

Smarter Balanced Assessment Consortium

Test Prep SBAC

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QUESTION NO: 1

Read the text and answer the question.

Blue Crabs Provide Evidence of Oil Tainting Gulf Food

Weeks ago, before engineers pumped in mud and cement to plug the gusher, scientists began finding specks of oil in crab larvae plucked from waters across the Gulf coast.

The government said last week that three-quarters of the spilled oil has been removed or naturally dissipated from the water. But the crab larvae discovery was an ominous sign that crude had already infiltrated the Gulf's vast food web – and could affect it for years to come.

"It would suggest the oil has reached a position where it can start moving up the food chain instead of just hanging in the water," said Bob Thomas, a biologist at Loyola University in New Orleans.

"Something likely will eat those oiled larvae . . . and then that animal will be eaten by something bigger and so on."

Tiny creatures might take in such low amounts of oil that they could survive, Thomas said. But those at the top of the chain, such as dolphins and tuna, could get fatal "megadoses."

Marine biologists routinely gather shellfish for study. Since the spill began, many of the crab larvae collected have had the distinctive orange oil droplets, said Harriet Perry, a biologist with the University of Southern Mississippi's Gulf Coast Research Laboratory.

"In my 42 years of studying crabs I've never seen this," Perry said.

She wouldn't estimate how much of the crab larvae are contaminated overall, but said about 40 percent of the area they are known to inhabit has been affected by oil from the spill. While fish can metabolize dispersant and oil, crabs may accumulate the hydrocarbons, which could harm their ability to reproduce, Perry said in an earlier interview with Science magazine. She told the magazine there are two encouraging signs for the wild larvae – they are alive when collected and may lose oil droplets when they molt.

Tulane University researchers are investigating whether the splotches also contain toxic chemical dispersants that were spread to break up the oil but have reached no conclusions, biologist Caz Taylor said.

If large numbers of blue crab larvae are tainted, their population is virtually certain to take a hit over the next year and perhaps longer, scientists say. The spawning season occurs between April and October, but the peak months are in July and August.

How large the die-off would be is unclear, Perry said. An estimated 207 million gallons of oil have spewed into the Gulf since an April 20 drilling rig explosion triggered the spill, and thousands of gallons of dispersant chemicals have been dumped.

Scientists will be focusing on crabs because they're a "keystone species" that play a crucial role in the food web as both predator and prey, Perry said.

Richard Condrey, a Louisiana State University oceanographer, said the crabs are "a living repository of information on the health of the environment."

Named for the light-blue tint of their claws, the crabs have thick shells and 10 legs, allowing them to swim and scuttle across bottomlands. As adults, they live in the Gulf's bays and estuaries amid marshes that offer protection and abundant food, including snails, tiny shellfish, plants and even smaller crabs. In turn, they provide sustenance for a variety of wildlife, from redfish to raccoons and whooping cranes.

Adults could be harmed by direct contact with oil and from eating polluted food. But scientists are particularly worried about the vulnerable larvae.

That's because females don't lay their eggs in sheltered places, but in areas where estuaries meet the open sea. Condrey discovered several years ago that some even deposit offspring on shoals miles offshore in the Gulf.

The larvae grow as they drift with the currents back toward the estuaries for a month or longer. Many are eaten by predators and only a handful of the 3 million or so eggs from a single female live to adulthood.

But their survival could drop even lower if the larvae run into oil and dispersants.

"Crabs are very abundant. I don't think we're looking at extinction or anything close to it," said Taylor, one of the researchers who discovered the orange spots.

Still, crabs and other estuary-dependent species such as shrimp and red snapper could feel the effects of remnants of the spill for years, Perry said.

"There could be some mortality, but how much is impossible to say at this point," said Vince Guillory, biologist manager with the Louisiana Department of Wildlife and Fisheries.

Perry, Taylor and Condrey will be among scientists monitoring crabs for negative effects such as population drop-offs and damage to reproductive capabilities and growth rates.

Crabs are big business in the region. In Louisiana alone, some 33 million pounds are harvested annually, generating nearly \$300 million in economic activity, Guillory said.

Blue crabs are harvested year-round, but summer and early fall are peak months for harvesting, Guillory said.

Prices for live blue crab generally have gone up, partly because of the Louisiana catch scaling back due to fishing closures, said Steve Hedlund, editor of SeafoodSource.com, a website that covers the global seafood industry.

Fishers who can make a six-figure income off crabs in a good year now are now idled – and worried about the future.

"If they'd let us go out and fish today, we'd probably catch crabs," said Glen Despaux, 37, who sets his traps in Louisiana's Barataria Bay. "But what's going to happen next year, if this water is polluted and it's killing the eggs and the larvae? I think it's going to be a long-term problem."

Excerpt from "Blue Crabs Provide Evidence of Oil Tainting Gulf Food Web" by John Flesher.

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Read the sentence from the text.

The government said last week that three-quarters of the spilled oil has been removed or naturally dissipated from the water.

What does the use of the word dissipated suggest? (Choose two.)

- A. Some of the spilled oil has left the Gulf waters.
- B. Some of the spilled oil has been made non-toxic.
- C. Some of the spilled oil has intensified in strength.
- D. Some of the spilled oil has separated into smaller parts.
- E. Some of the spilled oil has been consumed by ocean organisms.

ANSWER: A D

Explanation:

In this context, *dissipated* means that the spilled oil dispersed, scattered, or gradually disappeared from the water in its original noticeable concentration. Therefore, "Some of the spilled oil has left the Gulf waters" correctly captures the suggestion that oil was no longer present in the water in the same detectable or concentrated form. The wording pairs "removed" with "naturally dissipated," indicating that some oil was taken away while some was reduced through natural processes rather than remaining as a large, unified slick.

"Some of the spilled oil has separated into smaller parts" is also correct because dissipation can involve material spreading out and breaking into smaller droplets or particles. The passage itself supports this sense: scientists found specks and orange droplets of oil in crab larvae, showing that oil could remain in the ecosystem even after it had dispersed in the water. Dictionary definitions describe *dissipate* as causing something to disappear or scatter in different directions. See the [Merriam-Webster definition of dissipate](#) and the [Cambridge Dictionary definition](#). Thus, the word suggests both departure from the water in a concentrated form and separation into smaller, scattered amounts.

QUESTION NO: 2

A student is writing a persuasive speech for his speech class about the value of fine arts programs in public education, Read the paragraphs from the student's draft and complete the task that follows.

Value of the Arts

Fine arts programs in public education furnish critical thinking. Artists must evaluate their work for form and substance to ensure it accurately represents their vision and make any adjustments that are needed. Musicians must practice their skills continually and evaluate accuracy of their performance.

Arts programs also encourage goal setting. Both artists and musicians must make a vision of what they want their skills to be, and work to achieve that vision. They must constantly evaluate their abilities and decide what they must do to reach their goals. Goal setting is a skill that will be valuable to them not only in the arts, but also in other areas of life.

What are more concrete or specific words to replace the two underlined words? (Choose two.)

- A. promote
- B. provide
- C. supply
- D. establish
- E. implement
- F. start

ANSWER: A D

Explanation:

“promote” is an effective, specific replacement for the underlined word referring to critical thinking because arts programs do not literally hand students critical thinking; instead, participation in visual art and music helps develop and encourage those skills. The examples that follow—evaluating artistic form and substance, practicing, and assessing performance accuracy—show how fine arts programs promote critical-thinking habits. This word also strengthens the persuasive purpose by clearly describing the educational benefit provided by arts instruction.

“establish” is the most precise replacement for the underlined word describing a vision for students’ skills. Students establish a vision or goal by deliberately defining the level of skill they intend to reach. The next sentences support that meaning because students assess their current abilities and determine the actions needed to meet their goals. Together, these revisions make the claims more exact and maintain an appropriate academic tone for a persuasive speech. Selecting precise words and phrases is an expectation of the Common Core language standards, including using words accurately to convey meaning. See the [Common Core Language standards](#) and the [Smarter Balanced Assessment Consortium](#) for assessment and standards context.

QUESTION NO: 3

Read the text attached.

Passage 1

Critical information needed in fight to save wildlife

With global temperatures rising, an international group of 22 top biologists is calling for a coordinated effort to gather important species information that is urgently needed to improve predictions for the impact of climate change on future biodiversity. Current predictions fail to account for important biological factors like species competition and movement that can have a profound influence on whether a plant or animal survives changes to its environment, the scientists say in the September 9 issue of the journal *Science*. While more sophisticated forecasting models exist, much of the detailed species information that is needed to improve predictions is lacking.

“Right now, we’re treating a mouse the same way as an elephant or a fish or a tree. Yet we know that those are all very different organisms and they are going to respond to their environment in different ways,” says University of Connecticut Ecologist Mark Urban, the *Science* article’s lead author. “We need to pull on our boots, grab our binoculars, and go back into the field to gather more detailed information if we are going to make realistic predictions.”

