay with Lucasta.

(C) The speaker indicates that he has a duty of greater importance than that of his love for Lucasta.

(D) The speaker is leaving Lucasta for a woman who supports his military ambitions.

10 Mark for Review

Established in 1949, Wuxi opera has its roots in Chinese folk songs, but it has evolved into a full operatic genre with string, wind, and percussion instruments to accompany the human voice. Wuxi opera has many of the hallmarks of traditional opera, with long narrative songs and an emphasis on costume and musical performance. However, Chinese experts in Wuxi maintain that a defining feature that separates Wuxi opera from other operatic forms is Huang Tune, a kind of melody with powerful emotions and cheerful rhythms.

Which finding, if true, would most directly support the Chinese experts' argument?

(A) A series of modern operas stated to be Wuxi operas by their composers each have a Huang Tune within their sheet music.

(B) A number of Wuxi operas include instrumental accompaniment and narrative songs but do not include Huang tune.

(C) Most operas, regardless of region of the world, utilize some form of Huang Tune in their composition.

(D) Most Wuxi operas were not recorded when originally composed and therefore are difficult to examine.

CONTINUE

11 Mark for Review

Approximate Miles of Highway, in Thousands, in the United States Over a 20-year Period

Year	Rural interstate	Rural local	Urban interstate	Urban local
0	11.5	7	37.5	32.1
5	12	7.7	38	31.8
10	13.4	8.1	37.4	30.9
15	13.4	8.7	37.7	30.2
20	15.9	10	31.3	29.4

Over a 20-year period, the approximate total length, in miles, of rural highways within the United States generally increased, while the approximate total length, in miles, of urban highways within the United States generally decreased. Interestingly, total urban interstate highway length has decreased more sharply than its local counterpart, which can be seen by examining the changes in _____

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

(A) urban interstate and urban local highway mileage from year 0 to year 5.

(B) urban interstate and urban local highway mileage from year 15 to year 20.

(C) rural interstate and rural local highway mileage from year 10 to year 15.

(D) rural interstate and urban interstate highway mileage from year 15 to year 20.

12 Mark for Review

A team of scientists studying Eurasian jays, members of the corvid family of birds, recently conducted a series of experiments meant to assess the jays' self-control when it comes to food. The jays were each offered mealworms, their favorite food, as well as bread and cheese. The bread and cheese were made immediately available to the jays for consumption, while the jays could see the mealworms but had to wait a period of time before the mealworms were released to them. Because all of the jays in the experiment were willing to wait for the mealworm, the scientists concluded that the Eurasian jays were able to exhibit self-control for a better outcome, which is considered a sign of intelligence in animal biology.

Which finding, if true, would most directly weaken the scientists' conclusion?

(A) The process used in the scientists' study for examining the Eurasian jays is found to be less effective when used to examine other types of animals.

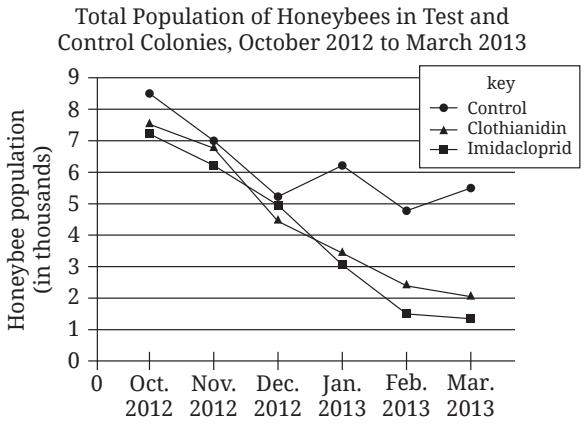
(B) Most bird species prefer mealworms, but they will consume bread and cheese when mealworms are unavailable or difficult to find.

(C) Another bird species is noted as preferring mealworms, bread, and cheese equally in a similar experiment.

(D) A study is released that the aroma in bread and cheese is offensive to Eurasian Jays, unlike that of mealworms.

CONTINUE

13 Mark for Review



In 2007, beekeepers across the globe were shocked when they lost over 30% of the bees in their colonies to colony collapse disorder, or CCD. Five years later, a group of researchers thought they found the culprit: neonicotinoids. They hypothesized that chemicals in this new pesticide caused bees to avoid hibernation, explaining why CCD occurred in the winter. The researchers set up three different apiaries: two experimental groups, one sprayed with Imidacloprid and one with Clothianidin, both of which are neonicotinoids, and a control group, free of neonicotinoids. The data appeared to confirm their hypothesis: bees exposed to neonicotinoids were more vulnerable to CCD, as evidenced by the lower final populations of the two experimental colonies as compared to the control group.

Which choice best describes data from the graph that supports the researchers' conclusion?

(A) The population of the control group declined at roughly the same rate as did those of the experimental group from October 2012 through November 2012.

(B) Neither of the experimental groups experienced a population increase in December 2012.

(C) The rates of CCD for the control group did not consistently follow the pattern for temperature from October 2012 to March 2013.

(D) From December 2012 to January 2013, the population of the experimental groups decreased while the population of the control group mostly increased.

14 Mark for Review

Some ethicists question whether criminal laws governing "attempts" are reasonable or morally sound. Typically, an attempt to commit a crime is punished less harshly than the successful commission of that same crime. So, connecting with a punch during an altercation may get you jail time, but losing your balance and falling to the ground while intending to deliver a punch during an altercation might not even get you into court. This raises the question: _____

Which choice most logically completes the text?

(A) why should someone avoid consequences merely for lack of physical contact?

(B) why should someone's bad intentions be relevant when the harm that the individual causes is what really matters?

(C) why should someone serve jail time for a simple punch in the nose when more serious crimes occur every day?

