Digital SAT Practice Test 1

Problems sourced from the college board question bank. Note: the official Bluebook practice tests and official college board digital SATs are adaptive tests.

You have 32 minutes to complete the first module of the Reading and Writing portion.

Question ID 6f873e68

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Standard English Conventions	Boundaries	Hard	

ID: 6f873e68

In crafting her fantasy fiction, Nigerian-born British author Helen Oyeyemi has drawn inspiration from the classic nineteenth-century fairy tales of the Brothers Grimm. Her 2014 novel *Boy, Snow, Bird*, for instance, is a complex retelling of the story of Snow White, while her 2019 novel _____ offers a delicious twist on the classic tale of Hansel and Gretel.

- A. Gingerbread—
- B. Gingerbread,
- C. Gingerbread
- D. Gingerbread:

Question ID 550866d1

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Standard English Conventions	Boundaries	Medium

ID: 550866d1

Eli Eisenberg, a genetics expert at Tel Aviv University in Israel, recently discovered that _____ have a special genetic ability called RNA editing that confers evolutionary advantages.

- A. cephalopods, ocean dwellers that include the squid, the octopus, and the cuttlefish
- B. cephalopods—ocean dwellers—that include the squid, the octopus, and the cuttlefish,
- C. cephalopods, ocean dwellers that include: the squid, the octopus, and the cuttlefish,
- D. cephalopods—ocean dwellers that include the squid, the octopus, and the cuttlefish—

Question ID 562d4b57

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Standard English Conventions	Boundaries	Easy	

ID: 562d4b57

In 2000, Nora de Hoyos Comstock, herself an owner of a successful consulting firm, sought to increase Latina representation in corporate _____ founded Las Comadres para las Americas, an international community that for over two decades has served as a resource and information network for Latina business professionals.

- A. settings she
- B. settings, she
- C. settings and she
- D. settings. She

Question ID 618d94c4

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Standard English Conventions	Boundaries	Hard	

ID: 618d94c4

In 2018, a team of researchers led by Dr. Caitlin Whalen compiled every available measurement of ocean mixing rates from the past two decades. With this novel data set, the team was able to determine how current-driven mixing varies across _____ and what impact it has on the distribution of heat and nutrients in the ocean.

- A. regions,
- B. regions:
- C. regions;
- D. regions

Question ID af557364

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Standard English Conventions	Boundaries	Easy

ID: af557364

In the novel *Things Fall Apart* by Chinua Achebe, Okonkwo is a leader of Umuofia (a fictional Nigerian clan) and takes pride in his culture's traditions. However, when the arrival of European missionaries brings changes to Umuofia, the novel asks a central question: How _____

- A. Umuofia's traditions will be affected.
- B. will Umuofia's traditions be affected.
- C. Umuofia's traditions will be affected?
- D. will Umuofia's traditions be affected?

Question ID 0a017199

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Central Ideas and Details	Hard

ID: 0a017199

Some animal-behavior studies involve observing wild animals in their natural habitat, and some involve capturing wild animals and observing them in a laboratory. Each approach has advantages over the other. In wild studies, researchers can more easily presume that the animals are behaving normally, and in lab studies, researchers can more easily control factors that might affect the results. But if, for example, the results from a wild study and a lab study of Western scrub-jays (*Aphelocoma californica*) contradict each other, one or both of the studies must have failed to account for some factor that was relevant to the birds' behavior.

Which choice best states the main idea of the text?

- A. When the results of a natural-habitat study and those from a lab study of a wild animal such as the Western scrub-jay conflict, the study in the natural habitat is more likely than the lab study to have accurate results.
- B. Studying wild animals such as the Western scrub-jay in both their natural habitat and lab settings is likely to yield conflicting results that researchers cannot fully resolve.
- C. Wild animals such as the Western scrub-jay can be effectively studied in their natural habitat and in the lab, but each approach has drawbacks that could affect the accuracy of the findings.
- D. Differing results between natural-habitat and lab studies of wild animals such as the Western scrub-jay are a strong indication that both of the studies had design flaws that affected the accuracy of their results.

Question ID 533d6d0e

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Central Ideas and Details	Easy

ID: 533d6d0e

To make her art more widely available, graphic artist Elizabeth Catlett turned to linocuts. In linocut printing, an artist carves an image into a sheet of linoleum to create a stamp that is used to mass-produce prints. In the linocut series *The Black Woman* (1946–1947), Catlett depicts the everyday experiences of Black women alongside the achievements of well-known Black women. This pairing invites the viewer to draw connections among the women. The linocut process enabled Catlett's work to reach a wide audience and supported her aim to unite Black women through her art.

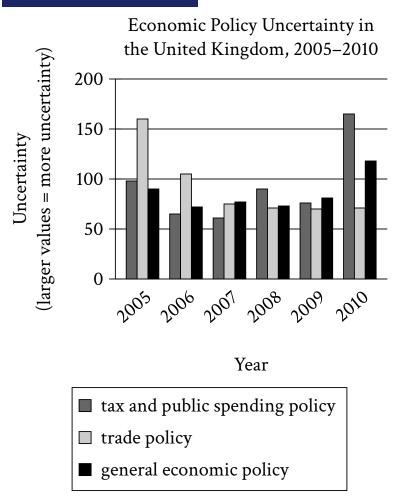
According to the text, what is significant about Catlett's use of linocut printing?

- A. Linocut printing involved using materials that were readily available to Catlett.
- B. Linocut printing helped Catlett use art to connect people, especially Black women.
- C. Catlett became commercially successful once she started using linocut printing.
- D. Catlett was one of the first Black artists to use linocut printing.

Question ID a0120582

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Hard	

ID: a0120582



High levels of public uncertainty about which economic policies a country will adopt can make planning difficult for businesses, but measures of such uncertainty have not tended to be very detailed. Recently, however, economist Sandile Hlatshwayo analyzed trends in news reports to derive measures not only for general economic policy uncertainty but also for uncertainty related to specific areas of economic policy, like tax or trade policy. One revelation of her work is that a general measure may not fully reflect uncertainty about specific areas of policy, as in the case of the United Kingdom, where general economic policy uncertainty _____

Which choice most effectively uses data from the graph to illustrate the claim?

- A. aligned closely with uncertainty about tax and public spending policy in 2005 but differed from uncertainty about tax and public spending policy by a large amount in 2009.
- B. was substantially lower than uncertainty about tax and public spending policy each year from 2005 to 2010.

- C. reached its highest level between 2005 and 2010 in the same year that uncertainty about trade policy and tax and public spending policy reached their lowest levels.
- D. was substantially lower than uncertainty about trade policy in 2005 and substantially higher than uncertainty about trade policy in 2010.

Question ID d2b5e069

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Hard

ID: d2b5e069

Psychologists Dacher Keltner and Jonathan Haidt have argued that experiencing awe—a sensation of reverence and wonder typically brought on by perceiving something grand or powerful—can enable us to feel more connected to others and thereby inspire us to act more altruistically. Keltner, along with Paul K. Piff, Pia Dietze, and colleagues, claims to have found evidence for this effect in a recent study where participants were asked to either gaze up at exceptionally tall trees in a nearby grove (reported to be a universally aweinspiring experience) or stare at the exterior of a nearby, nondescript building. After one minute, an experimenter deliberately spilled a box of pens nearby.

Which finding from the researchers' study, if true, would most strongly support their claim?