The 22 top biologists affiliated with the article identify six key types of biological information, including life history, physiology, genetic variation, species interactions, and dispersal, that will significantly improve prediction outcomes for individual

species. Obtaining that information will not only help the scientific community better identify the most at-risk populations and ecosystems, the scientists say, it will also allow for a more targeted distribution of resources as global temperatures continue to rise at a record rate.

Current climate change predictions for biodiversity draw on broad statistical correlations and can vary widely, making it difficult for policymakers and others to respond accordingly. Many of those predictions tend not to hold up over time if they fail to account for the full range of biological factors that can influence an organism's survival rate: species demographics, competition from other organisms, species mobility, and the capacity to adapt and evolve.

"We haven't been able to sufficiently determine what species composition future ecosystems will have, and how their functions and services for mankind will change," says co-author Dr. Karin Johst of the Helmholtz Centre for Environmental Research and the German Centre for Integrative Biodiversity Research. "This is because current ecological models often do not include important biological processes and mechanisms: so far only 23 percent of the reviewed studies have taken into account biological mechanisms."

Generating more accurate predictions is essential for global conservation efforts. Many species are already moving to higher ground or toward the poles to seek cooler temperatures as global temperatures rise. But the capacity of different organisms to survive varies greatly. Some species of frog, for instance, can traverse their terrain for miles to remain in a habitable environment. Other species, such as some types of salamander, are less mobile and capable of moving only a few meters over generations.

"New Zealand's strong foundation in ecological research will help," explains study co-author Dr.

William Godsoe, a Lincoln University lecturer and member of New Zealand's Bio-Protection Research Centre. "One of our hopes is to build on these strengths and highlight new opportunities to improve predictions by explicitly considering evolution, interactions among species, and dispersal." This will aid in the development of strategies to manage impacts on species and ecosystems before they become critical.

With more than 8.7 million species worldwide, gathering the necessary biological information to improve predictions is a daunting task. Even a sampling of key species would be beneficial, the authors say, as the more sophisticated models will allow scientists to extrapolate their predictions and apply them to multiple species with similar traits.

The researchers are calling for the launch of a global campaign to be spearheaded by the

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services or IPBES. The IPBES operates under the auspices of four United Nations entities and is dedicated to providing scientific information to policymakers worldwide. One thousand scientists from all over the world currently contribute to the work of IPBES on a voluntary basis. The scientists are also encouraging conservation strategies to support biodiversity such as maintaining dispersal corridors, and preserving existing natural habitats and genetic diversity.

"Our biggest challenge is pinpointing which species to concentrate on and which regions we need to allocate resources," says UConn Associate Professor Urban. In an earlier study in *Science*, Urban predicted that as many as one in six species internationally could be wiped out by climate change. "We are at a triage stage at this point. We have limited resources and patients lined up at the door."

Passage 2

Forecasting climate change's effects on biodiversity hindered by lack of data

An international group of biologists is calling for data collection on a global scale to improve forecasts of how climate change affects animals and plants. Accurate model predictions can greatly aid efforts to protect biodiversity from disturbances such as climate change and urban sprawl by helping scientists and decision-makers better understand, anticipate and respond to threats that imperil species and ecosystems.

In a paper published in *Science* on Thursday (Sept. 8), biologists cite a critical lack of data on key biological mechanisms – such as how animals and plants spread during their lifetime and how they evolve in response to changes in the environment – as the main obstacle to improving models' ability to forecast species' response to climate change.

"This paper is a call to arms," said Patrick Zollner, article co-author and Purdue associate professor of wildlife science. "The world is in dire circumstances. We're losing a lot of species, and we're largely unaware why. How do we need to rethink the kind of data we're collecting so we can take advantage of modern modeling tools to understand the outcomes of climate change for ecological systems? This could help us forestall losing wildlife that we later deeply regret."

The group outlines two key problems that hinder the capability of current models to make realistic predictions about biological responses to climate change.

Most models are descriptive, based on statistical correlations and observations, and fail to capture the underlying processes that produce observed changes. For example, a descriptive model might show that lynx in the northern U.S. are declining while bobcat populations in the same region are on the rise. Understanding what is driving this change requires a different sort of model, one that incorporates biological mechanisms. A mechanistic model that accounts for how warming temperatures affect snow depth, for instance, could provide insights into why bobcats – better adapted to habitats with less snow – are gaining a competitive edge over lynx. But 77 percent of current models of climate change’s impacts on wildlife do not include biological mechanisms.

Another challenge is that as models have grown in sophistication, they have far outpaced data collection. Put another way, a model is like a state-of-the-art kitchen, but the cupboards are bare. “We can now build videogame-like environments with computers where we can create multiple versions of Earth and ask what the implications under different scenarios are,” Zollner said. “But our ability to learn from these tools is constrained by the kinds of data we have.”

The group advanced several proposals on how to improve models, collect missing data and leverage available data to make broader predictions.

They identified six biological mechanisms that influence wildlife’s responses to climate change: physiology; demography and life history; evolutionary potential and adaptation; interactions between species; movement over land or water; and responses to changes in the environment. They ranked the information needed to account for these mechanisms in models and suggested proxies for data that are missing or hard to collect.

A globally coordinated effort to fill data gaps could greatly advance improvements in models and informed conservation approaches, the researchers wrote. They point to the Intergovernmental Panel on Climate Change and its consistent improvements in climate change modeling as a valuable blueprint for such a project.

But local and regional conservation groups need not wait for a global body to coalesce to start using a mechanistic approach in their own region, Zollner said

“If the ideas put forth in this paper start to be adopted and integrated into climate change work in a grass roots way, that could make a big difference in a region and could scale up over time,” he said.

Citizen scientists also have an important role to play in pitching in with data collection, he said.

Working with citizen scientists offers “an opportunity to get huge amounts of data, and it’s foolish not to take advantage of it,” Zollner said. “The data might not be as rigorous and needs to be treated differently, but it’s one more source of valuable information.

What is the effect of the last paragraph of the attached Passage 1 on the overall tone of the text?

- A. It gives a sense of humor with the metaphor of triaging the patients; the reader can imagine all the species of plants and animals lined up in their hospital gowns to be seen by the scientists.
- B. It gives a sense of hope; we can do this if we can pull together and conduct the necessary research.
- C. It gives a sense of urgency with the metaphor about triaging; there is a recognized problem, now we need to figure out how to do something about it before things literally die.
- D. It gives a sense of defeat; we are going to lose “patients” because we can’t act quickly enough with the amount of research and data that we have.

ANSWER: C

Explanation:

It gives a sense of urgency with the metaphor about triaging; there is a recognized problem, now we need to figure out how to do something about it before things literally die. The final paragraph concentrates the passage’s broad concern about climate-change forecasting into an immediate conservation decision: researchers have limited resources, many species face danger, and priorities must be set quickly. The phrase “triage stage” evokes an emergency setting in which professionals must assess numerous patients and decide who needs attention first. By comparing threatened species to “patients lined up at the door,” the author emphasizes that the situation is pressing and that delays can have irreversible consequences. This ending reinforces the passage’s repeated calls for better biological data, more accurate predictions, and targeted allocation of conservation resources. It does not merely present research as an academic goal; it frames that research as necessary for timely action while species and ecosystems remain at risk. The urgent tone is also consistent with global scientific assessments describing climate change as a growing driver of biodiversity loss. See the [IPBES Global Assessment](#) and the [IPCC Sixth Assessment Report, Working Group II](#).

QUESTION NO: 4

Choose the expression equivalent to $(t - 5)^2$.

- A. $t^2 - 25$
- B. $(t - 5)(t + 5)$
- C. $t^2 - 10t + 25$
- D. $t^2 + 10t - 25$

ANSWER: C**Explanation:**

The expression $t^2 - 10t + 25$ is equivalent to $(t - 5)^2$. A squared binomial means the factor is multiplied by itself: $(t - 5)(t - 5)$. Using the distributive property, multiply t by both terms in the second factor to get $t^2 - 5t$. Then multiply -5 by both terms to get $-5t + 25$. Combining the like middle terms, $-5t - 5t$ becomes $-10t$, resulting in $t^2 - 10t + 25$. This follows the standard perfect-square trinomial identity, $(a - b)^2 = a^2 - 2ab + b^2$. Substituting t for a and 5 for b produces $t^2 - 2(t)(5) + 5^2$, which simplifies to $t^2 - 10t + 25$. This expansion preserves the value of the original expression for every value of t . For additional instruction on multiplying binomials and expanding powers, see [Khan Academy's multiplying binomial expressions lesson](#) and [OpenStax Elementary Algebra](#).

QUESTION NO: 5 - (DRAG DROP)

DRAG DROP

Cheryl claims that any irrational number squared will result in a rational number.

Part A

Drag an irrational number into the first response box that when squared will result in a rational number.