(D) why should someone be rewarded by the system for being a skilled fighter?

CONTINUE

15 Mark for Review

Psychological research studies have consistently shown that early environmental factors, such as parental influence and peer relationships, have a profound effect on a child's developing personality. However, research also suggests that genetics plays a significant role in personality formation as well. So, the question that ought to be considered is _____

Which choice most logically completes the text?

(A) whether early environment or genetics is the sole determining factor regarding personality development.

(B) whether certain personality traits can be created through genetic engineering.

(C) whether genetics or early environmental factors play the greater role in personality development.

(D) whether parental influence or early peer relationships have the greater effect on personality development.

16 Mark for Review

Victoria Chang is a poet and author from the US who attended the University of Michigan, Harvard University, and Stanford University. Her books of poems have earned many accolades, and one of her books was recognized by *TIME* Magazine and even named one of Electric _____ of 2021.

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

(A) Literature's Favorite Nonfiction Book's

(B) Literatures Favorite Nonfiction Books

(C) Literature's Favorite Nonfiction Books

(D) Literatures Favorite Nonfiction Book's

17 Mark for Review

Ghost words are words that are accidentally published in an official reference text without any previous intentional _____ they can become widespread as more people use them in everyday language.

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

(A) use,

(B) use

(C) use, yet

(D) use yet

CONTINUE

18 Mark for Review

Elizabeth Woody is a Native American poet who has served in numerous roles in her _____ as a teacher, she taught creative writing for high school and college students, and as an artist, she learned basket weaving and served on multiple multi-disciplinary art committees.

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

(A) field,

(B) field:

(C) field

(D) field and

19 Mark for Review

Scientists have shown that some families are more likely to experience conditions such as kidney failure and diabetes due to mutations in their genetic codes. Armed with this information, _____

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

(A) the disorders of patients within a single family and unrelated patients at risk of developing the same disorders could be treated.

(B) the treatment of both patients within a single family and the treatment of unrelated patients at risk of developing the same disorders could be completed.

(C) scientists could treat both patients within a single family and unrelated patients at risk of developing the same disorders.

(D) scientists' treatments could be applied to both patients within a single family and unrelated patients at risk of developing the same disorders.

CONTINUE

20 Mark for Review

When Chinese American architect I. M. Pei was hired to renovate the Louvre, an art museum in Paris, France, his proposed design included a large glass and steel pyramid in the courtyard of the museum. Initially, critics and the public reacted negatively. In response, Pei placed a full-size model in the courtyard, which thousands of people visited. By the time the pyramid was built and opened, public opinion _____

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

(A) changed.

(B) had changed.

(C) will change.

(D) changes.

21 Mark for Review

A chief of the Shawnee people, Tecumseh fought against American expansion onto Native American lands. Tecumseh helped unite Native Americans from many different tribes, including the Shawnee, from the central Ohio River _____ from the shores of Lake Michigan; and the Kickapoo, from Oklahoma.

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

(A) Valley; the Potawatomi,

(B) Valley, the Potawatomi,

(C) Valley, the Potawatomi;

(D) Valley the Potawatomi,

22 Mark for Review

Rachel Carson was an American marine biologist who wrote numerous respected works, including *Silent Spring*, to promote conservation efforts. Carson's publishers were concerned about being faced with harsh _____ some of her ideas could be interpreted as libel since they contradicted many accepted scientific claims.

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

(A) criticism, however,

(B) criticism. However,

(C) criticism however

(D) criticism, however;

CONTINUE

23 Mark for Review

Spirit is a Mars rover that launched in 2004 and became inactive in 2010. It used panoramic color imaging technology developed by James F. Bell III. Bell used images from the Mars rover to create a book called *Postcards from Mars*. _____ the general public was able to become more familiar with the work being performed by the rover.

Which choice completes the text with the most logical transition?

(A) As a consequence,

(B) Despite this,

(C) Additionally,

(D) Otherwise,

24 Mark for Review

Some plants show visible responses to physical contact, such as *Mimosa pudica*, or the sensitive plant. Scientists hypothesize that this reaction is to protect the plant from danger, as the plant can shield its most sensitive areas from a predator or atmospheric threat and reopen to gather sunlight when it is safe to do so. _____ the plant has adapted to respond to its environment when something makes contact with it.

Which choice completes the text with the most logical transition?

(A) In other words,

(B) Moreover,

(C) Also,

(D) Overall,

25 Mark for Review

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

- In social mammals, researchers have found a connection between sociality and survival.
- Researchers studied female white-faced capuchin monkeys' social behavior.
- They observed three different behaviors to understand the social relationships.
- The researchers looked at grooming, joining in conflicts, and foraging proximity.
- Female capuchins who groomed and foraged near other females had better survival rates.
- Interactions with male capuchins did not have a positive impact on female survival rates.

The student wants to highlight the difference between female capuchins' relationships with other females and with males. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) Female white-faced capuchin monkeys' social behavior is connected to their survival.

(B) Researchers observed three different behaviors—including grooming, joining in conflicts, and foraging proximity—to understand the females' social relationships.

(C) Grooming, joining in conflicts, and foraging proximity with males did not have a positive impact on female survival.

(D) Female capuchins' relationships with other females had a positive impact on their survival, while their relationships with males did not.

CONTINUE

26 Mark for Review

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

- The National Oceanic and Atmospheric Administration (NOAA) is a scientific and regulatory agency within the US federal government.
- To track and forecast tropical cyclones, the NOAA gathers data using satellites, buoys, and reconnaissance aircraft.
- Data is entered into the Hurricane Weather Research and Forecasting (HWRF) computer simulation.
- The HWRF produces hurricane forecasts every six hours.
- Computer simulations use mathematical models to analyze data and make predictions about future events.