- A. Participants who had been looking at the trees helped the experimenter pick up significantly more pens than did participants who had been looking at the building.
- B. Participants who helped the experimenter pick up the pens used a greater number of positive words to describe the trees and the building in a postexperiment survey than did participants who did not help the experimenter.
- C. Participants who did not help the experimenter pick up the pens were significantly more likely to report having experienced a feeling of awe, regardless of whether they looked at the building or the trees.
- D. Participants who had been looking at the building were significantly more likely to notice that the experimenter had dropped the pens than were participants who had been looking at the trees.

Question ID ae51efb8

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Medium

ID: ae51efb8

The Post Office is a 1912 play by Rabindranath Tagore, originally written in Bengali. The character Amal is a young boy who imagines that the people he sees passing the window of his home are carefree even when engaged in work or chores, as is evident when he says to the daughter of a flower seller, _____

Which quotation from The Post Office most effectively illustrates the claim?

- A. "I see, you don't wish to stop; I don't care to stay on here either."
- B. "Oh, flower gathering? That is why your feet seem so glad and your anklets jingle so merrily as you walk."
- C. "I'll pay when I grow up-before I leave to look for work out on the other side of that stream there."
- D. "Wish I could be out too. Then I would pick some flowers for you from the very topmost branches right out of sight."

Question ID 206ecbfd

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Medium

ID: 206ecbfd

Plants like potatoes, tomatoes, and soybeans are susceptible to bacterial wilt disease caused by the bacteria *Ralstonia solanacearum*. A multinational team of scientists led by Zhong Wei studied whether other microbes in the soil might influence the degree to which plants are affected by the disease. The team sampled soil surrounding individual tomato plants over time and compared the results of plants that became diseased with those that remained healthy. They concluded that the presence of certain microbes in the soil might explain the difference between healthy and diseased plants.

Which finding, if true, would most directly support the team's conclusion?

- A. The soil surrounding healthy plants contained significantly higher concentrations of microbes known to inhibit *Ralstonia solanacearum* than the soil surrounding diseased plants did.
- B. The soil surrounding the plants contained high concentrations of *Ralstonia solanacearum* regardless of whether the plants were affected by wilt disease.
- C. The soil surrounding healthy plants tended to have significantly higher moisture levels than the soil surrounding diseased plants did.
- D. By the end of the experiment, over half the plants had been affected by wilt disease regardless of differences in the types and concentrations of microbes in the surrounding soil.

Question ID bf1fe112

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	Hard

ID: bf1fe112

Researchers hypothesized that a decline in the population of dusky sharks near the mid-Atlantic coast of North America led to a decline in the population of eastern oysters in the region. Dusky sharks do not typically consume eastern oysters but do consume cownose rays, which are the main predators of the oysters.

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

- A. Declines in the regional abundance of dusky sharks' prey other than cownose rays are associated with regional declines in dusky shark abundance.
- B. Eastern oyster abundance tends to be greater in areas with both dusky sharks and cownose rays than in areas with only dusky sharks.
- C. Consumption of eastern oysters by cownose rays in the region substantially increased before the regional decline in dusky shark abundance began.
- D. Cownose rays have increased in regional abundance as dusky sharks have decreased in regional abundance.

Question ID 841a15d0

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Craft and Structure	Cross-Text Connections	Hard

ID: 841a15d0

Text 1

Films and television shows commonly include a long list of credits naming the people involved in a production. Credit sequences may not be exciting, but they generally ensure that everyone's contributions are duly acknowledged. Because they are highly standardized, film and television credits are also valuable to anyone researching the careers of pioneering cast and crew members who have worked in the mediums.

Text 2

Video game scholars face a major challenge in the industry's failure to consistently credit the artists, designers, and other contributors involved in making video games. Without a reliable record of which people worked on which games, questions about the medium's development can be difficult to answer, and the accomplishments of all but its best-known innovators can be difficult to trace.

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

- A. By recommending that the scholars mentioned in Text 2 consider employing the methods regularly used by film and television researchers
- B. By pointing out that credits have a different intended purpose in film and television than in the medium addressed by the scholars mentioned in Text 2
- C. By suggesting that the scholars mentioned in Text 2 rely more heavily on credits as a source of information than film and television researchers do
- D. By observing that a widespread practice in film and television largely prevents the kind of problem faced by the scholars mentioned in Text 2

Question ID 362e987f

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Craft and Structure	Cross-Text Connections	Medium

ID: 362e987f

Text 1

In a study of the benefits of having free time, Marissa Sharif found that the reported sense of life satisfaction tended to plateau when participants had two hours of free time per day and actually began to fall when they had five hours of free time per day. After further research, Sharif concluded that this dip in life satisfaction mainly occurred when individuals spent all their free time unproductively, such as by watching TV or playing games.

Text 2

Psychologist James Maddux cautions against suggesting an ideal amount of free time. The human desire for both free time and productivity is universal, but Maddux asserts that individuals have unique needs for life satisfaction. Furthermore, he points out that there is no objective definition for what constitutes productivity; reading a book might be considered a productive activity by some, but idleness by others.

Based on the texts, how would Maddux (Text 2) most likely respond to the conclusion Sharif (Text 1) reached after her further research?

- A. By acknowledging that free time is more likely to enhance life satisfaction when it is spent productively than when it is spent unproductively
- B. By challenging the reasoning in Text 1, as it has not been proved that productivity commonly contributes to individuals' life satisfaction
- C. By warning against making an overly broad assumption, as there is no clear consensus in distinguishing between productive and unproductive activities
- D. By claiming that the specific activities named in Text 1 are actually examples of productive activities rather than unproductive ones

Question ID fd5268ad

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Standard English Conventions	Form, Structure, and Sense	Medium

ID: fd5268ad

Oglala Lakota poet Layli Long Soldier's star quilt poems offer an unusually open-ended reading experience. With _____ eight panels of text stitched together in the shape of a traditional eight-pointed Lakota star quilt, the poems present viewers with a seemingly infinite number of ways to read them.

- A. their
- B. it's
- C. they're
- D. its

Question ID 19ef53c5

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Standard English Conventions	Form, Structure, and Sense	Easy

ID: 19ef53c5

The alga species *Chlorella vulgaris* is very efficient at making oxygen. For this reason, scientists are currently exploring ways to use this species in space. *C. vulgaris* might be used, for example, to build future biological air exchange systems that _____ oxygen for astronauts.

- A. are producing
- B. produced
- C. produce
- D. have produced

Question ID 975a4737

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Standard English Conventions	Form, Structure, and Sense	Easy	

ID: 975a4737

To survive when water is scarce, embryos inside African turquoise killifish eggs _____ a dormant state known as diapause. In this state, embryonic development is paused for as long as two years—longer than the life span of an adult killifish.

- A. enter
- B. to enter
- C. having entered
- D. entering

Question ID ba4d42c1

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Standard English Conventions	Form, Structure, and Sense	Easy	

ID: ba4d42c1

The sun never sets during the Arctic summer in the Far North. In response, reindeer in this region must change their sleep habits. Instead of resting when it gets dark, they rest when they need _____ their food.

- A. digest
- B. will digest
- C. to digest
- D. digesting

Question ID 4e93a070

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Standard English Conventions	Form, Structure, and Sense	Easy

ID: 4e93a070

Like other amphibians, the wood frog (*Rana sylvatica*) is unable to generate its own heat, so during periods of subfreezing temperatures, it _____ by producing large amounts of glucose, a sugar that helps prevent damaging ice from forming inside its cells.