Part B

Drag an irrational number into the second response box that when squared will result in an irrational number.

Select and Place:

$$\frac{\sqrt[3]{2}}{\sqrt{3}}$$

$$\frac{\sqrt{3}}{\sqrt{2}}$$

$$\sqrt[3]{2}$$

$$\sqrt{2}$$

$$\pi$$

$$\sqrt{\pi}$$

Part A

$$\boxed{}^2 \boxed{}^2 = \text{rational number}$$

Part B

$$\boxed{}^2 \boxed{}^2 \boxed{}^2 \boxed{}^2 = \text{irrational number}$$

ANSWER:

Delete

$\frac{\sqrt[3]{2}}{\sqrt{3}}$

Part A

$\frac{\sqrt{3}}{\sqrt{2}}$

²

$\sqrt{2}$

²

= rational number

$\sqrt{3}$

$\sqrt{2}$

$\sqrt[3]{2}$

π

$\sqrt{\pi}$

Part B

$\frac{\sqrt[3]{2}}{\sqrt{3}}$

²

$\sqrt[3]{2}$

²

π

²

$\sqrt{\pi}$

²

= irrational number

Explanation:

The completed placement correctly sorts each irrational expression according to whether squaring it produces a rational or irrational result. In the rational-result section, squaring $\sqrt{2}$ gives 2. Because 2 is an integer, it is rational. Squaring $\sqrt{3}/\sqrt{2}$ gives $(\sqrt{3}/\sqrt{2})^2 = 3/2$. A ratio of two integers with a nonzero denominator is rational, so this also belongs in the rational-result section. These examples show that Cheryl's claim is not always true: some irrational numbers do have rational squares.

In the irrational-result section, $(\sqrt[3]{2}/\sqrt[3]{3})^2$ is $\sqrt[3]{4/9}$, which remains irrational, and $(\sqrt[3]{2})^2$ is $\sqrt[3]{4}$, which is also irrational. The value π squared is π^2 , an irrational value. Finally, $(\sqrt{\pi})^2$ equals π , which is irrational. Therefore, the displayed arrangement correctly places the two irrational values that become rational after squaring in the first group and the four irrational values that remain irrational after squaring in the second group.

This relies on the distinction between rational numbers, which can be written as a quotient of integers, and irrational numbers, which cannot. For background on these number sets, see [Khan Academy's explanation of irrational numbers](#).

QUESTION NO: 6

FILL BLANK

Read the text and answer the question.

Moving to the Back of Beyond

When my parents said the three of us were moving out to California, to a place just north of Los Angeles, my mind immediately went to thoughts of Disneyland and Hollywood, glitz and glamour. I imagined a Rodeo Drive shopping spree to pick out a bikini for the endless days I would be spending on the beach. However, I'd forgotten about my parents' penchant for the unconventional; they're definitely "the road less traveled" kind of people. Mom had a gopher snake for a pet when she was younger, and Dad was never happier than when he was climbing near-vertical cliffs that only mountain goats could love. These are not city folk.

They had chosen to buy a 900-square-foot cabin under a 250-year-old oak tree in the high chaparral¹ forest out in the back of beyond – so far away from Los Angeles that you couldn't even see the glow of the lights at night. When I first saw where we were going to live, I vacillated between feeling terrified and excited. This would be an adventure, for sure. But this was no camping trip where you could go home to civilization after a few days of roughing it; this was home, and roughing it was the new normal.

On move-in day, we drove fifteen miles out from Antelope Valley – where the nearest grocery store was located – on a two-lane road past llamas, cattle, and horses. Up and up we went, until finally we turned down a dirt road and headed into a canyon full of towering Coulter pines, bluegreen sagebrush, and ancient canyon live oaks. I didn't know the names of these plants then, of course; I learned them later. That first day all I saw then was a million shades of green.

We parked under an oak tree that shaded our cabin and a front yard of rock, sand, and sagebrush twice as large as the cabin itself. On the stone staircase that led to the front door, black lizards interrupted their push-ups to twist their heads and eye us as we passed. Scrub jays squawked and hummingbirds zoomed past the eaves, scolding us with their territorial calls.

No cars roared past. No radios blared from a neighbor's house. There were no neighbors – no human neighbors, anyway.

Our new home consisted of one bedroom, one bathroom, and one big room for everything else. A fireplace in the corner of the big room would be our sole source of heat in the winter. A swamp box (cooler) would blow a breeze over a big damp pad to keep us cool all summer, or so my father said. But it was early autumn that day, and the temperature was perfect in the shade of the oak tree. Our oak tree, I thought; I was settling in.

Mom wiped a layer of grime off the kitchen counter and muttered about getting a bottle of bleach on our next trip into town. That was the beginning of an important lesson about living in the back of beyond: you don't just zip over to the local convenience store anytime you need something out here. You have to make a careful list and check it twice so that you don't forget anything, because anywhere is a long way from here.

On my first walk around the property, I saw two horned toads, a red-tailed hawk, and some deer tracks. I wondered what else I might find deeper and higher in the canyon. Dad told me the real estate agent had mentioned that coyotes, bobcats, mountain lions, rattlesnakes, and even bears roamed these hills. To my surprise, I found I couldn't wait to see them. All of them. I felt my feet taking root in the earth, claiming this place as home.

With no street lamps timed to turn on at sunset, when night came it was darker than anything I had ever experienced. Mom and I went out to look at the stars while Dad tried to unplug the ancient toilet. In the city, or even in the suburbs where I had lived before, you could see only the brightest stars in the sky. But out here, it was like being in a planetarium, except there were no labels typed onto our sky. The sheer number and spread of stars was awe-inspiring.

That first night, we slept on air mattresses on the living room floor because the movers had not yet arrived. There were no curtains on the windows, so when the moon rose, it shone in as if moonbeams were an integral part of the cabin.

Eventually, I moved into the bedroom and Mom and Dad got a foldout bed for the living room. Over the next few months, I began to count the passage of time in full moons rather than by the pages of a calendar, and for the first time I really noticed the days growing shorter in winter and longer in summer.

It's hard to believe, but we've been here for six years now. I've been going to school in the valley, but I feel most at home up here with my wild fellow canyon dwellers. Soon, I will have to leave home for college, and I'm a little afraid of the culture shock I'm sure I will feel when I move back to civilization. Soon I'll be walking on pavement and well-mowed grass again, rooming with strangers, and eating meals in a cafeteria crowded with more people than live within twenty miles of this house. But I know I will come back. The back of beyond is home now.

1. chaparral: a dense thicket of shrubs and small trees

Click the two sentences that best support the inference that the narrator's expectations before the move were based on a kind of fantasy.

When my parents said the three of us were moving out to California, to a place just north of Los Angeles, my mind immediately went to thoughts of Disneyland and Hollywood, glitz and glamour. I imagined a Rodeo Drive shopping spree to pick out a bikini for the endless days I would be spending on the beach. However, I'd forgotten about my parents' penchant for the unconventional; they're definitely "the road less traveled" kind of people. Mom had a gopher snake for a pet when she was younger, and Dad was never happier than when she was younger, and Dad was never happier than when he was climbing near-vertical cliffs that only mountain goats could love. These are not city folk.

A. See explanation below.

B. When my parents said the three of us were moving out to California, to a place just north of Los Angeles, my mind immediately went to thoughts of Disneyland and Hollywood, glitz and glamour.

C. I imagined a Rodeo Drive shopping spree to pick out a bikini for the endless days I would be spending on the beach.

ANSWER: B C

Explanation:

The sentences “When my parents said the three of us were moving out to California, to a place just north of Los Angeles, my mind immediately went to thoughts of Disneyland and Hollywood, glitz and glamour” and “I imagined a Rodeo Drive shopping spree to pick out a bikini for the endless days I would be spending on the beach” directly reveal that the narrator has formed an idealized, entertainment-driven picture of California. Disneyland, Hollywood, Rodeo Drive, glamorous shopping, beaches, and endless sunny days are images associated with popular culture and tourism rather than evidence about the family’s actual destination or lifestyle. The narrator’s word choice, especially “immediately,” shows that these images are an automatic assumption rather than a conclusion based on facts. Together, the sentences support the inference that the narrator is imagining a fantasy version of the move: a luxurious, sunny Southern California experience. This is a text-evidence task because the selected details explicitly show the narrator’s thoughts before arriving. Smarter Balanced English language arts assessment materials emphasize using relevant textual evidence to support inferences and interpretations; see the [Smarter Balanced ELA/Literacy assessment information](#) and the [Common Core Reading Literature standards](#).

QUESTION NO: 7

Read the text and answer the question.

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With no street lamps timed to turn on at sunset, when night came it was darker than anything I had ever experienced. Mom and I went out to look at the stars while Dad tried to unplug the ancient toilet. In the city, or even in the suburbs where I had lived before, you could see only the brightest stars in the sky. But out here, it was like being in a planetarium, except there were no labels typed onto our sky. The sheer number and spread of stars was awe-inspiring.