The student wants to make a generalization about the approach taken by the NOAA to an audience familiar with the HWRF. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) The NOAA uses satellites, buoys, and reconnaissance aircraft to gather data for the HWRF.

(B) The Hurricane Weather Research and Forecasting (HWRF) model, which produces hurricane forecasts every six hours, uses computers to analyze data and make predictions about future events.

(C) The HWRF is just one example of a computer simulation: mathematical models used to analyze data and make predictions about future events.

(D) The National Oceanic and Atmospheric Administration (NOAA), a scientific and regulatory agency within the US federal government, tracks and forecasts tropical cyclones by gathering data using satellites, buoys, and reconnaissance aircraft.

27 Mark for Review

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

- A study by researchers at the University of Maryland showed that forest fires are getting worse.
- Forest fires recently burned an area almost twice as large as the area burned by forest fires twenty years ago.
- A likely explanation for the increase in forest fires is climate change.
- Climate change and forest fires create a feedback loop.
- In this feedback loop, climate change leads to more frequent heat waves that dry out the land, creating ideal conditions for larger forest fires.
- The forest fires lead to more carbon emissions, which fuel climate change and lead to drier environments.

The student wants to detail the sequence of the climate change and forest fire feedback loop. Which choice most effectively uses relevant information from the notes to accomplish this goal?

(A) Increased forest fires are likely caused by climate change.

(B) Forest fires are getting worse and burning an area twice as large as they burned twenty years ago.

(C) Climate change leads to dry land, which leads to larger forest fires, which leads to more carbon emissions, which leads to more climate change.

(D) Climate change leads to dry land, and forest fires lead to more carbon emissions.

CONTINUE

PSAT Prep Test 1—Math
Module 1

Turn to Section 2 of your answer sheet to answer the questions in this section.

DIRECTIONS

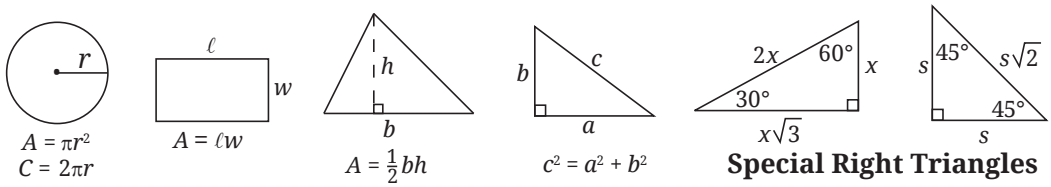
The questions in this section address a number of important math skills.
Use of a calculator is permitted for all questions.

NOTES

Unless otherwise indicated:

- All variables and expressions represent real l 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

INSTRUCTIONS FOR PRINT TESTS

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 directions, 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.
- You 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

CONTINUE

1 Mark for Review

When the equation $y = 2x - b$, where b is a constant, is graphed in the xy-plane, the line passes through the point $(3, -1)$. What is the value of b?

(A) -5

(B) -3

(C) 1

(D) 7

2 Mark for Review

If $-2 \leq f \leq 3$ and $-5 \leq g \leq 2$, what is the maximum value of fg?

(A) -15

(B) -4

(C) 6

(D) 10

3 Mark for Review

Player	A	B	C	D	E	F	G	H	I
Points	5	5	5	17	12	23	3	18	20

The table above shows the number of points scored by each player in a professional basketball game. What is the mean number of points scored by the players in the game?

4 Mark for Review

$$5\left(\frac{y}{2} + 5\right) = 2y + \frac{1}{2}y + 25$$

Which of the following describes the solution to the equation shown above?

(A) The only solution is $y = 1\frac{1}{2}$.

(B) The only solution is $y = 10$.

(C) The equation has infinitely many solutions.

(D) The equation has no solutions.

CONTINUE

5 Mark for Review

Triangles QRS and XYZ are similar right triangles, where $R > Q > S$ and $Y > X > Z$. If the measure of angle X is $63°$, what is the measure of angle S?

(A) $27°$

(B) $63°$

(C) $90°$

(D) $153°$

6 Mark for Review

A field of soybeans measuring 4.6 square kilometers is being harvested. If the farm workers can harvest 23 hectares per day, how many days will it take to harvest the entire field? (100 hectares = 1 square kilometer).

(A) 5

(B) 20

(C) 100

(D) 500

7 Mark for Review

Month	Balance
0	$1,400
1	$1,344
2	$1,290
3	$1,239
4	$1,189
5	$1,142

The table above shows the balance, in dollars, of a bank account. Which of the following best describes the model that fits the data?

(A) Exponential, decreasing by approximately 4% per month

(B) Exponential, decreasing by approximately 8% per month

(C) Linear, decreasing by approximately $47 per month

(D) Linear, decreasing by approximately $56 per month

CONTINUE

8 Mark for Review

$$5x - 3y = 7$$
$$2x + y = 5$$

If (x, y) is the solution to the system of equations above, what is the value of y?

9 Mark for Review

High School Students' Summer Plans

	Sophomores	Juniors	Total
Travel	15	25	40
Summer job	17	13	30
Relax	33	21	54
Sports	13	9	22
Volunteer	11	14	25
Other	16	13	29
Total	105	95	200

A high school that has a total of 1,200 students surveyed a representative sample of 200 of its students about their summer travel plans. Based on the data in the table above, what is the predicted number of juniors in the entire school who would indicate travel as their summer plans?