- A. had survived
- B. survived
- C. would survive
- D. survives

Question ID 3b3c043c

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Standard English Conventions	Form, Structure, and Sense	Easy

ID: 3b3c043c

In the late 1960s, inspired in part by the sight of laundry hanging on a clothesline, African American abstract painter Sam Gilliam began to create his iconic "Drape" paintings. He applied bold, saturated hues to large canvases and _____ them from ceilings or walls, causing the drooping fabric to cascade in dramatic loops and curves.

- A. to have suspended
- B. suspending
- C. to suspend
- D. suspended

Question ID 15c0ed26

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Hard

ID: 15c0ed26

The Hubble Space Telescope (HST) is projected to maintain operation until at least 2030, but it has already revolutionized high-resolution imaging of solar-system bodies in visible and ultraviolet (UV) light wavelengths, notwithstanding that only about 6% of the bodies imaged by the HST are within the solar system. NASA researcher Cindy L. Young and colleagues assert that a new space telescope dedicated exclusively to solar-system observations would permit an extensive survey of minor solar-system bodies and long-term UV observation to discern how solar-system bodies change over time. Young and colleagues' recommendation therefore implies that the HST _____

Which choice most logically completes the text?

- A. will likely continue to be used primarily to observe objects outside the solar system.
- B. will no longer be used to observe solar system objects if the telescope recommended by Young and colleagues is deployed.
- C. can be modified to observe the features of solar system objects that are of interest to Young and colleagues.
- D. lacks the sensors to observe the wavelengths of light needed to discern how solar system bodies change over time.

Question ID e0d51f42

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Hard

ID: e0d51f42

Ancestral Puebloans, the civilization from which present-day Pueblo tribes descended, emerged as early as 1500 B.C.E. in an area of what is now the southwestern United States and dispersed suddenly in the late 1200s C.E., abandoning established villages with systems for farming crops and turkeys. Recent analysis comparing turkey remains at Mesa Verde, one such village in southern Colorado, to samples from modern turkey populations in the Rio Grande Valley of north central New Mexico determined that the latter birds descended in part from turkeys cultivated at Mesa Verde, with shared genetic markers appearing only after 1280. Thus, researchers concluded that _____

Which choice most logically completes the text?

- A. conditions of the terrains in the Rio Grande Valley and Mesa Verde had greater similarities in the past than they do today.
- B. some Ancestral Puebloans migrated to the Rio Grande Valley in the late 1200s and carried farming practices with them.
- C. Indigenous peoples living in the Rio Grande Valley primarily planted crops and did not cultivate turkeys before 1280.
- D. the Ancestral Puebloans of Mesa Verde likely adopted the farming practices of Indigenous peoples living in other regions.

Question ID 66b10ad8

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Hard

ID: 66b10ad8

A team of biologists led by Jae-Hoon Jung, Antonio D. Barbosa, and Stephanie Hutin investigated the mechanism that allows *Arabidopsis thaliana* (thale cress) plants to accelerate flowering at high temperatures. They replaced the protein ELF3 in the plants with a similar protein found in another species (stiff brome) that, unlike *A. thaliana*, displays no acceleration in flowering with increased temperature. A comparison of unmodified *A. thaliana* plants with the altered plants showed no difference in flowering at 22° Celsius, but at 27° Celsius, the unmodified plants exhibited accelerated flowering while the altered ones did not, which suggests that ______

Which choice most logically completes the text?

- A. temperature-sensitive accelerated flowering is unique to A. thaliana.
- B. A. thaliana increases ELF3 production as temperatures rise.
- C. ELF3 enables A. thaliana to respond to increased temperatures.
- D. temperatures of at least 22° Celsius are required for A. thaliana to flower.

Question ID ebbfbd5e

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Expression of Ideas	Rhetorical Synthesis	Medium

ID: ebbfbd5e

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

- Abdulrazak Gurnah was awarded the 2021 Nobel Prize in Literature.
- · Gurnah was born in Zanzibar in East Africa and currently lives in the United Kingdom.
- Many readers have singled out Gurnah's 1994 book Paradise for praise.
- Paradise is a historical novel about events that occurred in colonial East Africa.

The student wants to introduce *Paradise* to an audience unfamiliar with the novel and its author. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A. Abdulrazak Gurnah, who wrote *Paradise* and later was awarded the Nobel Prize in Literature, was born in Zanzibar in East Africa and currently lives in the United Kingdom.
- B. Many readers have singled out Abdulrazak Gurnah's 1994 book *Paradise*, a historical novel about colonial East Africa, for praise.
- C. A much-praised historical novel about colonial East Africa, *Paradise* (1994) was written by Abdulrazak Gurnah, winner of the 2021 Nobel Prize in Literature.
- D. *Paradise* is a historical novel about events that occurred in colonial East Africa, Abdulrazak Gurnah's homeland.

Question ID abeb6c59

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Expression of Ideas	Rhetorical Synthesis	Easy

ID: abeb6c59

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

- The calendar used by most of the world (the Gregorian calendar) has 365 days.
- Because 365 days can't be divided evenly by 7 (the number of days in a week), calendar dates fall on a different day of the week each year.
- The Hanke-Henry permanent calendar, developed as an alternative to the Gregorian calendar, has 364 days.
- Because 364 can be divided evenly by 7, calendar dates fall on the same day of the week each year, which supports
 more predictable scheduling.

The student wants to explain an advantage of the Hanke-Henry calendar. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A. The Gregorian calendar has 365 days, which is one day longer than the Hanke-Henry permanent calendar.
- B. Adopting the Hanke-Henry permanent calendar would help solve a problem with the Gregorian calendar.
- C. Designed so calendar dates would occur on the same day of the week each year, the Hanke-Henry calendar supports more predictable scheduling than does the Gregorian calendar.
- D. The Hanke-Henry permanent calendar was developed as an alternative to the Gregorian calendar, which is currently the most-used calendar in the world.

This is the end of Reading and Writing Module 1. Take an optional 5 minute break before starting Module 2.

You have 32 minutes to complete the second module of the Reading and Writing portion.

Question ID b5cda95f

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Expression of Ideas	Rhetorical Synthesis	Medium

ID: b5cda95f

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

- Las sergas de Esplandián was a novel popular in sixteenth-century Spain.
- The novel featured a fictional island inhabited solely by Black women and known as California.
- That same century, Spanish explorers learned of an "island" off the west coast of Mexico.
- They called it California after the island in the novel.
- The "island" was actually the peninsula now known as Baja California ("Lower California"), which lies to the south of the US state of California.

The student wants to emphasize the role a misconception played in the naming of a place. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A. The novel Las sergas de Esplandián featured a fictional island known as California.
- B. To the south of the US state of California lies Baja California ("Lower California"), originally called California after a fictional place.
- C. In the sixteenth century, Spanish explorers learned of a peninsula off the west coast of Mexico and called it California.
- D. Thinking it was an island, Spanish explorers called a peninsula California after an island in a popular novel.