That first night, we slept on air mattresses on the living room floor because the movers had not yet arrived. There were no curtains on the windows, so when the moon rose, it shone in as if moonbeams were an integral part of the cabin.

Eventually, I moved into the bedroom and Mom and Dad got a foldout bed for the living room. Over the next few months, I began to count the passage of time in full moons rather than by the pages of a calendar, and for the first time I really noticed the days growing shorter in winter and longer in summer.

It's hard to believe, but we've been here for six years now. I've been going to school in the valley, but I feel most at home up here with my wild fellow canyon dwellers. Soon, I will have to leave home for college, and I'm a little afraid of the culture shock I'm sure I will feel when I move back to civilization. Soon I'll be walking on pavement and well-mowed grass again, rooming with strangers, and eating meals in a cafeteria crowded with more people than live within twenty miles of this house. But I know I will come back. The back of beyond is home now.

1. chaparral: a dense thicket of shrubs and small trees

Read the sentence from the text.

When I first saw where we were going to live, I vacillated between feeling terrified and excited.

What does the author communicate to the reader with the use of “vacillated?” (Choose three.)

- A. The narrator's emotions were in conflict.
- B. The narrator had trouble deciding how to feel.
- C. The narrator was scared and thrilled at the same time.
- D. The narrator kept changing her mind about the situation.
- E. The narrator stopped being scared and began to feel happy.

ANSWER: A B D

Explanation:

The narrator's emotions were in conflict, the narrator had trouble deciding how to feel, and the narrator kept changing her mind about the situation. The word *vacillated* means to waver or oscillate between different opinions, choices, or feelings. In this context, the narrator moves back and forth between terror at the isolated, unfamiliar cabin and excitement about the adventure it may offer. The phrase “between feeling terrified and excited” directly identifies the two opposing emotional responses, while *vacillated* communicates that neither feeling remains settled or final. The surrounding details reinforce this uncertainty: the new home is far from town and requires a major adjustment, yet its wilderness also promises discovery and adventure. Therefore, the word conveys an internal struggle in which the narrator alternates between contrasting reactions and cannot immediately form one fixed response. This meaning aligns with the dictionary definition of *vacillate* as wavering in mind, will, or feeling. See [Merriam-Webster's definition of “vacillate”](#) and [Cambridge Dictionary's definition of “vacillate”](#).

QUESTION NO: 8

Of the six basic trigonometric function graphs, which two do not show asymptotes?

- A. sine and cosine
- B. sine and secant
- C. tangent and cotangent
- D. cosine and cotangent

ANSWER: A

Explanation:

The correct answer is **sine and cosine**. The sine function, $(y=\sin x)$, and the cosine function, $(y=\cos x)$, are defined for every real value of (x) . Their graphs repeat smoothly and continuously, with outputs restricted to the interval from (-1) to (1) . Because neither function requires division by an expression that can become zero, there are no input values at which the function becomes undefined or grows without bound. Therefore, their graphs have no vertical asymptotes.

More generally, vertical asymptotes in trigonometric graphs occur at input values where a function is undefined and its values approach positive or negative infinity. Since sine and cosine remain finite and continuous across the entire real-number domain, they do not exhibit this behavior. Their periodic waves simply continue indefinitely to the left and right while staying within their fixed range. This is a key visual distinction when identifying the six basic trigonometric graphs. For additional reference, see [OpenStax Precalculus: Angles](#) and [Khan Academy: Trigonometric function graphs](#).

QUESTION NO: 9

Read the text and answer the question.

Blue Crabs Provide Evidence of Oil Tainting Gulf Food

Weeks ago, before engineers pumped in mud and cement to plug the gusher, scientists began finding specks of oil in crab larvae plucked from waters across the Gulf coast.

The government said last week that three-quarters of the spilled oil has been removed or naturally dissipated from the water. But the crab larvae discovery was an ominous sign that crude had already infiltrated the Gulf's vast food web – and could affect it for years to come.

"It would suggest the oil has reached a position where it can start moving up the food chain instead of just hanging in the water," said Bob Thomas, a biologist at Loyola University in New Orleans.

"Something likely will eat those oiled larvae . . . and then that animal will be eaten by something bigger and so on."

Tiny creatures might take in such low amounts of oil that they could survive, Thomas said. But those at the top of the chain, such as dolphins and tuna, could get fatal "megadoses."

Marine biologists routinely gather shellfish for study. Since the spill began, many of the crab larvae collected have had the distinctive orange oil droplets, said Harriet Perry, a biologist with the University of Southern Mississippi's Gulf Coast Research Laboratory.

"In my 42 years of studying crabs I've never seen this," Perry said.

She wouldn't estimate how much of the crab larvae are contaminated overall, but said about 40 percent of the area they are known to inhabit has been affected by oil from the spill. While fish can metabolize dispersant and oil, crabs may accumulate the hydrocarbons, which could harm their ability to reproduce, Perry said in an earlier interview with Science magazine. She told the magazine there are two encouraging signs for the wild larvae – they are alive when collected and may lose oil droplets when they molt.

Tulane University researchers are investigating whether the splotches also contain toxic chemical dispersants that were spread to break up the oil but have reached no conclusions, biologist Caz Taylor said.

If large numbers of blue crab larvae are tainted, their population is virtually certain to take a hit over the next year and perhaps longer, scientists say. The spawning season occurs between April and October, but the peak months are in July and August.

How large the die-off would be is unclear, Perry said. An estimated 207 million gallons of oil have spewed into the Gulf since an April 20 drilling rig explosion triggered the spill, and thousands of gallons of dispersant chemicals have been dumped.

Scientists will be focusing on crabs because they're a "keystone species" that play a crucial role in the food web as both predator and prey, Perry said.

Richard Condrey, a Louisiana State University oceanographer, said the crabs are "a living repository of information on the health of the environment."

Named for the light-blue tint of their claws, the crabs have thick shells and 10 legs, allowing them to swim and scuttle across bottomlands. As adults, they live in the Gulf's bays and estuaries amid marshes that offer protection and abundant food,

including snails, tiny shellfish, plants and even smaller crabs. In turn, they provide sustenance for a variety of wildlife, from redfish to raccoons and whooping cranes.

Adults could be harmed by direct contact with oil and from eating polluted food. But scientists are particularly worried about the vulnerable larvae.

That's because females don't lay their eggs in sheltered places, but in areas where estuaries meet the open sea. Condrey discovered several years ago that some even deposit offspring on shoals miles offshore in the Gulf.

The larvae grow as they drift with the currents back toward the estuaries for a month or longer. Many are eaten by predators and only a handful of the 3 million or so eggs from a single female live to adulthood.

But their survival could drop even lower if the larvae run into oil and dispersants.

"Crabs are very abundant. I don't think we're looking at extinction or anything close to it," said Taylor, one of the researchers who discovered the orange spots.

Still, crabs and other estuary-dependent species such as shrimp and red snapper could feel the effects of remnants of the spill for years, Perry said.

"There could be some mortality, but how much is impossible to say at this point," said Vince Guillory, biologist manager with the Louisiana Department of Wildlife and Fisheries.

Perry, Taylor and Condrey will be among scientists monitoring crabs for negative effects such as population drop-offs and damage to reproductive capabilities and growth rates.

Crabs are big business in the region. In Louisiana alone, some 33 million pounds are harvested annually, generating nearly \$300 million in economic activity, Guillory said.

Blue crabs are harvested year-round, but summer and early fall are peak months for harvesting, Guillory said.

Prices for live blue crab generally have gone up, partly because of the Louisiana catch scaling back due to fishing closures, said Steve Hedlund, editor of SeafoodSource.com, a website that covers the global seafood industry.

Fishers who can make a six-figure income off crabs in a good year now are now idled – and worried about the future.

"If they'd let us go out and fish today, we'd probably catch crabs," said Glen Despaux, 37, who

sets his traps in Louisiana's Barataria Bay. "But what's going to happen next year, if this water is polluted and it's killing the eggs and the larvae? I think it's going to be a long-term problem." Excerpt from "Blue Crabs Provide Evidence of Oil Tainting Gulf Food Web" by John Flesher.

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How does the last paragraph affect the presentation of information? (Choose three.)

- A. It illustrates the possible economic effects of the Gulf oil spill.
- B. It makes the report more personal by showing its effects on one individual.
- C. It provides a contrasting point of view to those expressed earlier in the text.
- D. It reinforces the idea that the oil contamination in the Gulf will have long-lasting effects.
- E. It summarizes the main types of damage scientists have identified in the Gulf ecosystem.
- F. It provides predictions about the length of time scientists expect the effects of the oil spill to last.