(A) 25

(B) 150

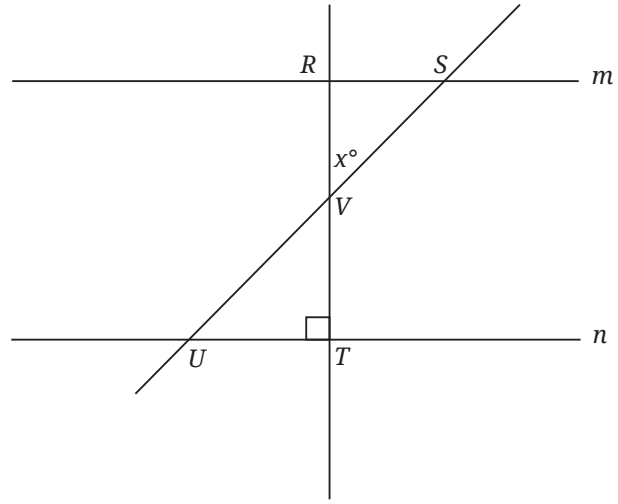
(C) 240

(D) 316

10 Mark for Review

The function h is defined by $h(x) = 9 - |x - 3|$. If $h(n) = -3$, what is the positive value of n?

11 Mark for Review



In the figure above, lines m and n cross the lines containing segments $\overline{RT}$ and $\overline{SU}$ such that angle RSV is congruent to angle TUV. If angle UTV is a right angle, and angle TUV measures 65°, what is the value of x?

CONTINUE

12 Mark for Review

$$3x + 2y = 4$$
$$y = \frac{2}{3}x - 2$$

The two equations in the system of equations above each form a line when graphed in the xy-plane. Which of the following statements is true regarding these two lines?

(A) The lines intersect at $(3, 2)$.

(B) The lines are the same line.

(C) The lines are parallel.

(D) The lines are perpendicular.

13 Mark for Review

Function f, where $y = f(x)$, is graphed in the xy-plane. The graph of the function contains the points $(0, 3)$ and $(5, 96)$. Which of the following could define f?

(A) $f(x) = \frac{1}{2}(3)^x$

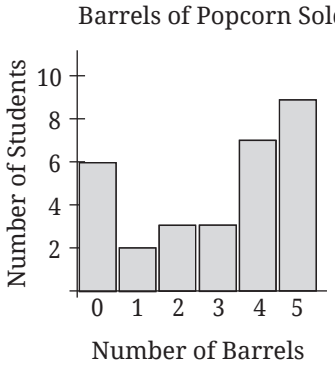
(B) $f(x) = 3(2)^x$

(C) $f(x) = 3(3)^x$

(D) $f(x) = 8(2)^x$

14 Mark for Review

A high school class is selling barrels of popcorn to raise money. The histogram below shows the number of students who sold each quantity of barrels.



Which of the following is true?

I. The mode number of barrels sold is equal to the median number of barrels sold.

II. The median number of barrels sold is equal to the mean number of barrels sold.

III. The mode number of barrels sold is equal to the range of the number of barrels sold.

(A) I only

(B) III only

(C) I and II only

(D) II and III only

CONTINUE

15 Mark for Review

$$S = 5(bc + 1) - 9$$

In the equation above, which of the following is equivalent to bc?

(A) $\frac{S-4}{5}$

(B) $S - 4$

(C) $\frac{S+4}{5}$

(D) $\frac{S+14}{5}$

16 Mark for Review

If the equation $y = x^2 - 10x - 75$ is graphed in the xy-plane, what is the y-coordinate of the parabola's vertex?

(A) -100

(B) 0

(C) 5

(D) 100

17 Mark for Review

$$10x - 62 = 9y$$
$$\frac{1}{4}x = y$$

The equations of two lines are shown above. If the lines are graphed in the xy-plane, they intersect at the point (a, b). What is the value of b?

18 Mark for Review

$$\left(a^{\frac{1}{3}}b^{\frac{1}{4}}\right)^3\left(a^{\frac{1}{3}}b^{\frac{1}{4}}\right)^4 = a^{\frac{k}{3}}b^{\frac{k}{4}}$$

If the equation above, where k is a constant, is true for all positive values of a and b, what is the value of k?

(A) 3

(B) 4

(C) 7

(D) 10

CONTINUE

19 Mark for Review

$$(3 - y)^2 - (3 - y)$$

Which of the following is an equivalent form of the expression above?

(A) $3 - y$

(B) $y^2 - 7y + 6$

(C) $(3 - y)(2 - y)$

(D) $9 - y^2$

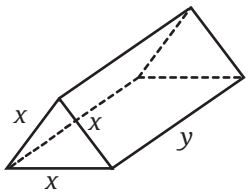
20 Mark for Review

Function f is defined by $f(x) = 3x$. In the xy-plane, the graph of $y = f(x)$ is parallel to the graph of linear function $y = g(x)$. If $g(0) = 5$ and $g(2) = r$, what is the value of r?

21 Mark for Review

In a certain marathon, 45 percent of the runners were men, and the rest were women. The official timekeeper determined that 62 percent of the men and 66 percent of the women completed the marathon in under four hours. What percent of the runners who completed the marathon in under four hours were women? (Disregard the percent sign when entering your answer.)

22 Mark for Review



The total surface area of the triangular prism shown above can be calculated using the following formula, where x is the length of the sides of the triangular ends and y is the length of the rectangular faces.

$$SA = 2\left(\frac{\sqrt{3}}{4}x^2\right) + 3xy$$

What must the expression $\frac{\sqrt{3}}{2}x^2$ represent?

(A) The area of one triangular end

(B) The area of one rectangular face and one triangular end

(C) The sum of the areas of the rectangular faces

(D) The sum of the areas of the triangular ends

CONTINUE

PSAT Prep Test 1—Math
Module 2—Easier

Turn to Section 2 of your answer sheet to answer the questions in this section.