Question ID 72df7623

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Expression of Ideas	Rhetorical Synthesis	Medium

ID: 72df7623

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

- In 2018 researchers Adwait Deshpande, Shreejata Gupta, and Anindya Sinha were observing wild macaques in India's Bandipur National Park.
- They saw macaques calling out to and gesturing at humans who were eating or carrying food.
- They designed a study to find out if the macaques were intentionally communicating to try to persuade the humans to share their food.
- In the study trials, macaques frequently called out to and gestured at humans holding food.
- In the study trials, macaques called out to and gestured at empty-handed humans less frequently.

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

- A. Macaques in the study called out to and gestured more frequently at humans holding food than at empty-handed humans.
- B. In 2018, researchers who had observed macaques in India's Bandipur National Park calling out to and gesturing at humans designed a study.
- C. The researchers hoped to find out if the macaques were intentionally communicating to try to persuade humans to share their food.
- D. The researchers studied how macaques behaved around both humans holding food and empty-handed humans.

Question ID 29f5d8bd

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Expression of Ideas	Rhetorical Synthesis	Hard

ID: 29f5d8bd

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

- In 1978, Sámi activists staged protests to block the construction of a dam on the Alta River in Norway.
- · The dam would disrupt Sámi fishing and reindeer herding.
- The dam was ultimately built, but the Alta conflict had a lasting impact.
- It brought international attention to the issue of Sámi rights.
- It led to a set of 2005 legal protections establishing Sámi rights to lands, waters, and resources.

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

- A. During the Alta conflict, Sámi activists staged protests to block the construction of a dam on the Alta River in Norway that would disrupt local fishing and reindeer herding.
- B. Although the dam that the Sámi activists had protested was ultimately built, the Alta conflict had a lasting impact.
- C. Sámi rights to lands, waters, and resources received international attention and legal protections as a result of the Alta conflict.
- D. The Alta conflict had a lasting impact, resulting in international attention and legal protections for Sámi rights to lands, waters, and resources.

Question ID 652950b7

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Expression of Ideas	Rhetorical Synthesis	Easy

ID: 652950b7

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

- In 1897, African American inventor Andrew Beard invented an automatic coupler.
- · It improved on the existing design of train car couplers.
- · It made the job of connecting train cars safer.
- In 1938, African American inventor Frederick Jones invented a mobile refrigeration system.
- It improved on the existing design of food transport trucks.
- It enabled trucks to carry perishable foods farther.

The student wants to emphasize a similarity between Beard's invention and Jones's invention. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A. Beard's automatic coupler and Jones's mobile refrigeration system both improved on existing designs.
- B. In 1897, Beard invented an automatic coupler, which made the job of connecting train cars safer.
- C. Beard's invention made the job of connecting train cars safer, whereas Jones's invention enabled food transport trucks to carry perishables farther.
- D. Jones's mobile refrigeration system, which he invented in 1938, made it possible for food transport trucks to carry perishable foods farther.

Question ID 88b4e212

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Craft and Structure	Text Structure and Purpose	Easy

ID: 88b4e212

Jackie Ormes's *Torchy Brown in Dixie to Harlem* (1937–38) was the first comic strip by a Black woman to appear in a widely read newspaper. The strip tells the story of Torchy, a young woman who leaves Mississippi to become a performer in New York City. Torchy's story reflects the experience of the Great Migration (1910–1970), when millions of Black Americans left the South in search of opportunities in other parts of the United States. *Torchy Brown* thus shows how Ormes used comics to comment humorously on issues affecting Black Americans, which she continued to do throughout her career.

Which choice best states the main purpose of the text?

- A. To show how Ormes's *Torchy Brown* inspired other Black women to write comic strips in the 1930s
- B. To illustrate how the subjects Ormes addressed in her comic strips changed over the course of her career
- C. To give an example of how Ormes presented the experiences of Black Americans in her comic strips
- D. To claim that several characters in *Torchy Brown* were based on people that Ormes knew personally

Question ID e2666b77

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Craft and Structure	Text Structure and Purpose	Easy

ID: e2666b77

The following text is from Srimati Svarna Kumari Devi's 1894 novel *The Fatal Garland* (translated by A. Christina Albers in 1910). Shakti is walking near a riverbank that she visited frequently during her childhood.

She crossed the woods she knew so well. <u>The trees seemed to extend their branches like welcoming arms.</u> They greeted her as an old friend. Soon she reached the river-side.

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

- A. It suggests that Shakti feels uncomfortable near the river.
- B. It indicates that Shakti has lost her sense of direction in the woods.
- C. It emphasizes Shakti's sense of belonging in the landscape.
- D. It conveys Shakti's appreciation for her long-term friendships.

Question ID c014a78c

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Craft and Structure	Text Structure and Purpose	Easy

ID: c014a78c

In many agricultural environments, the banks of streams are kept forested to protect water quality, but it's been unclear what effects these forests may have on stream biodiversity. To investigate the issue, biologist Xingli Giam and colleagues studied an Indonesian oil palm plantation, comparing the species richness of forested streams with that of nonforested streams. Giam and colleagues found that species richness was significantly higher in forested streams, a finding the researchers attribute to the role leaf litter plays in sheltering fish from predators and providing food resources.

Which choice best states the main purpose of the text?

- A. It discusses research intended to settle a debate about how agricultural yields can be increased without negative effects on water quality.
- B. It explains the differences between stream-protection strategies used in oil palm plantations and stream-protection strategies used in other kinds of agricultural environments.
- C. It describes findings that challenge a previously held view about how fish that inhabit streams in agricultural environments attempt to avoid predators.
- D. It presents a study that addresses an unresolved question about the presence of forests along streams in agricultural environments.

Question ID 27bccd45

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Craft and Structure	Text Structure and Purpose	Easy

ID: 27bccd45

Some bird species don't raise their own chicks. Instead, adult females lay their eggs in other nests, next to another bird species' own eggs. Female cuckoos have been seen quickly laying eggs in the nests of other bird species when those birds are out looking for food. After the eggs hatch, the noncuckoo parents will typically raise the cuckoo chicks as if they were their own offspring, even if the cuckoos look very different from the other chicks.

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

- A. It introduces a physical feature of female cuckoos that is described later in the text.
- B. It describes the appearance of the cuckoo nests mentioned earlier in the text.
- C. It offers a detail about how female cuckoos carry out the behavior discussed in the text.
- D. It explains how other birds react to the female cuckoo behavior discussed in the text.

Question ID a56a50e6

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Expression of Ideas	Transitions	Hard

ID: a56a50e6

Historically, most conductors of major orchestras and opera companies have been European men, but a new, more diverse generation of artists is stepping up to the podium. Mexico's Alondra de la Parra took over as conductor for the Queensland Symphony Orchestra in 2017, _____ and Colombia's Lina Gonzalez-Granados did the same for the Los Angeles Opera in 2022.

- A. in addition,
- B. lastly,
- C. granted,
- D. for instance,

Question ID 4e564c4f

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Expression of Ideas	Transitions	Hard

ID: 4e564c4f

With its clichéd imagery of suburban lawns and power lines, John Ashbery's 2004 poem "Ignorance of the Law Is No Excuse" may seem barren terrain for critical analysis. _____ cultural critic Lauren Berlant finds fertile ground in just its first two stanzas, devoting most of a book chapter to deciphering the "weight of the default space" Ashbery creates in this poem.