ANSWER: A B D

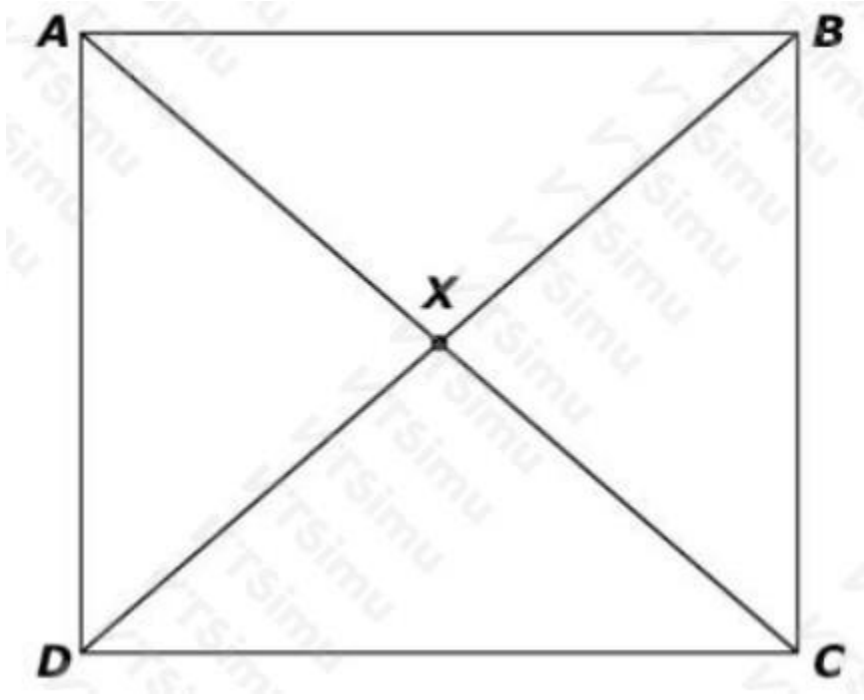
Explanation:

The final paragraph illustrates the possible economic effects of the Gulf oil spill by connecting contamination of crab eggs and larvae to a working crab fisher's ability to continue harvesting in future seasons. The article has already established that blue crabs support substantial regional economic activity; the closing quotation makes the potential loss tangible through the concern of someone whose livelihood depends on the fishery. It also makes the report more personal by showing its effects on one individual. Glen Despaux's first-person words shift the presentation from scientific observations and expert

projections to a direct human response from a local fisher affected by closures and uncertainty. Finally, it reinforces the idea that the oil contamination in the Gulf will have long-lasting effects. His concern specifically extends to “next year” and identifies harm to eggs and larvae, linking the article’s scientific discussion of vulnerable early life stages with a possible continuing problem for crab populations and fishing communities. This use of a concluding firsthand quotation develops how the text’s ideas and evidence are presented, consistent with the reading expectation to analyze how particular sentences or sections contribute to a text’s development. See the [Common Core RI.8.5 standard](#) and the [Smarter Balanced Assessment Consortium](#).

QUESTION NO: 10

Consider parallelogram ABCD with point X at the intersection of diagonal segments AC and BD.



Evelyn claims that ABCD is a square. Choose all statements that must be true for Evelyn’s claim to be true.

- A. $AB = BD$
- B. $AD = AB$
- C. $AC = BX$
- D. $m\angle ABC \neq 90^\circ$
- E. $m\angle AXB = 90^\circ$

ANSWER: B E

Explanation:

A square is both a rectangle and a rhombus. Therefore, all four sides have equal length, so the adjacent sides represented by $\overline{AD} = \overline{AB}$ must be congruent. This follows directly from the defining side-length property of a square. In addition, a square’s diagonals are perpendicular. Since X is the point where diagonal AC intersects diagonal BD, segment AX lies along AC and segment BX lies along BD. Thus, the angle formed by AX and BX, $\angle AXB$, must measure 90° . These facts are consistent with standard square properties: a square has four congruent sides and diagonals that intersect at right angles. The fact that ABCD is already identified as a parallelogram provides the usual opposite-side and diagonal-bisection relationships, while the stated equal-side and perpendicular-diagonal properties are necessary consequences when that parallelogram is specifically a square. See the [Math Is Fun quadrilaterals reference](#) and [Khan Academy’s parallelogram properties reference](#).

QUESTION NO: 11

FILL BLANK

Read the text and answer the question.

Moving to the Back of Beyond

When my parents said the three of us were moving out to California, to a place just north of Los Angeles, my mind immediately went to thoughts of Disneyland and Hollywood, glitz and glamour. I imagined a Rodeo Drive shopping spree to pick out a bikini for the endless days I would be spending on the beach. However, I'd forgotten about my parents' penchant for the unconventional; they're definitely "the road less traveled" kind of people. Mom had a gopher snake for a pet when she was younger, and Dad was never happier than when he was climbing near-vertical cliffs that only mountain goats could love. These are not city folk.

They had chosen to buy a 900-square-foot cabin under a 250-year-old oak tree in the high chaparral¹ forest out in the back of beyond – so far away from Los Angeles that you couldn't even see the glow of the lights at night. When I first saw where we were going to live, I vacillated between feeling terrified and excited. This would be an adventure, for sure. But this was no camping trip where you could go home to civilization after a few days of roughing it; this was home, and roughing it was the new normal.

On move-in day, we drove fifteen miles out from Antelope Valley – where the nearest grocery store was located – on a two-lane road past llamas, cattle, and horses. Up and up we went, until finally we turned down a dirt road and headed into a canyon full of towering Coulter pines, bluegreen sagebrush, and ancient canyon live oaks. I didn't know the names of these plants then, of course; I learned them later. That first day all I saw then was a million shades of green.

We parked under an oak tree that shaded our cabin and a front yard of rock, sand, and sagebrush twice as large as the cabin itself. On the stone staircase that led to the front door, black lizards interrupted their push-ups to twist their heads and eye us as we passed. Scrub jays squawked and hummingbirds zoomed past the eaves, scolding us with their territorial calls.

No cars roared past. No radios blared from a neighbor's house. There were no neighbors – no human neighbors, anyway.

Our new home consisted of one bedroom, one bathroom, and one big room for everything else. A fireplace in the corner of the big room would be our sole source of heat in the winter. A swamp box (cooler) would blow a breeze over a big damp pad to keep us cool all summer, or so my father said. But it was early autumn that day, and the temperature was perfect in the shade of the oak tree. Our oak tree, I thought; I was settling in.

Mom wiped a layer of grime off the kitchen counter and muttered about getting a bottle of bleach on our next trip into town. That was the beginning of an important lesson about living in the back of beyond: you don't just zip over to the local convenience store anytime you need something out here. You have to make a careful list and check it twice so that you don't forget anything, because anywhere is a long way from here.

On my first walk around the property, I saw two horned toads, a red-tailed hawk, and some deer tracks. I wondered what else I might find deeper and higher in the canyon. Dad told me the real estate agent had mentioned that coyotes, bobcats, mountain lions, rattlesnakes, and even bears roamed these hills. To my surprise, I found I couldn't wait to see them. All of them. I felt my feet taking root in the earth, claiming this place as home.

With no street lamps timed to turn on at sunset, when night came it was darker than anything I had ever experienced. Mom and I went out to look at the stars while Dad tried to unplug the ancient toilet. In the city, or even in the suburbs where I had lived before, you could see only the brightest stars in the sky. But out here, it was like being in a planetarium, except there were no labels typed onto our sky. The sheer number and spread of stars was awe-inspiring.

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Eventually, I moved into the bedroom and Mom and Dad got a foldout bed for the living room. Over the next few months, I began to count the passage of time in full moons rather than by the pages of a calendar, and for the first time I really noticed the days growing shorter in winter and longer in summer.

It's hard to believe, but we've been here for six years now. I've been going to school in the valley, but I feel most at home up here with my wild fellow canyon dwellers. Soon, I will have to leave home for college, and I'm a little afraid of the culture shock I'm sure I will feel when I move back to civilization. Soon I'll be walking on pavement and well-mowed grass again, rooming with strangers, and eating meals in a cafeteria crowded with more people than live within twenty miles of this house. But I know I will come back. The back of beyond is home now.

1. chaparral: a dense thicket of shrubs and small trees

The reader can conclude that the narrator is open to living at “the back of beyond” and accepts her new life there.

Click three sentences that best support this conclusion.

Our new home consisted of one bedroom, one bathroom, and one big room for everything else. A fireplace in the corner of the big room would be our sole source of heat in the winter. A swamp box (cooler) would blow a breeze over a big damp pad to keep us cool all summer, or so my father said. But it was early autumn that day, and the temperature was perfect in the shade of the oak tree. Our oak tree, I thought; I was settling in.

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- A. Our oak tree, I thought; I was settling in.
- B. To my surprise, I found I couldn’t wait to see them.
- C. I felt my feet taking root in the earth, claiming this place as home.