DIRECTIONS

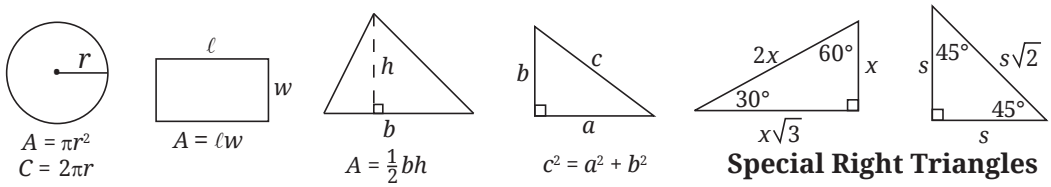
The questions in this section address a number of important math skills.
Use of a calculator is permitted for all questions.

NOTES

Unless otherwise indicated:

- All variables and expressions represent real l 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



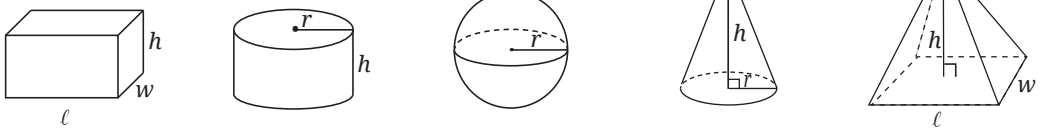
$A = \pi r^2$
$C = 2\pi r$

$A = \ell w$

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

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

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

INSTRUCTIONS FOR PRINT TESTS

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.

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- 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.
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- You 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.
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- 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

CONTINUE

1 Mark for Review

If a certain value is 130, what is 20% of that value?

(A) 26

(B) 65

(C) 104

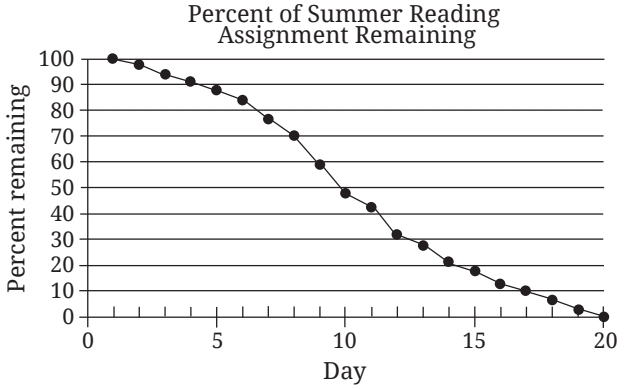
(D) 110

2 Mark for Review

$$c + d = 66$$

If $c = 20$ in the given equation, what is the value of d?

3 Mark for Review



The graph above shows the percent a student had remaining to read for his summer reading assignment each day during the 20 days it took to complete the assignment. On which day had the student completed 30% of the assignment?

(A) Day 3

(B) Day 7

(C) Day 8

(D) Day 12

CONTINUE

4 Mark for Review

Which of the following is an equivalent form of the expression $30y - 12cy$?

(A) $(5 - 2c)y$

(B) $18(c - 2y)$

(C) $18cy^2$

(D) $(30 - 12c)y$

5 Mark for Review

A small glass tube used in a scientific lab can hold no more than 8.50 milliliters of liquid needed for a certain experiment. Approximately how many teaspoons can the beaker hold? (1 teaspoon ≈ 4.93 milliliters)

(A) 1.72

(B) 3.57

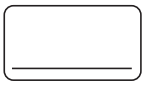
(C) 6.78

(D) 41.91

6 Mark for Review

$$4s + 2t = 7$$
$$3s - 2t = -14$$

In the system of equations above, what is the value of s?



CONTINUE

7 Mark for Review

A square has an area of 100 square inches. What is the length of one side of the square, in inches?

(A) 10

(B) 25

(C) 50

(D) 100

8 Mark for Review

Sydney borrowed money from a friend and is paying back the loan. The remaining amount she owes, A, can be calculated by the equation $A = 870 - 30w$, where w represents the number of weeks since she took the loan. What does the number 870 represent?

(A) The total amount of money Sydney has repaid

(B) The amount of money Sydney repays each week

(C) The number of weeks Sydney has been paying back the loan

(D) The original amount that Sydney borrowed

9 Mark for Review

Which of the following are the solutions to the equation $3x^2 - 48 = 0$?

(A) -16 and 16

(B) $-\sqrt{48}$ and $\sqrt{48}$

(C) -4 and 4

(D) $-\frac{\sqrt{48}}{3}$ and $\frac{\sqrt{48}}{3}$

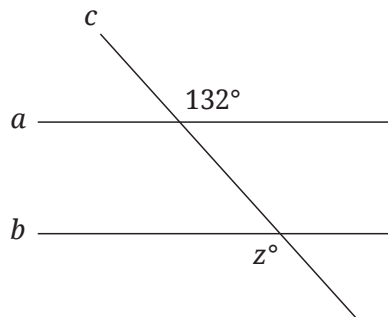
CONTINUE

10 Mark for Review

$$6(2y + z) = 12y + 18$$

In the equation above, z is a constant. For what value of z does the equation have an infinite number of solutions?

11 Mark for Review



Note: Figure not drawn to scale.

What is the value of z in the figure shown above if line a is parallel to line b?

(A) 48

(B) 66

(C) 132

(D) 264

CONTINUE

12 Mark for Review

If $w > 3$, then which of the following must be true?

(A) $-w < -3$

(B) $-w > -3$

(C) $w = 4$

(D) w is an integer

13 Mark for Review

A doctor's office is hiring a medical billing company to type invoices for the patients at the practice. The company charges a one-time fee of $\$125$ plus $\$80$ per invoice typed. Which of the following represents the amount, in dollars, the doctor's office will be charged if the company types 5 invoices each day for y days?

