Section: Section 1, Module 1: Reading and Writing, Easy

 Which choice completes the text with the most logical and precise word or phrase? The pineapple was domesticated in South America. Its physical structure is no longer identical to the structure of the wild plant it is descended from. Summer squash also its wild ancestor. That ancestor plant had a hard rind and bitter flesh. Indigenous people in eastern North America carefully bred the crop until it had a soft rind and mild-tasting flesh. A. varies from B. helps with C. argues with D. reacts to
 Which choice completes the text with the most logical and precise word or phrase? The adult emperor moth appears brown and orange with multiple eyespots as a result of pigmented scales that cover its wings and body. Although scales are widely known as the source of a moth's color and pattern, theof these scales goes beyond visual display: they also absorb the sun's heat for moths active during the day. A. tendency
B. attractiveness
C. utility D. frailty
3. As used in the text, what does the word "good" most nearly mean? The following text is from Charles Chesnutt's 1905 novel <i>The Colonel's Dream</i> . Mr. French and Mr. Kirby work together. Mr. French, the senior partner, who sat opposite Kirby, was an older man—a safe guess would have placed him somewhere in the debatable ground between forty and fifty; of a good height, as could be seen even from the seated figure, the upper part of which was held erect with the unconscious ease which one associates with military training. A. Reliable B. Well-behaved C. Talented D. Considerable
4. Which choice completes the text with the most logical and precise word or phrase?
Despite a growing view among young people and others in South Africa that celebrated anti-apartheid leader Nelson Mandela should have taken greater strides as president to effect more substantive structural changes in the country's stratified society, years after his death in 2013 Mandela continues to beby many worldwide. A. evaluated B. criticized C. lauded D. reinterpreted
5. Which choice best states the main purpose of the text?

The following text is adapted from Eugene O'Neill's 1920 play *Beyond the Horizon*. Andrew and Robert Mayo are brothers who grew up on their family's farm.

ANDREW: Farming ain't your nature. There's all the difference shown in just the way us two feel about the farm. You—well, you like the home part of it, I expect; but as a place to work and grow things, you hate it. Ain't that right?

ROBERT: Yes, I suppose it is. For you it's different. You're a Mayo through and through. You're wedded to the soil. You're as much a product of it as an ear of corn is, or a tree. Father is the same. This farm is his life-work.

- **A.** It illustrates that two characters share a goal.
- **B.** It shows how two characters solved a mystery.
- **C.** It describes a place two characters visited on vacation.
- **D.** It emphasizes a difference between two characters.
- **6.** Which choice best describes the function of the underlined portion in the text as a whole?

In the past, historians who wanted to examine Frederick Douglass's diary and other personal papers had to visit the Library of Congress in Washington, DC, to view them on microfilm (film containing scaled-down reproductions of documents). But traveling to the library often added time and costs to research projects. Now, by going to the library's website, researchers can access digitized versions of Douglass's papers without physically going anywhere.

- **A.** It gives information about a famous person.
- **B.** It explains the meaning of a word.
- **C.** It describes a debate among historians.
- **D.** It summarizes an unexpected finding.
- **7.** Which choice best states the main purpose of the text?

Built in the 1970s, Raccoon Mountain is a pumped-storage hydropower facility (a "water-battery") located in the United States along the Tennessee River. When energy demand is low, excess power from the regional electric utility's nuclear plants is used to pump water (from a lower reservoir filled from the Tennessee River) up a shaft to the summit lake, where the water is stored as gravitational potential energy. When energy demand peaks, the water drains down from the summit lake, spinning turbines and generating upward of 1,700 megawatts of power—enough to power one million homes for twenty hours.

- **A.** To point out the differences between two methods of energy generation
- **B.** To explain the basics of how a specific energy technology works
- **C.** To discuss the benefits of a new energy technology
- **D.** To encourage regional electric utilities to build energy storage facilities
- **8.** Based on the texts, how would the author of Text 2 most likely respond to the overall characterization in Text 1 of the publicity campaign?

Text 1

Middlemarch, Cecilia De Noel, and twenty-three other works of the late 1800s and early 1900s were rereleased in 2020 as publicity for a prestigious prize for women writers of fiction. Recognizing that women long had to use male pseudonyms for their works to be granted serious consideration (by publishers and readers alike), the campaign restored the authors' given female names in place of such pseudonyms and brought visibility to identities that should not have been hidden.

Text 2

The belief that women historically were barred from publishing under names perceived as female is persistent. That it is also an overgeneralization becomes obvious when considering writers such as Elizabeth Barrett Browning, who published *Poems* and many other works under her own name in the 1800s, and Sara Payson Willis, who elected to use the female pseudonym Fanny Fern for her novels and newspaper columns in the mid-1800s.

- **A.** By suggesting that Barrett Browning and Willis are among the historical examples that challenge the assumption about the historical use of pseudonyms by female writers that is presented in Text 1
- **B.** By agreeing that the authors of *Middlemarch*, *Cecilia De Noel*, and the other works referred to in Text 1 were not afforded the same opportunities as Barrett Browning and Willis to shape their own representations when publishing
- **C.** By asserting that while it is clearly inappropriate to conclude that Barrett Browning was motivated by the same set of factors as the authors of the works discussed in Text 1 to publish under the names they did, it is appropriate to conclude that Willis was
- **D.** By acknowledging that the circumstances of publication for Barrett Browning and Willis differed from those for the authors whose works are the focus of Text 1, given that Barrett Browning and Willis each published multiple works
- **9.** Which choice best states the main topic of the text?

When people think of dinosaurs with feathers, they typically think of winged dinosaurs, such as the bat-like *Yi qi*. However, many dinosaurs that didn't have wings also had feathers on their bodies. For instance, research indicates that the wingless, herbivorous *Kulindadromeus* likely had feathers.

- A. Dinosaurs with feathers
- B. Animals without feathers
- **C.** The most valuable fossil
- D. Bird species
- **10.** Based on the text, why does Don Mariano push aside the furniture on the piazza? The following text is from María Amparo Ruiz de Burton's 1885 novel *The Squatter and the Don*.

Don Mariano Alamar was silently walking up and down the front piazza of his house at the rancho; his hands listlessly clasped behind and his head slightly bent forward in deep thought. He had pushed away to one side the many arm-chairs and wicker rockers with which the piazza was furnished. He wanted a long space to walk. That his meditations were far from agreeable, could easily be seen by the compressed lips, slight frown, and sad gaze of his mild and beautiful blue eyes.