ANSWER: A B C

Explanation:

“Our oak tree, I thought; I was settling in.” directly shows a change in the narrator’s attitude. Calling the oak tree “our” tree expresses ownership and belonging, while “settling in” explicitly signals that the narrator is becoming comfortable in the isolated cabin rather than merely tolerating it. “To my surprise, I found I couldn’t wait to see them.” provides equally strong evidence of openness: after hearing that potentially frightening wild animals live nearby, the narrator responds with anticipation and curiosity. This reaction shows that the unfamiliar natural setting has become exciting rather than threatening. “I felt my feet taking root in the earth, claiming this place as home.” is the clearest support because the image of roots conveys a deep, lasting connection to the land, and the sentence explicitly identifies the place as home. Together, these details trace the narrator’s acceptance of the back-country lifestyle through feelings of belonging, enthusiasm, and attachment. Selecting precise textual evidence that supports an inference aligns with the Smarter Balanced English language arts claim concerning reading and interpreting literary texts. See the [Smarter Balanced ELA assessment overview](#) and the [Common Core literature reading standards](#).

QUESTION NO: 12

Which of these equations is false?

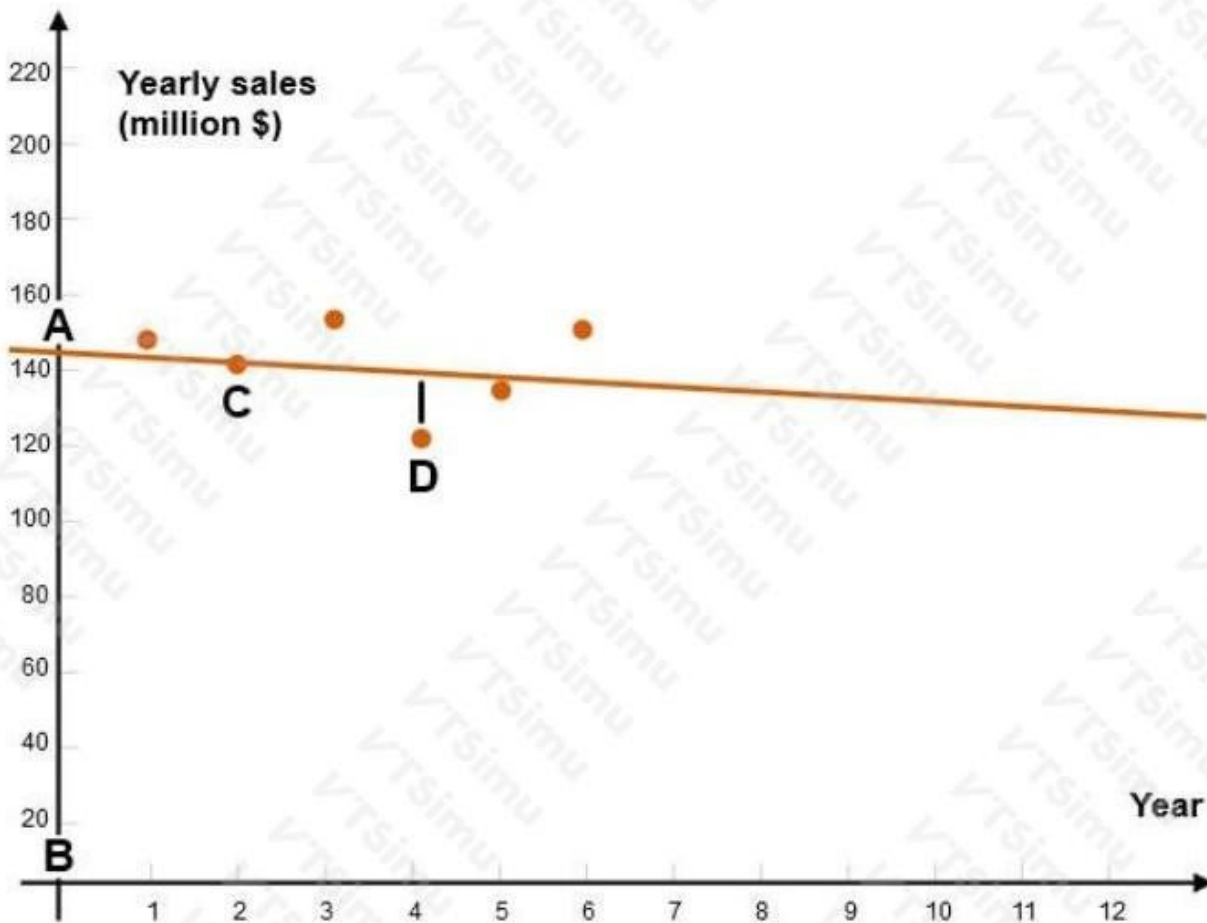
- A. $\sin(110^\circ) = \sin(-250^\circ)$
- B. $\sin(300^\circ) = \sin(-420^\circ)$
- C. $\tan(30^\circ) = \tan(570^\circ)$
- D. $\cos(40^\circ) = \cos(140^\circ)$

ANSWER: D

Explanation:

The equation **$\cos(40^\circ) = \cos(140^\circ)$** is false. The cosine function has the symmetry identity $\cos(180^\circ - \theta) = -\cos(\theta)$. Since 140° is equal to $180^\circ - 40^\circ$, its cosine is the negative of $\cos(40^\circ)$, not the same value. Numerically, $\cos(40^\circ)$ is approximately 0.766, whereas $\cos(140^\circ)$ is approximately -0.766 . The two values have equal magnitude but opposite signs because 40° lies in the first quadrant, where cosine is positive, while 140° lies in the second quadrant, where cosine is negative. Therefore, these angles do not produce equal cosine values. This result follows directly from the unit-circle definition of cosine as the horizontal coordinate: reflecting an angle across the vertical axis changes the sign of its horizontal coordinate.

QUESTION NO: 13



Students in a business class are studying the performance of XYZ Widgets over the past 6 years. This is a scatterplot of yearly sales and a linear model trend line of the data. Several students are predicting the performance of the company in year 7. Which of these is not a reasonable interpretation of the attached model?

- A. They are showing steady growth after the problem year and so they should make about 150 million dollars.
- B. The result 3 years ago is unusual for this company. Except for that year, they have been making about 140 million dollars each year and so that is what they will make next year.
- C. The trend is slightly negative, so they will make about 138 million dollars.
- D. Next year they will make 180 million dollars. They already had a really bad year and so they are due for a really good year.

ANSWER: D

Explanation:

“Next year they will make 180 million dollars. They already had a really bad year and so they are due for a really good year.” is not a reasonable interpretation because a prediction from a scatterplot and linear trend line must be based on the pattern represented by the model. The model summarizes the overall association between year and sales and can be extended cautiously to estimate a likely value for the next year. A single unusually low sales year does not create a mathematical requirement that the following or a later year must be unusually high. Saying the company is “due” for a good year substitutes an unsupported belief about chance for evidence from the data and does not use the displayed linear relationship to justify the estimate of 180 million dollars. Interpreting a trend line requires using its direction and position to make an

approximate prediction, while recognizing that actual sales may vary around that prediction. This aligns with the Smarter Balanced mathematics content emphasis on using a linear model to interpret data and make predictions. See the [Smarter Balanced Mathematics Content Specifications](#) and the [NCTM Data Analysis and Probability standards](#).

QUESTION NO: 14

FILL BLANK

Student Directions

Mandatory Financial Literacy Classes Argumentative Performance Task

Task:

In your economics class, you are discussing the importance of making smart financial decisions. Your teacher tells you that, in some school districts, students are required to take a financial literacy class before graduating. Your school board is hosting a meeting to decide whether to offer such a course for graduation, and wants students to contribute their perspectives. As part of your initial research, you have found four sources about financial literacy classes.

After you have reviewed these sources, you will answer some questions about them. Briefly scan the sources and the three questions that follow. Then, go back and read the sources carefully so you will have the information you will need to answer the questions and finalize your research. You may click on the Global Notes button to take notes on the information you find in the sources as you read. You may also use scratch paper to take notes.

In Part 2, you will write an argumentative essay on a topic related to the sources.

Directions for Beginning:

You will now examine several sources. You can re-examine any of the sources as often as you like.

Research Questions:

After looking at the sources, use the rest of the time in Part 1 to answer three questions about them. Your answers to these questions will be scored. Also, your answers will help you think about the information you have read and looked at, which should help you write your argumentative essay.

You may click on the Global Notes button or refer back to your scratch paper to look at your notes when you think it would be helpful. Answer the questions in the spaces below the items.

Both the Global Notes on the computer and your written notes on scratch paper will be available to you in Part 1 and Part 2 of the performance task.

Part 1

Sources for Performance Task:

Source #1

This article, from April 9, 2010, is from the New York Times, and is about the potential benefits of financial literacy courses.