(A) $80y + 125$

(B) $80(5)y + 125$

(C) $80y + 125(5)$

(D) $125(5)y + 80$

14 Mark for Review

$$P = 2{,}500 + 135x$$

The population of County Y, in thousands, can be modeled by the above equation, in which x represents the number of years since the 2010 census. What does the number 135 represent in this equation?

(A) Every year the population of County Y increases by 135 people.

(B) Every 135 years that passes, the population of County Y increases by $2{,}500$ people.

(C) Every 135 years that passes, the population of County Y increases by $250{,}000$ people.

(D) Every year the population of County Y increases by $135{,}000$ people.

CONTINUE

15 Mark for Review

The human population, in billions of people, for the world for the years 1960 through 2010 can be modeled by the function $P(y) = 3.039(1.017)^y$, where y represents the number of years since 1960. According to this model, the human population in 1974 was how many times the human population in 1972?

(A) 1.017

(B) $(1.017)^2$

(C) $3.039(1.017)$

(D) $3.039(1.017)^2$

16 Mark for Review

$$g(x) = 2x^2$$

Function g is defined above. If $g(x) = 288$, what is the positive value of x?

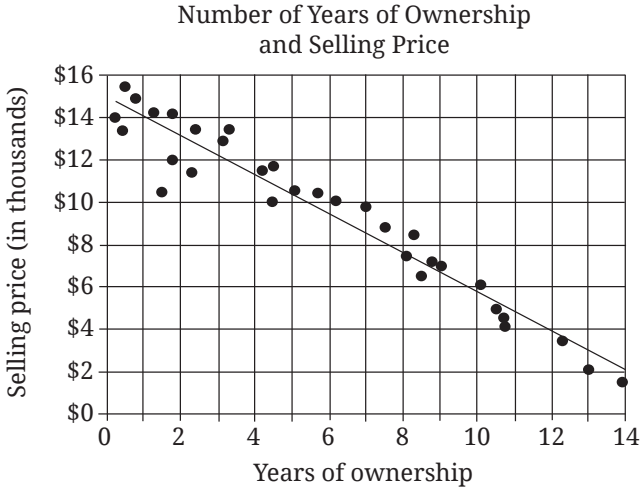
(A) 2

(B) 12

(C) 72

(D) 144

17 Mark for Review



For 32 cars that were identical when new, the scatterplot above shows the number of years of ownership and the selling price when the first owner sold the car. The line of best fit is also shown. For the car that was sold after exactly 7 years of ownership, the actual selling price of the car was approximately how much more than the selling price predicted by the line of best fit?

(A) $650

(B) $1,250

(C) $2,150

(D) $3,350

CONTINUE

18 Mark for Review

$$t = r$$
$$t = 1.8r - 6$$

The system of equations above has a solution (r, t). What is the value of r?

(A) 4.8

(B) 6.0

(C) 7.5

(D) 10.8

19 Mark for Review

A certain box has a width that is 2 inches more than its length and a height that is 5 inches less than its length. If each of the two smallest faces of the box has an area of 36 square inches, what is the volume of the box, in cubic inches?

20 Mark for Review

$$y = x - 6$$
$$y = -x^2 + 7x - 14$$

Which of the following gives all the solutions (x, y) that satisfy the system of equations above?

(A) There is no solution to this system of equations.

(B) $(4, -2)$

(C) $(4, -2)$ and $(2, -4)$

(D) $(4, 2)$ and $(2, -4)$

CONTINUE

21 Mark for Review

$$p^2 = 3 + q$$
$$3 = p + q$$

A system consisting of a linear equation and a quadratic equation is shown above. If $(p, q) = (x, y)$ is a solution to the system, which of the following could be the value of x?

(A) -3

(B) -2

(C) 0

(D) 3

22 Mark for Review

If $f(x) = x^k$ for some constant k, and $2f(x) = f(16x)$ for all positive values of x, what is the value of k?

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

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

(C) 4

(D) 8

CONTINUE

PSAT Prep Test 1—Math
Module 2—Harder

Turn to Section 2 of your answer sheet to answer the questions in this section.

DIRECTIONS

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NOTES

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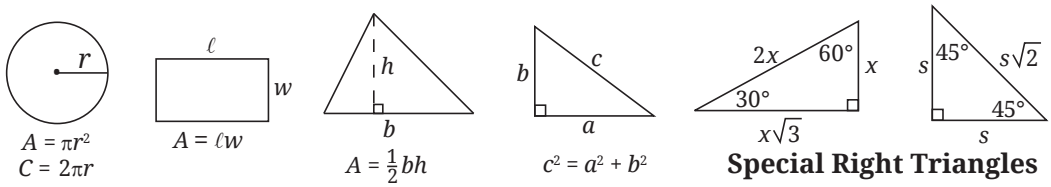
REFERENCE



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

$A = \ell w$

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

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

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.
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The sum of the measures in degrees of the angles of a triangle is 180.

CONTINUE

INSTRUCTIONS FOR PRINT TESTS

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CONTINUE

1 Mark for Review

$$y < \frac{1}{4}(3y - 2)$$

Which of the following values of y would make the above inequality true?

(A) -3

(B) -2

(C) 0

(D) 3

2 Mark for Review

$$5a^2 - (-3a^2)$$

Which of the following is equivalent to the expression above?

(A) $-15a^2$

(B) $2a^2$

(C) $8a^2$

(D) $8a^4$

3 Mark for Review

What is the result when 70 is increased by 20%?

(A) 56

(B) 72

(C) 84

(D) 90

4 Mark for Review

$$9y + 8 = 8 + ky - 5y$$

In the equation above, k is a constant. If the equation has infinitely many solutions, what is the value of k?