- **A.** He feels that walking an uninterrupted path will help him think through a difficult issue.
- **B.** He is determining which pieces of furniture to dispose of.
- **C.** He wishes to create the impression that he has a large extended family.
- **D.** He wants to make space so that he can engage in vigorous exercise.

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

	Average Hours	Worked	per Person	per Year	in	1950	and 2017
--	---------------	--------	------------	----------	----	------	----------

Country	1950	2017	Change in hours	Percent change in hours	
United Kingdom	2,184	1,670	-514	-24%	
Australia	2,178	1,731	-447	-21%	
Germany	2,427	1,354	-1,074	-44%	
Mexico	2,432	2,255	-177	-7%	
Calculations may be inexact due to rounding.					

A student in an economics course is examining the decline since 1950 in average hours worked per person per year in various nations due to both increased productivity and the adoption of policies that limit working hours. The first task in this investigation is to determine how the decline in the United Kingdom compares to that in other countries. The student finds that _____

- **A.** though the percent decrease in hours worked in the United Kingdom was greater than that in Germany and Mexico, it was less than that in Australia.
- **B.** though the percent decrease in hours worked in the United Kingdom was less than that in Germany, it was greater than that in Australia and Mexico.
- **C.** the decline in number of hours worked was greater in the United Kingdom than it was in Germany, Australia, or Mexico.
- **D.** while the number of hours worked rose in the United Kingdom from 1950 to 2017, it declined in Germany, Australia, and Mexico.
- **12.** Which choice most effectively uses data from the table to complete the comparison?

Impact of Three Key Industries on Oklahoma Economy in 2017

Industry	Approximate total contribution by industry	Number of people employed by industry	Average contribution per employee by industry
Constructio n	\$6,797,300,000	77,247	\$87,994
Professiona I services	\$7,694,000,000	69,846	\$110,157
Tribal economic activity	\$7,312,400,000	51,674	\$141,510

The nearly forty tribes located in Oklahoma, including the Chickasaw Nation and the Quapaw Tribe, operate numerous businesses, employ tens of thousands of people, and generate billions of dollars in revenue. A student in an economics class is researching the tribes' collective activity as a single industry. The student wants to compare that industry's

role in Oklahoma in 2017 with the roles of other industries in the state. Looking at a table with information about three industries, the student finds that compared with the other two industries, tribal economic activity _____

- **A.** ranked highest in all three economic measures listed in the table.
- **B.** employed the same number of people as construction.
- **C.** made the lowest total contribution by industry.
- **D.** made the highest average economic contribution per employee.
- 13. Which statement, if true, would best illustrate the challenge described in the text?

A creole language is an amalgam of a lexifier, or primary contributor of grammar and vocabulary, with one or more substrates, or secondary contributors. English-lexifying creoles in the Caribbean, such as Jamaican Patois, rely on West African substrates, while Hawaiian Pidgin relies on 'Ōlelo Hawai'i, the Polynesian language of the Native Hawaiian people, with further contributions from Cantonese and other East Asian languages, Portuguese, and Spanish. This is a heterogeneous history, even for a creole language. Moreover, numerous similarities are found among the East Asian substrates, as well as between Portuguese and Spanish. Thus, it can be challenging to credit certain words or features of grammar or pronunciation to any one substrate.

- **A.** Stative structures in which verbs modify subjects and serve a descriptive function comparable to that of adjectives are hallmarks of Hawaiian Pidgin as well as of East Asian languages such as Cantonese, yet the syntax of Hawaiian Pidgin's stative structures confirms their origin in 'Ōlelo Hawai'i.
- **B.** Hawaiian Pidgin's substitution of "d" for the voiced "th" consonant (as used in "that") and of "t" for the unvoiced "th" consonant (as used in "thick") can be credited to the absence of "th" consonants in 'Ōlelo Hawai'i, though most other Polynesian languages lack "th" consonants too.
- **C.** As is also the case with some first-language speakers of Jamaican Patois, many first-language speakers of Hawaiian Pidgin align their pronunciation, word choice, and syntax more closely with English in certain conversational contexts than in others.
- **D.** The usage of the Hawaiian Pidgin verb "ste" to convey a temporary state, as in the statement "da watah ste cold" (the water is cold), most nearly resembles that of the 'Ōlelo Hawai'i verb *noho*, though the Portuguese verb *ficar* and the Spanish verb *estar* have similar usages and may also exert an influence on "ste."
- **14.** Which choice most logically completes the text?

The great blue heron and the small dark heron are long-legged birds that live in wetlands, like the Everglades in Florida. Laura D'Acunto and colleagues wanted to know how these birds choose an area in which to live. They looked at features of the birds' habitats, such as the geographic location of the area and how deep the water is during the birds' breeding season. They found that great blue herons prefer areas with deep water during breeding season, but that was not true for small dark herons. The researchers concluded that water management strategies that increase the depth of water in potential wetland bird habitats during breeding season are therefore more likely to ______ blank

- **A.** attract great blue herons to the area than they are to attract small dark herons to the area.
- **B.** decrease the area's appeal to both great blue herons and small dark herons than they are to increase the appeal to either.
- **C.** extend the average lifespan of great blue herons already in the area than they are to attract a greater number of those birds to the area.
- **D.** attract birds that don't typically live in wetlands to the area than they are to attract great blue herons or small dark herons to the area.
- **15.** Which choice most logically completes the text?

Filtration is a widely used method for removing microplastics—plastics with a width less than 5 millimeters (mm)—from waterways. However, filtration systems are typically unable to capture very small microplastics. Menake Piyasena and Nelum Perera designed a device that applies sound waves to water as it flows through a metal tube. The sound waves cause microplastics in the water to gather in the middle and along the sides of the tube. The microplastics can then be separated out by channeling polluted and clean water though different outlets. Testing indicated that the system removes even tiny microplastics, including ones as small as 10 microns, or 0.01 mm, wide. This result suggests that ______ blank

- **A.** unlike sound waves, filters have the ability to remove large microplastics from polluted waterways.
- **B.** the sound wave treatment system may help solve a problem associated with filtration of microplastics.
- **C.** directing water through filtration tubes with multiple outlets reduces microplastic pollution.
- **D.** combining filtration with sound waves is likely the most efficient method for removing microplastics from water.
- **16.** Which choice completes the text so that it conforms to the conventions of Standard English?

A professor at the University of Oklahoma, Amy McGovern works on developing	artificial
intelligence technology, with a specific focus on supervised machine	
blank	

machine learning involves teaching computer algorithms to organize large amounts of data.

- **A.** learning supervised
- **B.** learning, supervised
- C. learning. Supervised
- **D.** learning, which supervised
- **17.** Which choice completes the text so that it conforms to the conventions of Standard English?