- A. Likewise,
- B. Nonetheless,
- C. In turn,
- D. That is,

Question ID 0314684f

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Expression of Ideas	Transitions	Medium	

ID: 0314684f

Alexander Lawrence Posey (1873–1908) varied his focus and tone depending on the genre in which he was
writing. In his poetry, he used heartfelt language to evoke the beauty and peacefulness of his natural
surroundings; in his journalism, he employed humor and satire to comment on political issues
affecting his Muskogee Creek community.

- A. that is,
- B. granted,
- C. similarly,
- D. by contrast,

Question ID f3c0e374

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Expression of Ideas	Transitions	Easy	

ID: f3c0e374

In 1885, Chinese-born California resident Mary Tape became a hero of the Asian American civil rights movement. In January of that year, she won an antidiscrimination case in the California Supreme Court.

_____ in April, she wrote an open letter criticizing her local board of education for discrimination. Both actions are remembered today as historic stands against racism.

- A. Later,
- B. For instance,
- C. In other words,
- D. Rather,

Question ID 222e4d89

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Expression of Ideas	Transitions	Medium	

ID: 222e4d89

Originally coined by economist Joan Robinson to refer to markets with multiple sellers of a product but only one buyer, the term "monopsony" can also refer to markets where demand for labor is limited. In a product monopsony, the single buyer can force sellers to lower their prices. _____ in a labor monopsony, employers can force workers to accept lower wages.

- A. Earlier,
- B. Instead,
- C. Similarly,
- D. In particular,

Question ID 7a7ba10d

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Expression of Ideas	Transitions	Easy

ID: 7a7ba10d

When Chinese director Chloé Zhao accepted the Oscar in 2021 for her film *Nomadland*, she made Academy Award history. _____ only one other woman, Kathryn Bigelow of the United States, had been named best director at the Oscars, making Zhao the second woman and the first Asian woman to win the award.

- A. As a result,
- B. Previously,
- C. However,
- D. Likewise,

Question ID 108fb9e7

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Expression of Ideas	Transitions	Medium	

ID: 108fb9e7

"Wishcycling"—putting nonrecyclable items into recycling bins under the mistaken belief that those items can be recycled—ultimately does more harm than good. Nonrecyclable items, such as greasy pizza boxes, can contaminate recyclable materials, rendering entire batches unusable. _____ nonrecyclable products can damage recycling plants' machinery.

- A. Fittingly,
- B. On the contrary,
- C. Moreover,
- D. Nevertheless,

Question ID 410d7d28

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Expression of Ideas	Transitions	Hard	

ID: 410d7d28

In her poetry collection *Thomas and Beulah*, Rita Dove interweaves the titular characters' personal stories with broader historical narratives. She places Thomas's journey from the American South to the Midwest in the early 1900s within the larger context of the Great Migration. _____ Dove sets events from Beulah's personal life against the backdrop of the US Civil Rights Movement.

- A. Specifically,
- B. Thus,
- C. Regardless,
- D. Similarly,

Question ID 1d6e96f3

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Craft and Structure	Words in Context	Medium	

ID: 1d6e96f3

For a 2020 exhibition, photographer and neurobiologist Okunola Jeyifous _____ a series of new images based on a series of alphabet posters from the 1970s known as the "Black ABCs," which featured Black children from Chicago. Jeyifous photographed the now-adult models and layered the photos over magnified images of the models' cells, resulting in what he called "micro and macro portraiture."

- A. validated
- B. created
- C. challenged
- D. restored

Question ID 5c38a6d5

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Craft and Structure	Words in Context	Hard

ID: 5c38a6d5

In studying the use of external stimuli to reduce the itching sensation caused by an allergic histamine response, Louise Ward and colleagues found that while harmless applications of vibration or warming can provide a temporary distraction, such _____ stimuli actually offer less relief than a stimulus that seems less benign, like a mild electric shock.

- A. deceptive
- B. innocuous
- C. novel
- D. impractical

Question ID 101e69de

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Craft and Structure	Words in Context	Medium

ID: 101e69de

The following text is from F. Scott Fitzgerald's 1925 novel The Great Gatsby.

[Jay Gatsby] was balancing himself on the dashboard of his car with that resourcefulness of movement that is so peculiarly American—that comes, I suppose, with the absence of lifting work in youth and, even more, with the formless grace of our nervous, sporadic games. This <u>quality</u> was continually breaking through his punctilious manner in the shape of restlessness.

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

- A. Standard
- B. Prestige
- C. Characteristic
- D. Accomplishment

Question ID 5046a8e3

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Craft and Structure	Words in Context	Easy	

ID: 5046a8e3

In the mid-nineteenth century, some abolitionist newspapers _____ westward migration in the United States; by printing a letter that described the easy fortunes and high salaries miners could make in California during the Gold Rush, Frederick Douglass's newspaper *North Star* was one such publication that inspired readers to relocate.

- A. stimulated
- B. assigned
- C. opposed
- D. disregarded

Question ID dac47b83

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Craft and Structure	Words in Context	Medium	

ID: dac47b83

Stephen Hannock's luminous landscape paintings are appealing to viewers but have elicited little commentary from contemporary critics, a phenomenon that may be due to the very fact that the paintings seem so _____. Many critics focus their attention on art that is cryptic or overtly challenging.

- A. innovative
- B. subversive
- C. profound
- D. accessible

Question ID 6c39d701

Assessment	Test	Domain	Skill	Difficulty	
SAT	Reading and Writing	Craft and Structure	Words in Context	Easy	

ID: 6c39d701

The process of mechanically recycling plastics is often considered ______ because of the environmental impact and the loss of material quality that often occurs. But chemist Takunda Chazovachii has helped develop a cleaner process of chemical recycling that converts superabsorbent polymers from diapers into a desirable reusable adhesive.

- A. resilient
- B. inadequate
- C. dynamic
- D. satisfactory

Question ID 483db6c2

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Craft and Structure	Words in Context	Easy

ID: 483db6c2

The following text is adapted from Lewis Carroll's 1865 novel Alice's Adventures in Wonderland.

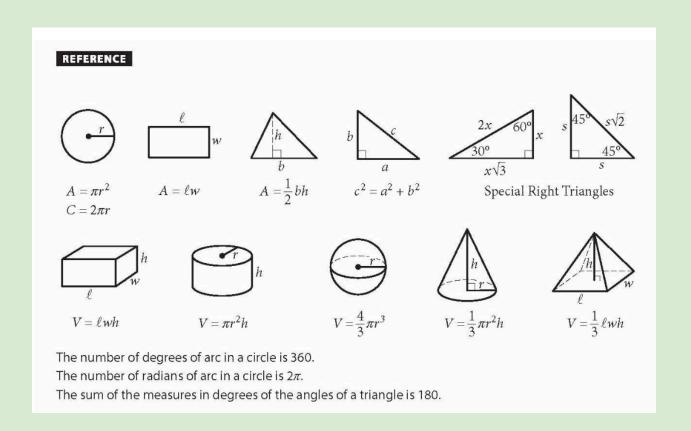
"The second thing is to find my way into that lovely garden. I think that will be the best plan." It sounded like an excellent plan, no doubt, and very neatly and <u>simply</u> arranged; the only difficulty was, that Alice had not the smallest idea how to set about it.

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

- A. Faintly
- B. Hastily
- C. Easily
- D. Foolishly

This is the end of Reading and Writing Module 2. Take an optional 10 minute break before starting the ath section.

This is the beginning of the math section. Please use the <u>desmos graphing calculator</u> and the formulas below for both modules.