CONTINUE

5 Mark for Review

Right triangle LMN has a right angle at N. If the value of $\cos(L)$ is $\frac{\sqrt{21}}{5}$, what is the value of $\sin(M)$?

Ⓐ $\frac{\sqrt{21}}{21}$

Ⓑ $\frac{5\sqrt{21}}{21}$

Ⓒ $\frac{\sqrt{21}}{5}$

Ⓓ $\sqrt{21}$

6 Mark for Review

A theater sells student tickets to a play for $\$24$ and regular admission tickets for $\$36$. If the theater sells out the 100-seat theater for opening night and has total ticket sales of $\$3{,}144$, how many of the tickets sold were student tickets?

7 Mark for Review

A shoe store is having a sale in which a customer receives a 30 percent discount on a second pair of shoes after purchasing the first at regular price. The tax rate of 6 percent is applied to the whole purchase. If s represents the regular price of each pair of shoes at the store, which of the following expressions gives the total amount that a customer would pay for two pairs during this sale?

Ⓐ $1.7s + 0.06$

Ⓑ $1.06(s - 0.3s)$

Ⓒ $1.06s + 0.7s$

Ⓓ $1.06(s + 0.7s)$

8 Mark for Review

$$\frac{1}{\frac{1}{2y} - \frac{1}{y+3}}$$

For all $y > 3$, which of the following is equivalent to the expression above?

Ⓐ $3 - y$

Ⓑ $\frac{2y^2 + 6y}{3 - y}$

Ⓒ $\frac{3 - y}{2y^2 + 6y}$

Ⓓ $2y^2 + 6y$

CONTINUE

9 Mark for Review

At a souvenir shop, the cost of 5 hats and 9 magnets is $\$72.00$, and the cost of 2 hats and 1 magnet is $\$14.50$. If the hats all cost the same price and the magnets all cost the same price, how much does 1 magnet cost?

(A) $\$3.22$

(B) $\$4.50$

(C) $\$5.50$

(D) $\$5.78$

10 Mark for Review

The function $V(m) = 52(0.91)^{0.5m}$ models the number of cases of a virus in a small country m months after the initial outbreak in January. What is the approximate value of x if, according to the function, the disease cases are predicted to decrease by $x\%$ every 60 days? (Assume 1 month has 30 days.)

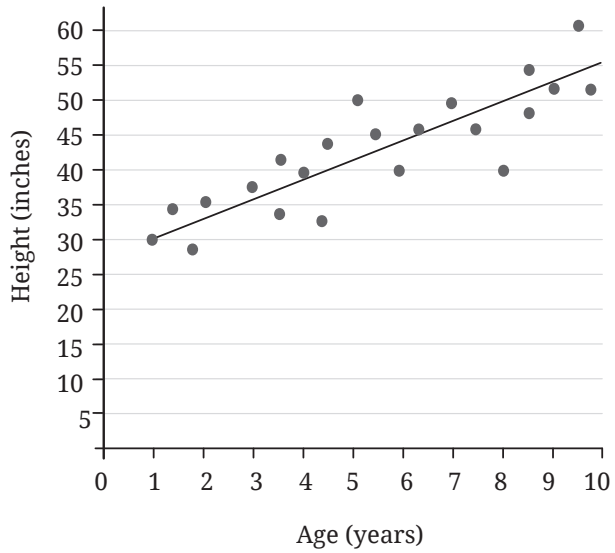
(A) 9.0

(B) 9.1

(C) 9.5

(D) 47.3

11 Mark for Review



A pediatrician's office collects data on the heights of all its patients. The scatterplot above shows the heights of the male patients seen by the office at various ages less than 10 years. A linear model best describes the data, and the line of best fit is shown. For the patient who is exactly 8 years old, which of the following best estimates the percent increase from his actual height to the height that the model predicts?

(A) 20%

(B) 25%

(C) 75%

(D) 80%

CONTINUE

12 Mark for Review

$$SA = 4\pi r^2$$

The formula for the surface area (SA) of a sphere with radius r is shown above. If the radius of sphere A is 3 times the radius of sphere B, how many times larger is the surface area of sphere A than the surface area of sphere B?

(A) 3

(B) 9

(C) 27

(D) 36

13 Mark for Review

The graph of function f in the xy-plane, where $y = f(x)$, is a parabola. If the graph of function f intersects the x-axis at $(k, 0)$ and $(3, 0)$, and the vertex of f is at $(5, -3)$, what is the value of k?

(A) 1

(B) 5

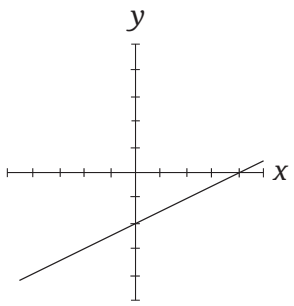
(C) 7

(D) 9

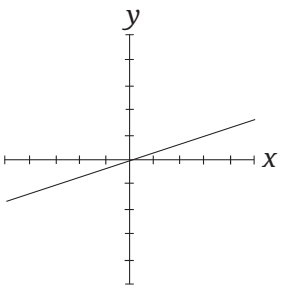
14 Mark for Review

In the xy-plane above, the graph of $f(x)$ is shown. Which of the following could be the graph of $f(x-4)+2$?