The	Tuskegee	Univ	ersity	Archives'	СО	llection	ind	cludes	an	origina	al 195	7 photogi	raph c	١c
Marti	n Luther	King	Jr. a	addressing	а	group	of	Tuske	gee	civil	rights	activists.	Take	n
by P.	H. Polk, th	e pho	to											

blank King in profile, the glow of a stage light casting his silhouette onto the curtains behind him. A. to show B. having shown C. shows D. showing
18. Which choice completes the text so that it conforms to the conventions of Standard English?
Sociologist Alton Okinaka sits on the review board tasked with adding new sites to the Hawai'i Register of Historic Places, which includes the Gulick-Rowell House and the Kukui Heiau. However, Okinaka doesn't make such decisionsblank
all historical designations must be approved by a group of nine other experts from the fields of architecture, archaeology, history, and Hawaiian culture. A. single-handedly and B. single-handedly, C. single-handedly D. single-handedly;
19. Which choice completes the text so that it conforms to the conventions of Standard English?
Most of the ice found on Earth is ice Ih, distinguished by a crystalline structure in which molecules form a hexagonal pattern. Amorphous ice, on the other hand, constitutes most of the ice in the ultrafrigid environment of outer space. Defined by a disorganized molecular structure, blank
A. ice Ih differs from amorphous ice in that it possesses the thermal energy to form crystals.
B. ice Ih contains crystals, whereas amorphous ice, which lacks the thermal energy to form them, does not.
C. the lack of thermal energy in amorphous ice explains its inability to form the crystals found in ice lh.
D. amorphous ice lacks the thermal energy to form the crystals found in ice lh.
20. Which choice completes the text so that it conforms to the conventions of Standard English?
When, in 2018, scientists in Germany discovered a fossilized brittle star with three thick,

something never before seen in the fossil ______ blank clonal fragmentation, a type of asexual reproduction, an animal splits itself in two, each

spine-studded arms positioned opposite three thin, undeveloped ones, they found

clonal fragmentation, a type of asexual reproduction, an animal splits itself in two, each half then regrowing its missing limbs—just what the brittle star was doing.

- **A.** record. Evidence of cloning in
- **B.** record—evidence of cloning in

- C. record, evidence of cloning, in
- D. record: evidence of cloning. In
- **21.** Which choice completes the text with the most logical transition?

Typically, upon detecting the scent of another animal, a lion will open its mouth. _____ the lion allows the scent to reach sensory receptors on the roof of its mouth. These sensors help the lion interpret the source of the scent.

- A. Nowadays,
- **B.** However.
- **C.** On the other hand,
- **D.** By doing so,
- **22.** Which choice completes the text with the most logical transition?

A team led by Portuguese researcher Isabel C.F.R. Ferreira found that many species of mushrooms contain chemicals called phenolic compounds, such as 5-O-caffeoylquinic acid and kaempferol. _____ Ferreira detected 5-O-caffeoylquinic acid in *Pleurotus ostreatus* mushrooms and kaempferol in *Sparassis crispa* mushrooms.

- **A.** However,
- **B.** For this reason,
- **C.** For example,
- **D.** Nevertheless,
- **23.** The student wants to emphasize a difference between the two seaweeds. Which choice most effectively uses relevant information from the notes to accomplish this goal?

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

- The human tongue contains taste receptors for a rich, savory flavor called umami.
- Umami is triggered by the compounds in a variety of foods, including pork and soy sauce.
- Participants in a study tasted a sample of winged kelp, a type of brown seaweed.
- They rated its umami intensity as moderate.
- The participants tasted a sample of arame, another type of brown seaweed.
- They rated its umami intensity as high.
- **A.** Both winged kelp and arame are types of brown seaweed.
- **B.** Winged kelp and arame both contain umami flavor, which can also be triggered by compounds in pork and soy sauce.
- **C.** Participants in a research study found winged kelp, a type of brown seaweed, to have moderate umami intensity, while arame's umami was more intense.
- **D.** Some types of brown seaweed, like winged kelp and arame, trigger umami flavor in human taste buds.
- **24.** The student wants to identify the title of J.D. Salinger's first published short story. Which choice most effectively uses relevant information from the notes to accomplish this goal?

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

- J.D. Salinger was an acclaimed writer.
- His first published work of fiction was a short story.

- It was called "The Young Folks."
- It first appeared in *Story* in 1940.
- A. In 1940, a short story by J.D. Salinger appeared in Story.
- **B.** Acclaimed writer J.D. Salinger's first published work of fiction was a short story.
- **C.** J.D. Salinger's first published work of fiction appeared in 1940.
- **D.** J.D. Salinger's first published short story was called "The Young Folks."
- **25.** The student wants to emphasize a difference between the two scrolls. Which choice most effectively uses relevant information from the notes to accomplish this goal?

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

- Ike Taiga (1723–1776) was a Japanese painter.
- Li Bai (701–762) was a Chinese poet.
- Taiga created the artwork titled Landscape and Couplet of Chinese Verse.
- The artwork is made up of two scrolls.
- Scroll 1 features a painting of a lone figure walking among tall, narrow mountains.
- Scroll 2 features a poem from Li Bai that is about being in nature.
- **A.** In Landscape and Couplet of Chinese Verse, one scroll features a painting, while the other scroll features a poem.
- **B.** Ike Taiga created *Landscape and Couplet of Chinese Verse*, which is made up of two scrolls that each depict nature.
- **C.** Made up of two scrolls that each depict nature, *Landscape and Couplet of Chinese Verse* was created by Li Bai.
- **D.** One of the two scrolls that make up *Landscape and Couplet of Chinese Verse* features mountains, and one features a portrait of poet Li Bai.
- **26.** The student wants to provide evidence that Randmaa's journey was a true circumnavigation. Which choice most effectively uses relevant information from the notes to accomplish this goal?

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

- Uku Randmaa is an Estonian sailor who completed a true circumnavigation of the globe in 2019.
- One of the requirements of a true circumnavigation is that the journey must begin and end in the same port.
- Randmaa's circumnavigation began and ended in the port of Les Sables d'Olonne, France.
- On his journey, Randmaa passed the three great capes of the Southern Ocean.
- His journey took 254 days.
- **A.** To be considered a true circumnavigation, a journey must begin and end in the same port, and Randmaa's lasted 254 days.
- **B.** Randmaa began and ended his trip in the same port (Les Sables d'Olonne, France), one of the requirements for a true circumnavigation.
- **C.** Randmaa is an Estonian sailor who completed a true circumnavigation that ended in Les Sables d'Olonne, France.
- **D.** A true circumnavigation, Randmaa's journey also passed the three great capes of the Southern Ocean.