Working Financial Literacy in With the Three R's by Tara Siegel Bernard

Most Americans aren't fluent in the language of money. Yet we're expected to make big financial decisions as early as our teens— Should I take on thousands of dollars of student debt? Should I buy a car? – even though most of us received no formal instruction on financial matters until it was too late.

While no course in personal finance could have prevented many Americans from getting caught up in the housing bubble¹, it's clear that most of us need some help, preferably starting when we're still in school. And I'm not just talking about learning to balance your checkbook. Its understanding concepts like the time value of money, risk and reward, and, yes, the importance of savings.

All of this raises the question: What's happening inside our classrooms? And how many schools even broach the topic? As it turns out, for a country that prizes personal responsibility, we're doing very little.

"We need to teach the basics of economics and finances so people can make financial decisions in a changing world," said Annamaria Lusardi, economics professor at Dartmouth College and a research associate at the National Bureau of

Economic Research. "It's the compounding of interest², the problem of inflation³. These are the principles. And these are really scientific topics."

While more states are beginning to require some sort of personal finance instruction, there aren't enough that do, financial literacy experts say, and there is little consistency in the quality of the education. Just 13 states require students to take a personal finance course or include the subject in an economics course before they graduate from high school, up from seven states in 2007, according to the Council for Economic Education. Meanwhile, 34 states (including those 13) have personal finance within their curriculum guidelines, up from 28 states in 2007...

But that hasn't stopped enterprising teachers like Mathew Frost, who teaches 11th and 12th graders American history and economics at Sunset High School in Dallas, from working the topic into his student's school day. The Texas economics curriculum carves out time for personal finance, but it doesn't test students on the material. Mr. Frost says it's just too important to ignore. So he tries to bring the lesson to life for his students by pairing them up as married couples and giving them a couple of children. The students must then create a budget based on the average income range for their neighborhood, or about \$21,000 to \$40,000 a year. As in the board game "Life," the students are dealt real-world circumstances.

Mr. Frost has them randomly pick "chance cards" from a bag, which might tell them they need new brakes for their car, broke an arm, suffered a death in the family, or found \$20.

"I try to make it as realistic as possible," he said. "We talk about building budgets, expenses, investing money," he added, as well as "how to use credit wisely, insurance and careers."

One of his students later wrote about the experience. The 11th grader, who simulated life with a wife and two children on \$21,000 a year, told of balancing needs versus wants, trying to find an apartment in a safe neighborhood that fit the family budget, and the effect of an unexpected rent increase on their savings.

"I first learned that real life isn't going to be as nice as this game," he said. "I also learned that good budgeting has to be maintained throughout a person's life no matter the income, no matter the living conditions."

Research shows that this type of financial education tends to resonate with the students later.

Michael S. Gutter, an assistant professor of family financial management at the University of Florida, studied the issue in 2009, after he surveyed 15,700 students at 15 universities who came from states with different (or nonexistent) personal finance schooling requirements. The study was financed by the National Endowment for Financial Education, a nonprofit organization in Denver that provides financial education curriculums.

"College students who came from states where there was a course required were more likely to budget, were more likely to be saving, and were less likely to have maxed out their credit cards in the last year and were more likely to be paying off their credit cards fully," Professor Gutter said. But his research also suggested that "social learning is also very powerful as well," he said. "What your parents tell you matters."

"It's hard because there is no silver bullet to get this into every school," said Matthew Yale, deputy chief of staff to Education Secretary Arne Duncan. "It's not as simple as saying, 'We're going to institute this in the 100,000 public schools in America.' But our plan for reauthorization does make room for financial literacy in schools, which is a really big, big deal." Mr. Yale was referring to the Obama administration's plan to revise the Elementary and Secondary Education Act, commonly known as No Child Left Behind.

He said the Department of Education's next step is to work with districts and teachers and help them find the money they need, whether it's through the many literacy-minded nonprofits or the private sector. Mr. Yale also said that department officials were working on competitive grant programs, which would allow schools to compete for money to pay for the financial literacy programs. As a joint effort with the Treasury Department, the Education Department is currently running the National Financial Capability Challenge, an online exam for high school students that measures financial know-how and recognizes outstanding performers, to help raise awareness.

President Bush created the first Advisory Council on Financial Literacy in 2008, and President

Obama plans to assemble his own team. In its annual report, the first council recommended that Congress or state legislatures mandate financial education in all schools

for students in kindergarten through 12th grade. But the new administration follows through with that recommendation? Mr. Yale said education officials were "not interested in introducing unfunded mandates."

So what can we do? According to Scott Truelove, who teaches personal finance as part of a workstudy program for seniors at Chesterton High School in Indiana, "It will take a parent movement."

Mr. Truelove has already seen the power of financial education in his school's hallways, where a student told him and another personal finance teacher that she set up a Roth 1.R.A.* given what she learned in class.

"That, to me, is huge," Mr. Truelove said.

1ousing bubble: when housing prices rapidly increase to unsustainable levels and then collapse 2compound interest: interest paid on both the original amount of money invested and on the interest it has already earned

3inflation: a general increase in prices that decrease the purchasing power of money

4"Roth I.R.A.: a type of individual retirement account

Bernard Siegal, Tara. (2010, April 9). Working

Financial Literacy in With the Three R's. The New York

Times. Retrieved from <http://www.nytimes.com/2010/04/10/your-money/10money.html>

Source #2

In this article from February 6, 2009, the Chicago Tribune discusses problems with financial literacy education.

Financial Education Leaving Americans Behind by Greg Burns

With so many personal finance decisions turning into disasters, a chorus of voices is singing the praises of financial-literacy education.

Make every American a financial whiz, the thinking goes, and credit bubbles never will bedevil us again.

Trouble is, growing evidence suggests that financial-literacy courses don't work. Worse, they may actually hurt, in part by making their graduates overconfident about limited skills.

Few want to hear that message, according to Lauren Willis, a professor at Loyola Law School in Los Angeles, whose recent paper, "Against Financial Literacy

Education," shook up all sorts of vested interests. . . .

Plenty of people make a living off these courses, and lawmakers love them, since they give the impression that something is being done about the intractable problem of financial ignorance.

Utah, Missouri, and Tennessee require students to take a semester-long personal-finance class before graduating from high school. Illinois and 16 other states incorporate financial education into other subjects—by decree, of course.

The Indiana Senate this month approved a bill that would require "personal financial responsibility" to be taught from kindergarten through high school. Its sponsor described it as an appropriate response to "difficult times." Other states are mulling expanded mandates

These measures don't affect only youth. Adults face similar obligatory instruction when they seek bankruptcy protection or, in some cases, apply for loans.

Academics have known for years about the scant evidence in support of the programs, but few are willing to go as far as Willis in bluntly denouncing them as a counterproductive racket."

She cites examples, such as the high school students who took a semester-long personal finance course and tested worse than those who didn't. Or the graduates of retirement-planning classes who thought their literacy had increased, when their financial test scores had not.

Now comes a study from Harvard Business School raising more doubts. Using rigorous methodology, it concluded that programs in widespread use during the past two decades were no use at all.

"They weren't effective in changing people's financial decisions," said Shawn Cole, one of two professors behind the report, titled "If You Are So Smart, Why Aren't You Rich?"

"We find no effect," he said. "My gut feeling is that teaching math or statistics would be more useful."

Still, Cole believes it may be possible to design an effective program. That's a common theme among those who favor financial education: Just because no one has proven these courses work is no reason to give up searching for the right formula.

Willis has other ideas. She wants to forget about making Americans capable of handling their credit and investment needs – most will never get there, especially given the fast-moving, complicated nature of financial services.

She favors pro-consumer regulation and one-on-one counseling with unbiased advisers. Sure, those could be tough to come by. But no one said saving Americans from themselves would be easy.

1 racket: a dishonest scheme or business activity

Burns, Greg. (2009, February 6). Financial Education Leaving Americans Behind. Chicago Tribune. Retrieved from http://articles.chicagotribune.com/2009-02-16/news/0902150143_1_financial-literacy-financial-literacy-education-financial-ignorance.

Source #3

This October 6, 2013 article from the New York Times is about the drawbacks of financial literacy courses, and what the research shows about teaching financial literacy skills.

Financial Literacy, Beyond the Classroom by Richard

H. Thaler

Even if we grade on a very generous curve, many Americans flunk when it comes to financial literacy. Consider this three-item quiz:

- Suppose you had \$100 in a savings account and the interest rate was 2 percent a year. After five years, how much do you think you would have if you left the money to grow? More than \$102, exactly \$102 or less than \$102?
- Imagine that the interest rate on your savings account was 1 percent a year and that inflation was 2 percent. After one year, would you be able to buy more than, the same as, or less than you could today with the money?
- Do you think this statement is true or false: "Buying a single company stock usually provides a safer return than a stock mutual fund"?