You have 35 minutes to complete the first module.

Question ID 2d1e5eff

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Hard

ID: 2d1e5eff

$$y = 2x^2 - 21x + 64$$
$$y = 3x + a$$

In the given system of equations, a is a constant. The graphs of the equations in the given system intersect at exactly one point, (x, y), in the xy-plane. What is the value of x?

- A. **-8**
- в. **-6**
- C. **6**
- D. 8

Question ID 005e9982

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear functions	Hard

ID: 005e9982

$$f(x) = 9,000(0.66)^x$$

The given function f models the number of advertisements a company sent to its clients each year, where x represents the number of years since 1997, and $0 \le x \le 5$. If y = f(x) is graphed in the xy-plane, which of the following is the best interpretation of the y-intercept of the graph in this context?

- A. The minimum estimated number of advertisements the company sent to its clients during the $\bf 5$ years was $\bf 1,708$.
- B. The minimum estimated number of advertisements the company sent to its clients during the $\bf 5$ years was $\bf 9,000$.
- C. The estimated number of advertisements the company sent to its clients in 1997 was 1,708.
- D. The estimated number of advertisements the company sent to its clients in 1997 was 9,000.

Question ID 65244c8d

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Hard

ID: 65244c8d

$$\sqrt{\left(x-2\right)^2} = \sqrt{3x+34}$$

What is the smallest solution to the given equation?

Question ID 5822c232

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	Hard

ID: 5822c232

Which expression is equivalent to $\frac{y+12}{x-8} + \frac{y(x-8)}{x^2y-8xy}$?

A.
$$\frac{xy+y+4}{x^3y-16x^2y+64xy}$$

B.
$$\frac{xy+9y+12}{x^2y-8xy+x-8}$$

C.
$$\frac{xy^2 + 13xy - 8y}{x^2y - 8xy}$$

D.
$$\frac{xy^2 + 13xy - 8y}{x^3y - 16x^2y + 64xy}$$

Question ID 4782fd69

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Advanced Math	Nonlinear functions	Medium	

ID: 4782fd69

The function $f(x) = 206(1.034)^x$ models the value, in dollars, of a certain bank account by the end of each year from 1957 through 1972, where x is the number of years after 1957. Which of the following is the best interpretation of "f(5) is approximately equal to 243" in this context?

- A. The value of the bank account is estimated to be approximately 5 dollars greater in 1962 than in 1957.
- B. The value of the bank account is estimated to be approximately 243 dollars in 1962.
- C. The value, in dollars, of the bank account is estimated to be approximately $\bf 5$ times greater in $\bf 1962$ than in $\bf 1957$.
- D. The value of the bank account is estimated to increase by approximately 243 dollars every 5 years between 1957 and 1972.

Question ID d08a5d15

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Advanced Math	Nonlinear functions	Easy	

ID: d08a5d15

The function f is defined by $f(x)=5x^2$. What is the value of f(8)?

- $\mathsf{A.}\ 40$
- в. **50**
- $\text{c.}\,80$
- $\mathsf{D.}\ 320$

Question ID c9f2f07d

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Advanced Math	Nonlinear functions	Medium	

ID: c9f2f07d

$$f(x) = (x+6)(x+5)(x-4)$$

The function f is given. Which table of values represents y=f(x)-3?

A.	$oldsymbol{x}$	$oldsymbol{y}$
	-6	-9
	-5	-8
	4	1

В.	\boldsymbol{x}	\boldsymbol{y}
	-6	-3
	-5	-3
	4	-3

C.	$oldsymbol{x}$	$oldsymbol{y}$
	-6	-3
	-5	-2
	4	7

D.	$oldsymbol{x}$	$oldsymbol{y}$
	-6	3
	-5	3
	4	3

Question ID 54bf74ea

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear functions	Hard

ID: 54bf74ea

$$p(t) = 90,000(1.06)^t$$

The given function p models the population of Lowell t years after a census. Which of the following functions best models the population of Lowell t months after the census?

A.
$$r(m) = \frac{90,000}{12} (1.06)^m$$

B.
$$r(m) = 90{,}000{\left(rac{1.06}{12}
ight)^m}$$

C.
$$r(m)=90{,}000{\left(rac{1.06}{12}
ight)}^{rac{m}{12}}$$

D.
$$r(m) = 90,000(1.06)^{\frac{m}{12}}$$

Question ID 5bfaf155

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Medium

ID: 5bfaf155

$$p=20+rac{16}{n}$$

The given equation relates the numbers p and n, where n is not equal to 0 and p > 20. Which equation correctly expresses n in terms of p?

A.
$$n=rac{p-20}{16}$$

B.
$$n=rac{p}{16}+20$$

C.
$$n=rac{p}{16}-20$$

D.
$$n=rac{16}{p-20}$$

Question ID 8217606b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Hard

ID: 8217606b

$$64x^2 - (16a + 4b)x + ab = 0$$

In the given equation, a and b are positive constants. The sum of the solutions to the given equation is k(4a+b), where k is a constant. What is the value of k?

Question ID a51ff0d6

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Advanced Math	Nonlinear functions	Hard	

ID: a51ff0d6

$$f(x) = (x+7)^2 + 4$$

The function $m{f}$ is defined by the given equation. For what value of $m{x}$ does $m{f}(m{x})$ reach its minimum?

Question ID 4443355f

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	Hard

ID: 4443355f

The expression $4x^2 + bx - 45$, where b is a constant, can be rewritten as (hx + k)(x + j), where h, k, and j are integer constants. Which of the following must be an integer?

- A. $\frac{b}{h}$
- В. <u></u>
- C. $\frac{45}{h}$
- D. $\frac{45}{k}$

Question ID a1397504

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Equivalent expressions	Hard

ID: a1397504

$$0.36x^2 + 0.63x + 1.17$$

The given expression can be rewritten as $a \left(4x^2 + 7x + 13 \right)$, where a is a constant. What is the value of a?

Question ID 536832c0

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Hard

ID: 536832c0

In the xy-plane, a line with equation 2y=4.5 intersects a parabola at exactly one point. If the parabola has equation $y=-4x^2+bx$, where b is a positive constant, what is the value of b?

Question ID 90990b9a

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 90990b9a

$$x=49 \ y=\sqrt{x}+9$$

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

- $\mathsf{A.}\ 16$
- в. **40**
- $\text{c.}\,81$
- $\mathsf{D.}\ 130$

Question ID 72bf9318

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear functions	Medium

ID: 72bf9318

The function f is defined by $f(x)=7x^3$. In the xy-plane, the graph of y=g(x) is the result of shifting the graph of y=f(x) down 2 units. Which equation defines function g?

A.
$$g(x)=rac{7}{2}x^3$$

B.
$$g(x)=7x^{rac{3}{2}}$$

C.
$$g(x)=7x^3+2$$

D.
$$g(x)=7x^3-2$$

Question ID 07e83fd6

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 07e83fd6

$$b=42cf$$

The given equation relates the positive numbers \emph{b} , \emph{c} , and \emph{f} . Which equation correctly expresses \emph{c} in terms of \emph{b} and \emph{f} ?