27. The student wants to emphasize a similarity between Macready and Keene. Which choice most effectively uses relevant information from the notes to accomplish this goal?

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

- In the 1800s, some actors also managed theaters.
- They were known as actor-managers.
- William Charles Macready managed the Covent Garden Theatre (London) from 1837 to 1839.
- He starred in a production of *Henry V* there in 1838.
- Laura Keene managed Laura Keene's Theatre (New York) from 1856 to 1863.
- She starred in a production of *The Seven Sisters* there in 1860.
- A. In the 1800s, some actors (such as Keene) also managed theaters; they were thus considered actor-managers.
- As actor-managers, both Macready and Keene managed theaters where they also

performed. C. Both Macready and Keene were managers of the Covent Garden Theatre in London, where they also starred in various plays. D. Macready managed a London theater, whereas Keene managed one in New York.
Section: Section 1, Module 2: Reading and Writing, Hard
 Which choice completes the text with the most logical and precise word or phrase? The recovery program led by Marisel López-Flores has dramatically increased the population size of the endangered <i>Amazona vittata</i>, the endemic parrot of Puerto Rico. Given that <i>A. vittata</i> corresponds in physiology, behavior, and ecology to endangered <i>Amazona</i> species elsewhere in the Caribbean, the conservation approach developed by López-Flores may beacross the genus. A. replicable B. comprehensible C. observable D. redeemable
2. Which choice completes the text with the most logical and precise word or phrase? Although oil shocks—such as the 45% rise in oil prices from November 1980 to February 1981—can strongly affect individual consumers, Gbadebo Oladosu and colleagues have shown that at the level of national economies, their effects are often quite The effect of recent oil shocks on the gross domestic product of the United States, for example, was only slightly greater than zero. A. persistent B. subdued C. beneficial D. variable
3. Which choice completes the text with the most logical and precise word or phrase? Steiger Butte Drum, a family ensemble from the Klamath Tribes of the Pacific Northwest,

collaborated with composer Michael Gordon to create Natural History, a work featuring traditional drumming and vocals alongside an orchestra and chorus. Steiger Butte Drum's

participation is _

blank

to the piece: members not only contributed to its composition but also must be included in all performances.

- A. analogous
- **B.** tangential
- C. integral
- **D.** subsequent
- **4.** Which choice best states the function of the underlined portion in the text as a whole? The following text is adapted from Susan Glaspell's 1917 play *The People*. Oscar, a writer at a newspaper called *The People*, is writing at a table when a woman enters the office to speak to the editor.

THE WOMAN: This *is* the office of *The People*?

OSCAR: Um-hum.

THE WOMAN: (Excitedly.) I came to see the author of those wonderful words.

OSCAR: (Rising.) Which wonderful words?

THE WOMAN: About moving toward the beautiful distances.

OSCAR: (Loses interest and returns to his writing.): Oh. Those are Mr. Wills' wonderful words

THE WOMAN: Could I see him?

OSCAR: He isn't here yet. He's just back from California. Won't be at the office till a little later

- **A.** To indicate that Oscar had been expecting the woman to come to the office
- B. To suggest that Oscar is annoyed that the woman's visit has interrupted his work
- **C.** To depict Oscar as a polite and professional representative of the newspaper
- **D.** To show Oscar's brief hope that the woman is fond of his writing
- **5.** Which choice best states the function of the underlined sentence in the text as a whole? Vertical gene transfer involves the transmission of genetic material from a parent to offspring; horizontal gene transfer, on the other hand, involves the exchange of genetic material between organisms not in a parent-offspring relationship. While horizontal gene transfer is common among prokaryotes—single-celled organisms, such as the bacteria *Comamonas aquatica* and *Moraxella caviae*—it has rarely been observed among eukaryotes (multicellular organisms). However, new studies suggest that horizontal gene transfer is more common in eukaryotes than originally thought.
- **A.** It explains a biological process by contrasting it with a somewhat similar process.
- **B.** It explains why a common perception of a biological process is flawed.
- **C.** It proposes a direction for future research into a biological phenomenon.
- **D.** It argues that two biological phenomena are more similar than they may initially appear to be.
- **6.** Which choice best describes the overall structure of the text?

Some researchers posit that the species inhabiting the South Pacific island of Grande Terre belong to clades that predate the island's split from remnants of the former supercontinent Gondwana around 80 million years ago. A study conducted by Yohan Pillon et al. found, however, that the crown age (the age of the most recent common ancestor of all living and extinct species in the clade) of the clade of *Geissois* trees on Grande Terre is

- 7.3 million years; Pillon et al. further found that the crown age of the clade of *Geissois* trees in the South Pacific generally is also approximately 7.3 million years.
- **A.** It identifies a discrepancy between a hypothesis some researchers have proposed and related research findings, then explains that discrepancy.
- **B.** It presents a possibility that some researchers have raised, then describes a study that clarifies their reasons for doing so.
- **C.** It explains a view some researchers have advanced, then discusses study results that led them to reconsider that view.
- **D.** It describes an idea that some researchers have put forward, then presents study results that are incompatible with that idea.
- **7.** Based on the texts, how would Ert and Erev (Text 2) most likely respond to Kahneman and Tversky's finding (Text 1)?

Text 1

In a seminal 1979 study, Daniel Kahneman and Amos Tversky presented students and college faculty from Israel, Sweden, and the United States with hypothetical questions involving financial decisions. Finding that participants' responses indicated that losses have a greater psychological impact than equivalent gains do, the researchers formulated the concept of loss aversion, which has since informed research in fields ranging from cognitive psychology to transportation studies.

Text 2

Eyal Ert and Ido Erev conducted an experiment in which two groups of Israeli students were exposed to financial choices that involved potential losses of either relatively minor sums of money, such as 10 Israeli shekels (low-stakes contexts), or more substantial sums, such as 100 Israeli shekels (high-stakes contexts). The researchers concluded that only the latter contexts were associated with loss aversion.

- **A.** By observing that researchers' ability to assess feelings about financial decisions is contingent on gathering adequate data about gains and losses
- **B.** By agreeing that experimental results support the idea that some people tend to be more cognizant of financial losses than of gains
- **C.** By disputing Kahneman and Tversky's claim that a tendency to place excessive emphasis on financial losses accounts for the loss aversion observed in fields such as cognitive psychology and transportation studies
- **D.** By contending that the attitude toward financial losses that Kahneman and Tversky observed is contingent on the magnitude of outcomes
- **8.** According to the text, what is one way that *The Antelope Woman* differs from most of Erdrich's work?