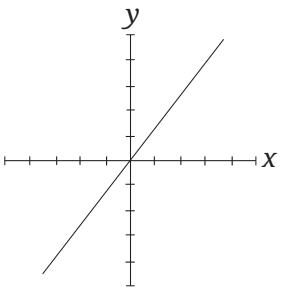
(A)



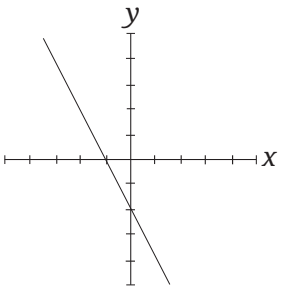
(B)



(C)



(D)



CONTINUE

15 Mark for Review

If the equation $5x^2 + bx + 125 = 0$ has no real solutions, which of the following could be the value of constant b?

(A) -50

(B) 25

(C) 50

(D) 130

16 Mark for Review

During a month of practice, a distance runner ran at a pace of 5 miles per hour at the beginning of the month before increasing her pace to 6 miles per hour for the rest of the month. She spent 70% of her total time jogging at the slower pace, and the rest at the faster pace. If the runner ran for a total of 120 hours during the month, what is the total distance, in miles, that she ran?

17 Mark for Review

If the function h is defined by $h(x) = 2x^2 - 7x - 3$, what is $h(x + 3)$?

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

(B) $h(x + 3) = 2x^2 - 7x - 6$

(C) $h(x + 3) = 2x^2 + 5x - 6$

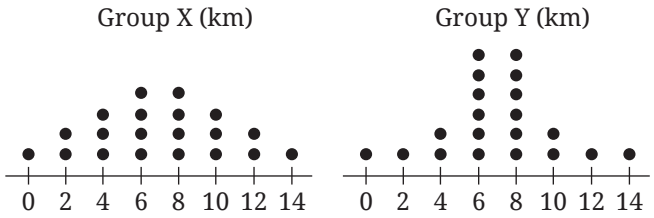
(D) $h(x + 3) = 2x^2 - 23x + 15$

18 Mark for Review

The function q is defined by $q(x) = 4x^3 - bx^2 + 14x + 12$, where b is a constant. In the xy-plane, the graph of q contains the points $(-\frac{1}{2}, 0)$, $(2, 0)$, and $(n, 0)$. What is the value of b?

CONTINUE

19 Mark for Review



The dot plots above represent two fitness groups at a local gym and the kilometers run by the 20 athletes participating in each group during one week. Which of the following statements correctly compares the means and standard deviations of the two groups?

(A) The mean number of kilometers run by each athlete in group X is less than the mean of group Y, and the standard deviation of the number of kilometers run by each athlete in group X is greater than the standard deviation of group Y.

(B) The mean number of kilometers run by each athlete in group X is more than the mean of group Y, and the standard deviation of the number of kilometers run by each athlete in group X is less than the standard deviation of group Y.

(C) The mean number of kilometers run by each athlete in group X is equal to the mean of group Y, and the standard deviation of the number of kilometers run by each athlete in group X is equal to the standard deviation of group Y.

(D) The mean number of kilometers run by each athlete in group X is equal to the mean of group Y, and the standard deviation of the number of kilometers run by each athlete in group X is greater than the standard deviation of group Y.

20 Mark for Review

$$kx = -9y + 2$$
$$40x + 8 = 36y - 44x$$

The given system of equations, in which k is a constant, has infinitely many solutions. What is the value of k?

(A) -21

(B) -10

(C) 1

(D) 84

CONTINUE

21 Mark for Review

At a certain car wash, the first three detailing services cost $\$60$ each, and a discounted amount is charged for each additional detailing service. During one visit, a customer purchased 9 total detailing services and was charged a total of $\$360$. If s is the number of detailing services purchased during one visit, and $s > 2$, which function f gives the total cost, in dollars, of one visit?

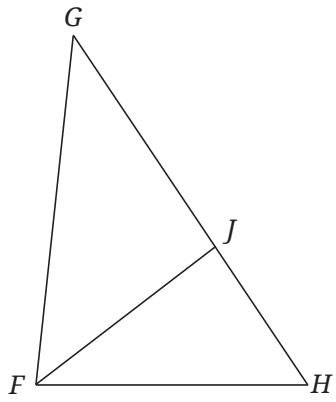
(A) $f(s) = 30s + 90$

(B) $f(s) = 30s + 180$

(C) $f(s) = 40s$

(D) $f(s) = 60s$

22 Mark for Review



In the figure above, the ratio $\frac{FJ}{FH}$ has the same value as the ratio $\frac{FG}{GH}$. Which of the following angle measures must be congruent?

(A) Angle FGH and angle FHJ

(B) Angle FJG and angle FJH

(C) Angle GFJ and angle HFJ

(D) Angle GFH and angle FJH

STOP

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

PSAT Prep, 2023–2024 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

Section 1: Module 1
Reading and Writing

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

Section 1: Module 2 (Easier)
Reading and Writing

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D
5.	A	B	C	D
6.	A	B	C	D
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22.	A	B	C	D
23.	A	B	C	D
24.	A	B	C	D
25.	A	B	C	D
26.	A	B	C	D
27.	A	B	C	D

Section 1: Module 2 (Harder)
Reading and Writing

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D
5.	A	B	C	D
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7.	A	B	C	D
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19.	A	B	C	D
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21.	A	B	C	D
22.	A	B	C	D
23.	A	B	C	D
24.	A	B	C	D
25.	A	B	C	D
26.	A	B	C	D
27.	A	B	C	D

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Practice Test

YOUR NAME: _____
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(Print) Number and Street

_____
City State Zip Code

PHONE NO.: _____
(Print)

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

Section 2: Module 1 Math

1. (A) (B) (C) (D)
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22. (A) (B) (C) (D)

Section 2: Module 2 (Easier) Math

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20. (A) (B) (C) (D)
21. (A) (B) (C) (D)
22. (A) (B) (C) (D)

Section 2: Module 2 (Harder) Math

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