A.
$$c=rac{b}{42f}$$

B.
$$c=rac{b-42}{f}$$

c.
$$c=42bf$$

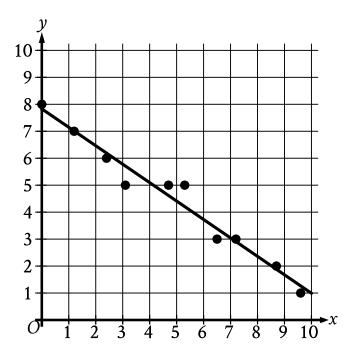
D.
$$c=42-b-f$$

Question ID 796b120b

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Medium	

ID: 796b120b

In the given scatterplot, a line of best fit for the data is shown.



Which of the following is closest to the slope of this line of best fit?

- A. **7**
- $\mathsf{B.}\ \mathbf{0.7}$
- c. -0.7
- D. -7

Question ID cf40e194

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	Easy

ID: cf40e194

Response	Frequency
Once a week or more	3
Two or three times a month	16
About once a month	26
A few times a year	73
Almost never	53
Never	29
Total	200

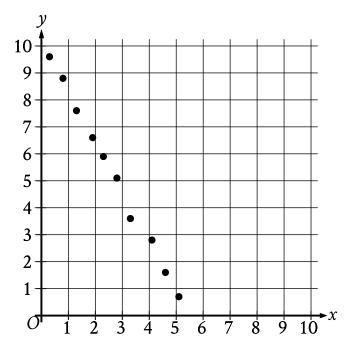
The table gives the results of a survey of **200** people who were asked how often they see a movie in a theater. How many people responded either "never" or "almost never"?

- A. **24**
- В. 53
- c. **82**
- D. **118**

Question ID a6541d64

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Two-variable data: Models and scatterplots	Easy

ID: a6541d64



Which of the following equations is the most appropriate linear model for the data shown in the scatterplot?

A.
$$y = -1.9x - 10.1$$

B.
$$y = -1.9x + 10.1$$

c.
$$y = 1.9x - 10.1$$

D.
$$y = 1.9x + 10.1$$

Question ID 869b99d4

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	One-variable data: Distributions and measures of center and spread	Easy

ID: 869b99d4

73, 74, 75, 77, 79, 82, 84, 85, 91

What is the median of the data shown?

Question ID d9e83476

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	Medium

ID: d9e83476

Quadrilateral P'Q'R'S' is similar to quadrilateral PQRS, where P,Q,R, and S correspond to P',Q',R', and S', respectively. The measure of angle P is $\mathbf{30}^\circ$, the measure of angle Q is $\mathbf{50}^\circ$, and the measure of angle R is R0°. The length of each side of R1'R2' is R3 times the length of each corresponding side of R2'R3. What is the measure of angle R4'?

- A. $10\degree$
- в. **30°**
- c. 40°
- D. 90°

Question ID dd899ebf

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Area and volume	Easy

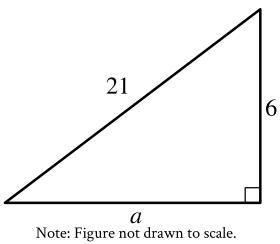
ID: dd899ebf

What is the area, in square centimeters, of a rectangle with a length of 34 centimeters (cm) and a width of 29 cm?

Question ID de6d51e1

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Right triangles and trigonometry	Medium

ID: de6d51e1



For the triangle shown, which expression represents the value of a?

A.
$$\sqrt{21^2-6^2}$$

B.
$$21^2-6^2$$

c.
$$\sqrt{21-6}$$

D.
$$21-6$$

Question ID 669f307b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Right triangles and trigonometry	Hard

ID: 669f307b

$$RS = 20$$

$$ST = 48$$

$$TR = 52$$

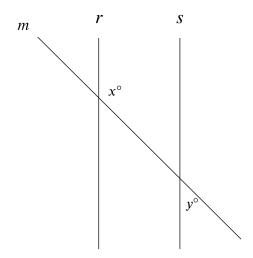
The side lengths of right triangle RST are given. Triangle RST is similar to triangle UVW, where S corresponds to V and T corresponds to W. What is the value of $\tan W$?

- $\mathsf{A.}\ \frac{5}{13}$
- B. $\frac{5}{12}$
- C. $\frac{12}{13}$
- $\mathsf{D.}\ \frac{12}{5}$

Question ID 681fe1cf

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	Medium

ID: 681fe1cf



Note: Figure not drawn to scale.

In the figure shown, lines r and s are parallel, and line m intersects both lines. If y < 65, which of the following must be true?

- A. x < 115
- B. x>115
- C. x+y < 180
- D. x + y > 180

Question ID 5c1751d6

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear functions	Medium

ID: 5c1751d6

\boldsymbol{x}	10	15	20	25
f(x)	82	137	192	247

The table shows four values of x and their corresponding values of f(x). There is a linear relationship between x and f(x) that is defined by the equation f(x) = mx - 28, where m is a constant. What is the value of m?

Question ID 89dc2564

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in two variables	Easy

ID: 89dc2564

Line \pmb{k} is defined by $\pmb{y}=\pmb{3x}+\pmb{15}$. Line \pmb{j} is perpendicular to line \pmb{k} in the \pmb{xy} -plane. What is the slope of line \pmb{j} ?

- $\mathsf{A.-}\frac{1}{3}$
- B. $-\frac{1}{12}$
- $\mathrm{C.}-\tfrac{1}{18}$
- $\mathrm{D.}-\frac{1}{45}$

Question ID 80f346ea

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in two variables	Medium

ID: 80f346ea

A line passes through the points (4,6) and (15,24) in the $\it xy$ -plane. What is the slope of the line?

Question ID 4e00f906

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Algebra	Linear equations in one variable	Easy	

ID: 4e00f906

What value of \emph{p} satisfies the equation $5\emph{p}+180=250$?

- A. **14**
- в. **65**
- c. **86**
- $\mathsf{D.}\ 250$

This is the end of the first math module. Take an optional 5 minute break before completing the second module. You may continue using the desmos calculator and reference formulas on the second module.

Question ID dadfd136

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear functions	Easy

ID: dadfd136

In the linear function h, h(0)=41 and h(1)=40. Which equation defines h?

A.
$$h(x)=-x+41$$

B.
$$h(x)=-x$$

C.
$$h(x) = -41x$$

D.
$$h(x)=-41$$

Question ID 38f53fa4

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Algebra	Linear equations in two variables	Medium	

ID: 38f53fa4

Figure A and figure B are both regular polygons. The sum of the perimeter of figure A and the perimeter of figure B is 63 inches. The equation 3x + 6y = 63 represents this situation, where x is the number of sides of figure A and y is the number of sides of figure B. Which statement is the best interpretation of 6 in this context?

- A. Each side of figure B has a length of ${\bf 6}$ inches.
- B. The number of sides of figure B is **6**.
- C. Each side of figure A has a length of ${\bf 6}$ inches.
- D. The number of sides of figure A is **6**.

Question ID 43e69f94

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Algebra	Linear functions	Hard	

ID: 43e69f94

The cost of renting a backhoe for up to 10 days is \$270 for the first day and \$135 for each additional day. Which of the following equations gives the cost y, in dollars, of renting the backhoe for x days, where x is a positive integer and $x \le 10$?

A.
$$y=270x-135$$

B.
$$y = 270x + 135$$

c.
$$y = 135x + 270$$

D.
$$y = 135x + 135$$

Question ID 5b4e020d

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Algebra	Linear equations in one variable	Easy	

ID: 5b4e020d

If x=40, what is the value of x+6?