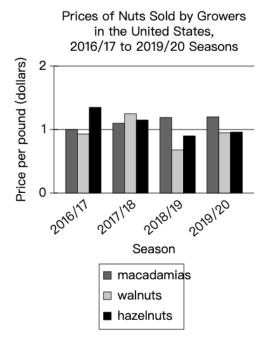
Tracks is a 1988 novel by Ojibwe writer Louise Erdrich. It explores how historical events affect families on a reservation in rural North Dakota. *Tracks* is typical of Erdrich's work. Her writing usually focuses on portrayals of everyday life in Ojibwe communities. Yet some of her novels have fantastical plots and take place outside Ojibwe communities. For example, her 2016 novel *The Antelope Woman* is essentially fantasy fiction, and the otherworldly events in its plot are set in an urban Indigenous community in Minneapolis.

A. Its main characters are Ojibwe.

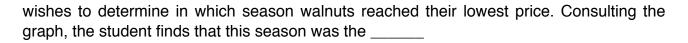
- B. It isn't set in a rural Oiibwe community.
- C. It has been adapted into a movie.
- **D.** It contains very little dialogue.
- **9.** The text most strongly suggests that particular aspects of Hamilton's political beliefs may have been omitted from the musical in part to achieve which effect?

Lin-Manuel Miranda's 2015 hip-hop musical *Hamilton* depicts historical political figure Alexander Hamilton as a self-made man who, through sheer determination, transcends his humble origins to become a key participant in the founding of the United States. This depiction of Hamilton establishes him as a compelling and well-defined protagonist but obscures other facets of the historical person's views, namely his elitism and mistrust of the democratic politics of some of his contemporaries. In effect, the musical's portrayal of Hamilton fails to convey the ideological complexity that a more nuanced portrayal might have suggested.

- A. To suggest why certain contributions by Hamilton to US history have been overlooked
- B. To encourage modern audiences to emulate Hamilton's politics
- C. To create an unambiguous thematic presentation of Hamilton's life
- **D.** To challenge the prevailing historical consensus about Hamilton
- 10. Which choice most effectively uses data from the graph to complete the statement?



The US Department of Agriculture's *Fruit and Tree Nuts Outlook* is a document that covers a variety of subjects, from the causes of reductions in grapefruit supply to the forecast for yields of apple crops. A student studying agricultural economics is consulting a graph in the document that shows the prices for which several types of nuts have been sold by growers in the United States over four growing seasons from 2016 to 2020. The student



- **A.** 2017/18 season.
- **B.** 2016/17 season.
- C. 2018/19 season.
- **D.** 2019/20 season.
- 11. Which choice most effectively uses data from the graph to complete the example? Lin-Tai Ho and colleagues counted fish in a tide pool in Taiwan at several times during the year and found that some species had a significantly higher maximum population count than others. For example, the highest count for the combtooth blenny was 62 individuals in January of 2001, whereas the highest count for the yellowtail sergeant was _____
- A. 72 individuals in January of 2001.
- B. 15 individuals in April of 2001.
- **C.** 13 individuals in January of 2001.
- **D.** 3 individuals in January of 2001.
- **12.** Which choice most effectively uses data from the table to complete the example? Population and Population Density of African Countries in 2015

Country	Density (inhabitants/km² km squared)	Area (km² k m squared)	Estimated population		
São Tomé and Príncipe	189.8	1,001	190,000		
Ethiopia	88.2	1,127,127	99,391,000		
Mauritania	3.9	1,030,700	4,068,000		
Angola	20.1	1,246,700	25,022,000		

As the second-most populous continent in the world, Africa was home to an estimated 1.186 billion people in 2015. In a paper for a social studies class, a student nonetheless notes that countries with very large populations may be less densely populated than are countries with much smaller populations, as can be seen by comparing _____

- **A.** the geographic size of Angola (1,246,700 square kilometers) with its relatively high population of 25,022,000 inhabitants.
- **B.** Angola, which has a high population of 25,022,000 inhabitants and a relatively low density of 20.1 inhabitants/square kilometer, with São Tomé and Príncipe, which has a much lower population and a higher density.
- **C.** Mauritania, which has a low density, with Ethiopia, which has a similar density despite both countries having different geographic sizes.
- **D.** the populations of both São Tomé and Príncipe and Ethiopia in 2015 with their populations in 2010.
- **13.** Which finding, if true, would most directly support Aburto-Oropeza and colleagues' explanation?

Declining fishing technology costs and overexploitation of near-shore fishing grounds have made isolated oceanic reefs, which often lack regulatory protections, increasingly

attractive to commercial and sport fishers. A team led by Octavio Aburto-Oropeza surveyed the biomass density and species composition of two isolated reefs: Alacranes, a protected (fishing prohibited) reef 135 kilometers from the Yucatan Peninsula, and Bajos del Norte, an unprotected reef 25 kilometers further out to sea. Species at the highest level of the trophic pyramid constituted 34% of the biomass at Alacranes and 10% of the biomass at Bajos del Norte. Aburto-Oropeza and colleagues attribute this difference to the two reefs' difference in regulatory status.

- **A.** Total biomass at Alacranes is much greater than total biomass at Bajos del Norte, though the reefs' biomass densities are similar.
- **B.** It is somewhat more expensive for commercial and sport fishers to reach Bajos del Norte than it is to reach Alacranes.
- **C.** Some of the species that compose the highest trophic level at Bajos del Norte are not found at Alacranes.
- **D.** Commercial and sport fishers tend to disproportionately remove species at the highest trophic level.
- **14.** Which choice most logically completes the text?

Researchers Eugeni Vidal-Tortosa and Robin Lovelace looked at the relationship between street lighting in a city and people's willingness to ride a bicycle. Their results suggest that poor street lighting can deter new or inexperienced cyclists from riding in a city but has little effect on experienced cyclists. Therefore, increasing the number of streetlights in a city could potentially ______ blank

- **A.** decrease the number of experienced cyclists riding in the city.
- **B.** increase the number of new or inexperienced cyclists riding in the city.
- **C.** increase the number of experienced cyclists riding in the city.
- **D.** decrease the number of new or inexperienced cyclists riding in the city.

15. Which choice most logically completes the text?

Research into whether floating mats of macroalgae affect the prevalence of microphytobenthos (MPB)—benthic, or bottom-dwelling, microalgae—has produced varying results: Amber Hardison and colleagues determined that macroalgae do not impact MPB, whereas Emilio García-Robledo and Alfonso Corzo observed that benthic chlorophyll concentrations (a common measure of MPB biomass) decreased in the presence of macroalgae. Hypothesizing that macroalgal mats have a negative effect on MPB biomass, Alice F. Besterman and Michael L. Pace surveyed mudflats in Curlew Bay and other coastal sites in Virginia. Because Besterman and Pace did not find a significant correlation between benthic chlorophyll concentrations and the abundance of macroalgal mats, it can be concluded that _______ blank

- **A.** their hypothesis about the relationship between macroalgae and MPB was not supported and their finding was instead consistent with that of Hardison and colleagues.
- **B.** although this finding was consistent with that of García-Robledo and Corzo, trends in MPB biomass are likely not a result of stresses caused by macroalgae.
- **C.** differences between their study design and that of García-Robledo and Corzo likely explain the discrepancy in the two studies' findings about the responses of MPB to macroalgal mats.

D. rather than inhibiting chlorophyll production in MPB, as they had hypothesized, macroalgal mats may positively affect chlorophyll production.
16. Which choice completes the text so that it conforms to the conventions of Standard English? Many ranching terms come from Spanish. For example, the word "stockade" (a fence) from the Spanish word estacada, and "cinch" (a belt) derives from cincho. This is because the first Anglo, African, and Native American cattle ranchers in the southwestern US learned the trade from Spanish-speaking Mexican vaqueros, or cowboys. A. have derived B. were deriving C. derive D. derives
17. Which choice completes the text so that it conforms to the conventions of Standard English? A voluntary workforce established to make improvements to public lands, parks, and forests across the US, the Civilian Conservation Corps (CCC)—though widely popular—was not without its critics. For Aldo Leopold, the CCC was implicated in what "Idle CCC camps," he wrote, "presented a widespread temptation to build new and often needless roads." A. he viewed as unnecessary development. B. he viewed as unnecessary development? C. did he view as unnecessary development.
18. Which choice completes the text so that it conforms to the conventions of Standard English? Though it was designated as missionmission was actually the forty-sixth flight under NASA's Space Shuttle Program. A. STS-45, the B. STS-45, and the C. STS-45. The D. STS-45 the
19. Which choice completes the text so that it conforms to the conventions of Standard English? The epic poem <i>Theogony</i> dates back to the 8th century BCE. Originallyin ancient Greek, it has since been translated into other languages. A. is written B. had been written C. written D. was written
20. Which choice completes the text so that it conforms to the conventions of Standard English?

Trade with neighboring civilizations contributed to the success of the Roman Empire which reigned in the Mediterranean from around 27 BCE to 476 CE. By supplying oil grapes, and grain to societies that lacked these valuableRoman Empire grew not only in wealth but also in power and influence. A. items; the B. items, the C. items the
D. items. The
21. Which choice completes the text with the most logical transition? In his 2023 collection <i>The Diaspora Sonnets</i> , Filipino American poet Oliver de la Paz leverages the sonnet form's "diamond-like quality of precision," as he describes it. The poems often adhere scrupulously to the form's centuries-old conventions, such as its characteristic fourteen-line length. In the twelve-line poem "Diaspora Sonnet at the Feeders Before the Freeze,"de la Paz playfully subverts sonnet conventions, the poem's truncated length conveying a sense of abruptness. A. for example, B. similarly, C. by contrast, D. fittingly,
 22. Which choice completes the text with the most logical transition? Cornelia Konrads is a German sculptor who creates art that seems to be part of its surroundings. Her sculpture entitled the match is built between statues at a park in France

- **23.** Which choice most effectively uses information from the given sentences to explain the advantages of onshore wind farms over offshore ones?
- •A wind farm uses turbines to convert wind into electrical power.
- •Offshore wind farms tend to produce more electricity than farms on land (onshore).
- •Offshore wind farms tend to be more expensive to build and maintain than onshore ones.
- •Muppandal Wind Farm is an onshore wind farm in Tamil Nadu, India.
- **A.** Though they don't produce as much electricity as offshore wind farms, onshore farms are usually cheaper to build and maintain.
- **B.** Tamil Nadu, India, is home to Muppandal Wind Farm.
- **C.** Like other wind farms, Muppandal Wind Farm in Tamil Nadu, India, uses turbines to turn wind power into electricity.
- **D.** Whether onshore or offshore, wind farms harness the power of wind to generate electricity.

24. The student wants to emphasize how popular *The Woman in White* became when it was first published. Which choice most effectively uses relevant information from the notes to accomplish this goal?

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

- •Wilkie Collins's mystery novel *The Woman in White* first appeared in a London literary magazine.
- •The novel was published in forty weekly installments between November 1859 and August 1860.
- •Every installment ended with a moment of unresolved suspense.
- The Woman in White became extremely popular as readers eagerly anticipated the next week's entry.
- •The magazine's sales increased to a record-breaking 100,000 copies per issue.
- **A.** The Woman in White became so popular that sales of the magazine it appeared in increased to a record-breaking 100,000 copies per issue.
- **B.** Every installment of *The Woman in White* ended with a moment of unresolved suspense, which led readers to eagerly anticipate the next week's entry.
- **C.** Collins's novel *The Woman in White* was published in forty weekly installments between November 1859 and August 1860.
- **D.** The Woman in White, a mystery novel, first appeared in a London literary magazine.
- **25.** The student wants to emphasize fluorite's Mohs scale number. Which choice most effectively uses relevant information from the notes to accomplish this goal?

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

- •The Mohs scale of mineral hardness is a ten-point scale that orders minerals by hardness based on their ability to scratch other minerals.
- •Minerals with larger numbers are harder than minerals with smaller numbers and can leave visible scratches on them.
- •Minerals with smaller numbers are softer than minerals with larger numbers and cannot leave visible scratches on them.
- •The mineral gypsum has a Mohs scale number of 2.
- •The mineral fluorite has a Mohs scale number of 4.
- •The mineral quartz has a Mohs scale number of 7.
- **A.** Quartz, which has a Mohs scale number of 7, can scratch both gypsum and fluorite.
- **B.** In the Mohs scale of mineral hardness, guartz (7) is ranked higher than gypsum (2).
- **C.** Fluorite has a Mohs scale number of 4, which means that it is harder than gypsum (2) but softer than quartz (7).
- **D.** Fluorite, gypsum, and quartz can be ordered by their ability to leave visible scratches on other minerals.
- **26.** The student wants to emphasize the aesthetic qualities of SMA by quoting Knight. Which choice most effectively uses relevant information from the notes to accomplish this goal?