- $\mathsf{A.}\ \mathbf{34}$
- в. **40**
- $\text{C.}\,\mathbf{46}$
- $\mathsf{D.}\ 64$

Question ID a26fed41

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	Easy

ID: a26fed41

On a car trip, Rhett and Jessica each drove for part of the trip, and the total distance they drove was under 220 miles. Rhett drove at an average speed of 35 miles per hour (mph), and Jessica drove at an average speed of 40 mph. Which of the following inequalities represents this situation, where r is the number of hours Rhett drove and j is the number of hours Jessica drove?

- A. 35r+40j>220
- B. 35r + 40j < 220
- c. 40r + 35j > 220
- D. 40r + 35j < 220

Question ID c5526332

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear functions	Hard

ID: c5526332

\boldsymbol{x}	f(x)
1	-64
2	0
3	64

For the linear function f, the table shows three values of x and their corresponding values of f(x). Function f is defined by f(x) = ax + b, where a and b are constants. What is the value of a - b?

- A. -64
- B. **62**
- c. 128
- D. **192**

Question ID 4c195508

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Algebra	Linear functions	Easy	

ID: 4c195508

d = 16t

The given equation represents the distance d, in inches, where t represents the number of seconds since an object started moving. Which of the following is the best interpretation of t0 in this context?

- A. The object moved a total of ${f 16}$ inches.
- B. The object moved a total of ${\bf 16}t$ inches.
- C. The object is moving at a rate of 16 inches per second.
- D. The object is moving at a rate of $\frac{1}{16}$ inches per second.

Question ID 57e4b0b9

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear inequalities in one or two variables	Medium

ID: 57e4b0b9

A model estimates that whales from the genus *Eschrichtius* travel 72 to 77 miles in the ocean each day during their migration. Based on this model, which inequality represents the estimated total number of miles, x, a whale from the genus *Eschrichtius* could travel in x0 days of its migration?

A.
$$72 + 16 \le x \le 77 + 16$$

B.
$$(72)(16) \le x \le (77)(16)$$

c.
$$72 \le 16 + x \le 77$$

D.
$$72 \leq 16x \leq 77$$

Question ID 20c1b21d

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Algebra	Linear equations in one variable	Easy	

ID: 20c1b21d

If 5x=20, what is the value of 15x?

- A. **7**
- в. **12**
- c. **23**
- D. **60**

Question ID 252d6b8a

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear equations in two variables	Hard

ID: 252d6b8a

$$5x + 7y = 1$$
$$ax + by = 1$$

In the given pair of equations, a and b are constants. The graph of this pair of equations in the xy-plane is a pair of perpendicular lines. Which of the following pairs of equations also represents a pair of perpendicular lines?

A.
$$10x + 7y = 1$$

 $ax - 2by = 1$

B.
$$10x + 7y = 1$$

 $ax + 2by = 1$

c.
$$10x + 7y = 1$$

 $2ax + by = 1$

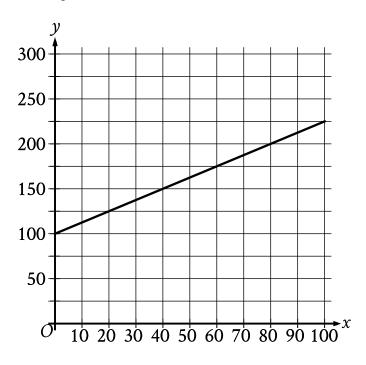
D.
$$5x-7y=1$$
 $ax+by=1$

Question ID cab69050

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Linear functions	Easy

ID: cab69050

The cost \emph{y} , in dollars, for a manufacturer to make \emph{x} rings is represented by the line shown.



What is the cost, in dollars, for the manufacturer to make ${\bf 60}$ rings?

- $\mathsf{A.}\ 100$
- в. **125**
- c. **175**
- D. **225**

Question ID a23c1142

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Algebra	Linear equations in one variable	Easy	

ID: a23c1142

8x = 88

What value of $oldsymbol{x}$ is the solution to the given equation?

- $\mathsf{A.}\ 11$
- в. **80**
- c. **96**
- $\mathsf{D.}\ 704$

Question ID d708c5e3

Assessment	Test	Domain	Skill	Difficulty	
SAT	Math	Problem-Solving and Data Analysis	Percentages	Medium	

ID: d708c5e3

The population of City A increased by 7% from 2015 to 2016. If the 2016 population is k times the 2015 population, what is the value of k?

- $\mathsf{A.}\ \mathbf{0.07}$
- в. **0.7**
- $\text{c.}\ \textbf{1.07}$
- D. **1.7**

Question ID 68ce71ce

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Probability and conditional probability	Easy

ID: 68ce71ce

The table gives the distribution of votes for a new school mascot and grade level for 80 students.

		Grade level			
Mascot	Sixth	Seventh	Eighth	Total	
Badger	4	9	9	22	
Lion	9	2	9	20	
Longhorn	4	6	4	14	
Tiger	6	9	9	24	
Total	23	26	31	80	

If one of these students is selected at random, what is the probability of selecting a student whose vote for new mascot was for a lion?

- A. $\frac{1}{9}$
- B. $\frac{1}{5}$
- C. $\frac{1}{4}$
- D. $\frac{2}{3}$

Question ID bbfa4707

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Easy

ID: bbfa4707

A wind turbine completes 900 revolutions in 50 minutes. At this rate, how many revolutions per minute does this turbine complete?

- A. 18
- $\mathsf{B.}~850$
- $\text{c.}\, 950$
- $\mathsf{D.}\ \mathbf{1,}\mathbf{400}$

Question ID 5216125e

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Easy

ID: 5216125e

A customer spent \$27 to purchase oranges at \$3 per pound. How many pounds of oranges did the customer purchase?

Question ID 0f1d42fd

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Ratios, rates, proportional relationships, and units	Hard

ID: 0f1d42fd

The density of a certain type of wood is 353 kilograms per cubic meter. A sample of this type of wood is in the shape of a cube and has a mass of 345 kilograms. To the nearest hundredth of a <u>meter</u>, what is the length of one edge of this sample?

- A. 0.98
- B. 0.99
- c. **1.01**
- D. 1.02

Question ID 7eea65e3

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Systems of two linear equations in two variables	Medium

ID: 7eea65e3

Which of the following systems of linear equations has no solution?

A.
$$y=6x+3$$

$$y = 6x + 9$$

в.
$$y=10$$

$$y=10x+10$$

C.
$$y=14x+14$$

$$y = 10x + 14$$

D.
$$x=3$$

$$y = 10$$

Question ID e056a89f

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Systems of two linear equations in two variables	Easy

ID: e056a89f

$$x = 5$$
 $y = x - 8$

Which of the following points (x,y) is the solution to the given system of equations in the xy-plane?

- A. (0,0)
- B. (5, -3)
- C. (5, -8)
- D. (5,8)

Question ID 9609a243

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Algebra	Systems of two linear equations in two variables	Hard

ID: 9609a243

$$4x - 9y = 9y + 5$$
$$hy = 2 + 4x$$

In the given system of equations, h is a constant. If the system has no solution, what is the value of h?

- A. -9
- в. 0
- C. **9**
- $\mathsf{D.}\ 18$

This is the end of the test - congratulations!