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

•Stop motion animation (SMA) is a filmmaking technique that involves manipulating characters (puppets, clay figures, etc.) by hand in minute increments.

- •Each change in position is meticulously captured in a series of images that, when played back, give the illusion of motion.
- •Producer Travis Knight: "It's a process that dates back to the dawn of cinema, with a charm and a warmth and a beauty that other forms of animation...do not have. And because you effectively get one opportunity to get it right, every shot is a high-wire act."
- •Knight: SMA is "raw and it's imperfect. It's also undeniably human."
- **A.** The handmade, "imperfect" look of stop motion animation, says Knight, lends this "undeniably human" technique a "charm and a warmth and a beauty."
- **B.** As Knight says, "you effectively get one opportunity to get it right" when meticulously capturing the series of images that, when played back, give it the illusion of motion.
- **C.** With its puppets and clay figures, stop motion animation, Knight says, "dates back to the dawn of cinema."
- **D.** Stop motion animation is imperfect, making every shot "a high-wire act," Knight says.
- **27.** The student wants to provide a specific example of an isthmus. Which choice most effectively uses relevant information from the notes to accomplish this goal?

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

- •An isthmus is a strip of land that connects two larger pieces of land across an expanse of water.
- •It is also known as a land bridge.
- •The Isthmus of Potidea is located in Greece.
- •It connects the Kassandra Peninsula to mainland Greece.
- A. There is a land bridge in Greece.
- **B.** In Greece, the Kassandra Peninsula is connected to mainland Greece.
- C. One example of an isthmus is the Isthmus of Potidea in Greece.
- **D.** An isthmus, also known as a land bridge, is a strip of land that connects two larger pieces of land across an expanse of water.

Section: Section 2, Module 1: Math, Regular

82. $y = 8x - 3$	
	y=13
What is the solution (x,y) to the given system of equations?	
A. (2, 13)	
B. (8,13)	
c. (13, 2)	
D. (13,8)	

```
83. Triangle PQR is similar to triangle XYZ such that P, Q, and R correspond to X, Y, and Z, respectively. The length of side PQ is 20, and the length of side QR is 18. The length of each side of triangle XYZ is 2 times the length of its corresponding side in triangle PQR. What is the length of side YZ?
A. 9
B. 10
C. 36
D. 40
```

84. A number x is at least twice the value of a number y. If the value of y is 65, which inequality represents the possible values of x? A. $x \geq 63$ B. $x \geq 67$ **c.** $x \ge 130$ D. $x \geq 132$ **85.** The function h is defined by h(x)=4(6x-10). What is the value of h(10)? **A**. 10 **B.** 40 **C**. 60 **D.** 200 **86.** $g(t) = -16t^2 + 176t$ The function g gives the height of a model rocket, in feet, t seconds after it was launched into the air. Which statement is the best interpretation of g(3)=384? A. The height of the model rocket was 384 feet when it was launched into the air. ${f B.}$ The height of the model rocket was 3 feet when it was launched into the air. f c. The height of the model rocket was 3 feet 384 seconds after it was launched into the air. f D. The height of the model rocket was 384 feet 3 seconds after it was launched into the air. 87. Sophia bought confetti and balloons for \$69. Each package of confetti cost \$2, and each balloon cost \$1. If Sophia bought 10 packages of confetti, how many balloons did she buy? **88.** If $\frac{2x+2x}{5} = 88$, what is the value of 4x? **A.** 88 **B**. 220 **c**. 440 **D.** 880 89. A marine biologist uses a linear model to estimate the weight of a blue whale after it is born. The model estimates that a certain blue whale weighs 5,310 pounds at birth and gains 10.0 pounds per hour, for 120 hours, after it is born. Based on this model, what is the estimated weight, in pounds, of this blue whale 3 hours after it is born? **90.** If $\frac{x}{y}=56$ and $\frac{cx}{8y}=56$, what is the value of c? **91.** Which expression is a factor of $81p^{21} - 121p^{19}$? **A.** 9p + 11B. $81p^2 + 121$ C. 11p - 9D. $-40p^{44}$

92.

\boldsymbol{x}	h(x)
0	28
1	29
2	31

For the function h, the table gives three values of x and their corresponding values of h(x). Which equation could define h?

A.
$$h(x)=2^x$$

$$\mathsf{B.}\ h(x) = 2^x + 2$$

$$\mathsf{c.}\ h(x) = 2^x + 26$$

$$\mathbf{p.}\ h(x)=2^x+27$$

93. For the linear function g, the graph of y = g(x) in the xy-plane has a slope of 5 and passes through the point (1,19). Which equation defines g?

A.
$$g(x) = 5x$$

B.
$$g(x) = 5x + 5$$

C.
$$g(x) = 5x + 14$$

D.
$$g(x)=19x$$

94.
$$f(x) = 2(x-1)(x-6)(x-9)$$

If the given function f is graphed in the xy-plane, where y=f(x), what is the x-coordinate of an x-intercept of the graph?

95.
$$y = \frac{10z}{x+4}$$

The given equation relates the positive numbers x, y, and z. Which equation correctly expresses z in terms of x and y?

A.
$$z=rac{xy}{10}$$

B.
$$z = \frac{x+4}{10y}$$

C.
$$z = \frac{10y}{x+4}$$

D.
$$z = \frac{(x+4)y}{10}$$

96. Which equation has no solution?

A.
$$6x + 2 = 2(3x + 1)$$

$$\mathbf{B.}\ 6x + 20 = 2(3x + 4)$$

c.
$$6x + 1 = 3x + 1$$

D.
$$6x + 3 = -6x - 3$$

97.

Number of cars	Maximum number of passengers and crew
4	145
6	213
8	281

The table shows the linear relationship between the number of cars, c, on a commuter train and the maximum number of passengers and crew, p, that the train can carry. Which equation represents the linear relationship between c and p?

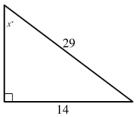
A.
$$34c-p=-9$$

B.
$$34c-p=9$$

C.
$$34p-c=-9$$

D.
$$34p-c=9$$

98.



Note: Figure not drawn to scale.

In the triangle shown, what is the value of $\sin x$?

99. While the mass of an object is the same everywhere, the weight of an object is not the same on different planets. An object has a weight of 70.00 pounds on Earth and a weight of 74.62 pounds on Saturn. The object's weight on Jupiter is 252.8% of its weight on Earth. If the object's weight on Saturn is x% of its weight on Jupiter, which of the following is closest to the value of x?

A. 42.17

в. 69.76

C. 176.96

D. 269.48

100.
$$y = 8(x-2)^2 + 3$$

$$y=8x+3$$

A solution to the given system of equations is (x,y). What is one possible value of xy?

101. The measure of angle S is $\frac{9\pi}{13}$ radians. The measure of angle T is 3 times the measure of angle S. Which expression represents the measure, in **degrees**, of angle T?

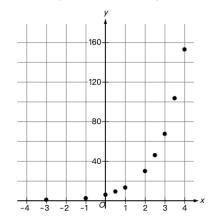
- A. $\frac{9}{13}(90)(3)$
- **B.** $\frac{9}{13}(180)(3)$
- **c**. $\frac{9}{13\pi}(90)(3)$
- **D.** $\frac{9\pi}{13}(180)(3)$

102.
$$8|7-x|+2=82$$

What is the sum of the solutions to the given equation?

- **A**. 14
- **B.** 10
- $\mathbf{C}.-3$
- D.-14

103. The scatterplot shows the relationship between x and y for the 10 data points in data set A.



Data set B is created by multiplying the *y*-value of each data point from data set A by 40. Which of the following equations is the most appropriate model for data set B?

$$\mathbf{A.}\ y = 7{(2.11)}^x$$

B.
$$y = 276(2.11)^x$$

C.
$$y = 7(2.11)^x + 40$$

D.
$$y = 40(2.11)^x + 40$$

Section: Section 2, Module 2: Math, Difficulty: easy

104. What value of p satisfies the equation 6p + 30 = 150?

A. 20

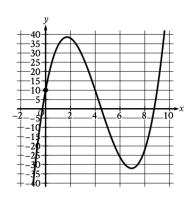
в. 30

c. 114

D. 150

105. A customer spent \$12 to purchase oranges at \$3 per pound. How many pounds of oranges did the customer purchase?

106.



The *y*-intercept of the graph shown is (x,y). What is the value of y?

107. A biodegradable object with a mass of 36 grams started to decompose after being discarded. Each month after the object started to decompose, the remaining mass of the object was approximately 70% of the mass of the preceding month. Which function f gives the approximate remaining mass, in grams, of the object x months after the object started to decompose?

A. $f(x) = 36(0.3)^x$

B. $f(x) = 36(0.7)^x$

c. $f(x) = 36(1.3)^x$

D. $f(x) = 36(1.7)^x$

108. Which expression is equivalent to (8yz)(y)(3z)?

A. $24y^2z^2$

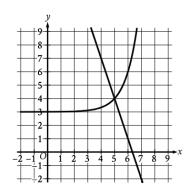
B. $24y^2z$

C. 24yz

D. 16yz

109. The price of an item increased by p% from \$78 to \$81. What is the value of p?

110.



The graph of a system of a linear equation and a nonlinear equation is shown. What is the solution (x,y) to this system?

A. (5, 4)

 $\mathbf{B.}\ (3,0)$

 $\mathbf{C}.(0,5)$

D. (0,0)

111. The function f is defined by $f(x)=x^2+86$. What is the value of f(x) when x=10?

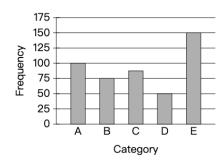
A. -186

B. -14

c. 14

D. 186

112.

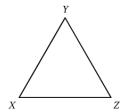


In the bar graph, which category has a frequency that is $\frac{1}{3}$ the frequency of category E?

- A. Category A
- B. Category B
- C. Category C
- D. Category D

113. Each side of a triangle has a length of 27. What is the perimeter of this triangle?

114.



Note: Figure not drawn to scale.

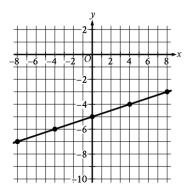
In triangle XYZ shown, segments XY and YZ each have length 128 millimeters. Which statement is sufficient to prove that all three angles in the triangle have equal measure?

- A. Segment XZ has length 64 millimeters.
- ${f B.}$ Segment XZ has length 128 millimeters.
- ${f C}.$ Segment XZ has length 256 millimeters.
- ${f D}.$ Segment XZ has length 384 millimeters.

115.
$$f(r) = 15 + 3r$$

The function f represents the total cost, in dollars, of attending a carnival when r rides are ridden. How many rides can be ridden for a total cost of \$51?

116.



The graph of the linear function f is shown, where y=f(x). What is the slope of the graph of f?

- A. -5
- B. $-\frac{1}{4}$
- C. $\frac{1}{4}$
- **D**. 5

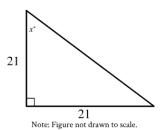
117. Which measure, in **radians**, is equivalent to $(36 \cdot 180)^{\circ}$?

- A. 36π
- B. $\pi + 36$
- **C.** $-\frac{\pi}{36}$
- D. $\pi-36$

118. In an experiment, two solutions are combined such that the volume of the mixture increases at a constant rate of 2.6 milliliters per minute. Which of the following describes the total volume of the mixture as a function of time?

- A. Increasing linear
- B. Decreasing linear
- C. Increasing exponential
- **D.** Decreasing exponential

119.



In the triangle shown, what is the value of x?

- **A.** 21
- **B.** 42
- **C**. 45
- **D**. 69

121. A snack company advertises that bags of pretzels produced by the company weigh, on average, 1 pound each. To test this, Sam selected at random 25 bags of pretzels produced by the company and weighed each bag. Based on his measurements, Sam estimated that for all bags of pretzels produced by the company, the average weight per bag is 1.02 pounds, with a margin of error of 0.03 pounds. For all bags of pretzels produced by the company, which of the following is the most appropriate conclusion about the average weight w, in pounds, per bag?

A. w=1.02

B. $0.99 \leq w \leq 1.02$

 $\mathbf{C.}\ 0.99 \leq w \leq 1.05$

D. $1.02 \leq w \leq 1.05$

122. A rectangle has width w and length ℓ . If the perimeter of the rectangle is greater than 45, which of the following inequalities must be true?

A. $w+\ell < 45$

B. $2w+2\ell<45$

C. $w+\ell>45$

D. $2w+2\ell>45$

123. A rectangle has a length of x units and a width of (x-12) units. If the rectangle has an area of 133 square units, what is the value of x?

A. 7

 $\mathbf{B.}\ 19$

c. 26

D. 133

124. Which expression is equivalent to $(66y)^{\frac{1}{2}}$, where y>1?

A. $66 \cdot \sqrt{y}$

B. $\sqrt{66} \cdot y$

C. $\sqrt{66y}$

D. $\sqrt{(66y)^2}$