Anyone with even a basic understanding of compound interest, inflation and the answers to these questions are "than" and "false." Yet in a survey of Americans over age 50 conducted by the economists Annamaria Lusardi of George Washington University and Olivia S Mitchell of the Wharton School of the University of Pennsylvania, only a third could answer all three questions correctly.

This is particularly troubling given the inherent complexity of our modern economy. Whether in taking out a student loan, buying a house, or saving for retirement, people are being asked to make decisions that are difficult even if they have graduate training in finance and economics. Throwing the financially illiterate into that maelstrom is like taking students currently enrolled in driver's education and asking them to compete in the Indianapolis 500.

A popular approach to this problem is to work harder to improve financial literacy – for example, by including household finance in the basic high school curriculum. One reason to think this solution will have big payoffs is that people who are more knowledgeable about financial matters, as measured by a test, perform better at tasks like saving for retirement and staying out of debt. This may seem a straightforward argument in support of financial literacy courses. Unfortunately, it isn't.

The problem is that measured financial literacy is highly correlated with other factors, most notably higher education in general, so it's hard to sort out causes. (The ability to solve the Sunday crossword puzzle is probably also positively correlated with good financial outcomes.) So to see whether a financial education curriculum is likely to pay dividends, we should review specific efforts to shore up financial skills in those who are deficient, and not just measure what people already know.

A new paper by three business school professors – Daniel Fernandes of Erasmus University in the Netherlands and the Catholic University of Portugal, John

G. Lynch Jr. of the University of Colorado, and Richard Netemeyer of the University of Virginia – presents a discouraging assessment of attempts to teach people how to deal with money. Their article uses a technique called meta-analysis," looking at results from 168 scientific studies of efforts to teach people to be financially astute, or at least less clueless.

The authors' conclusions are clear: over all, financial education is laudable,* but not particularly helpful. Those who receive it do not perform noticeably better when it comes to saving more, for example, or avoiding ruinous debt. . . .

Don't get me wrong. I am all for trying to teach household finance in schools, starting as early as possible. And when it comes to high school, I think learning about compound interest is at least as important as trigonometry or memorizing the names of all 50 state capitals. If we try enough approaches, and evaluate what works, we may improve such programs'

effectiveness. But we shouldn't fool ourselves into thinking that adding a household finance class to a high school curriculum will in itself create knowledgeable consumers who can understand today's wide array of financial products.

...In the meta-analysis, even the most time-intensive programs – those with more than 24 hours of education and training, almost the length of a college course – had no discernible effects just two years later.

It would be premature to conclude that all efforts at improving financial literacy are futile. But it is a fair conclusion that simply doing more of the training commonly used now will not produce significant results. So what else might we try? Although no approach offers a panacea,⁴ three types of efforts seem worthy of more attention.

The first is what Professor Lynch, one of the authors of the meta-analysis, calls just-in-time education.

Because learning decays quickly, it's best to provide assistance just before a decision is made. High school seniors should receive help in how to think about a student loan and how to make sure that the education bought with the loan offers good prospects for repayment. Just-in-time education can be offered at other crucial moments—when taking out a mortgage or figuring out when to retire. But unless such education is compulsory, many of the consumers most in need of help don't take advantage of it. And we need to be sure not to confuse self-serving marketing⁵ with objective advice.

Another approach is to offer simple rules of thumb to help people cope. Because few people can calculate how much they need to save for a comfortable retirement, it might help to offer simple guidelines like “invest as much as possible in your 401(k), plan H 6 “save 15 percent of your income,” or “get a 15-year mortgage if you are over 50.”

One example comes from a field experiment involving microentrepreneurs⁷ in the Dominican Republic. Of those who expressed an interest in receiving help, some were offered training in basic accounting principles while others were given simple rules of thumb. The accounting education did not have apparent effects, but simple rules – like keeping personal money and business money in separate drawers – led to better outcomes. This seemingly trivial concept helped small-business owners keep better track of how their businesses were faring.

The third approach, and the one I believe offers the best prospects of immediate help, is to make our financial system more user-friendly. You don't need to be a computer scientist to use a smartphone. If we made choosing a suitable mortgage as easy as checking the weather in Timbuktu, fewer households would find themselves underwater* when real estate markets tumble...

The same principle can be used in other areas, from credit cards to checking accounts. The financial services industry – either on its own or as required by government regulators – needs to find ways to make it easier for people to make sound decisions. And those financial firms that engage in fraudulent practices should be prosecuted and stopped.

1diversification: investing in different assets in order to minimize risk

2meta-analysis: an analysis of several separate but similar studies to determine if an observed effect is not due to chance alone

3laudable: praiseworthy

4panacea: a solution or remedy for all difficulties or diseases

5self-serving marketing: surveys, top 10 lists, and technical papers that contain seemingly useful consumer information but are being used as a marketing strategy

6401(k) plan: a retirement savings plan in which deductions are automatically made from an employee's paycheck before taxes are deducted and that are sometimes matched by the employer

7microentrepreneur: operator of a microenterprise, or very small business; microenterprises typically employ fewer than ten people and have relatively low start-up costs

8 underwater: when an individual owes more on a loan than the market value of the loan; this term is typically applied to home mortgages

Thaler, Richard

H. (2013, October 6). Financial Literacy, Beyond the Classroom. New York Times. Retrieved from <http://www.nytimes.com/2013/10/06/business/financial-literacy-beyond-theclassroom.html>.

Source #4

This article, from October 15, 2006, is from the Baltimore Sun and is about concerns surrounding mandated financial literacy classes.

While Carroll County students will be required to take a financial literacy course to graduate starting next year, concerns linger over whether mandating the course is the most effective way to teach money matters to teens.

"The course is likely a good thing, but I am convinced it is not the best thing," school board President Thomas

G. Hiltz said last week. "One course is not a panacea and, alone, will not make our students financially literate."

After a lengthy debate about requiring the class, board members voted 4-1 to require students beginning next school year to take the half-credit course. It will cover concepts such as money management, consumer rights and responsibilities, credit, savings, and investing.

Carroll joins a handful of Maryland school systems – including Harford, St. Mary's, Talbot and Baltimore counties—with a similar requirement.

The financial course was one of several changes to the high school program of studies that the board approved.

During last week's meeting, Hiltz joined Cynthia L. Foley in supporting a motion to amend the proposal that would have eliminated financial literacy as a required course. The motion to amend failed in a 3-2 vote.

Foley was the lone dissenter¹ when the original proposal came to a vote. Hiltz said he voted to approve the high school program of studies that included the financial literacy requirement because he supported the overall plan.

"While it did not turn out the way I may have wanted... unless I believe there has been an egregious mistake in judgment, a vote against the entire high school program of studies is, in my view, sour grapes," Hiltz said in an email.

During the meeting, Hiltz suggested the board needed more time to consider alternatives, such as incorporating elements of the course into already required classes or developing a comprehensive "financial literacy program," not a single course.

Hiltz also said a required course would necessitate about 10 teachers each year and cost the system about \$600,000 annually.

"My overwhelming concern is not cost – it is effectiveness," Hiltz said. "The \$600,000 is a low cost if the course is effective. An effective course will return that investment. It is a high cost if it is ineffective."

School officials said statistics suggest teens and young adults are assuming too much credit card debt and are not knowledgeable about finances.

About one in five students gets a personal finance course during high school, according to the JumpStart Coalition for Personal Financial Literacy, which surveys high school seniors every other year to gauge financial aptitude.

Of the 5,775 high school seniors in 37 states who participated in that survey this year, students on average scored 52.4 percent on 30 questions, according to the group.

A 2004 poll of college administrators found that excessive credit card debt was the primary reason students dropped out and the secondary reason was low grades, according to the Maryland Coalition for Financial Literacy.

Carroll school officials said last week that in a "pre-test" given to about 30 students taking the financial literacy elective this semester, the highest score was about 60 percent—with some students scoring much lower.

"Personal finances are not being taught in the home," said Patricia Hummel, a parent who also teaches financial literacy at Winters Mill High as a permanent substitute. "Studies have shown that only 26 percent of 13- to 21-year-olds reported that their parents actively taught them how to manage money."

Hummel supported a required financial literacy course because, "unless this class is mandated, students will not take advantage of the class."

Hiltz said that while the district has piloted [tested] a financial literacy course, no local data has been collected on its effectiveness.

"We all agree that financial literacy is essential," he said. "The lack of a real consideration of other options ... troubled me greatly. I am concerned that we picked low-hanging fruit, which may be the most expensive and least effective option."

¹dissenter: someone who disagrees with a particular view

Davis, Gina. (2006, October 15). Finance Course Prompts Debate. Baltimore Sun. Retrieved from http://articales.baltimoresun.com/2006-10-15/news/0610140104_1_hiltz-high-school-programfinancial-literacy.

Paraphrase information from Source #1 that refutes information from Source #2 without plagiarizing.

A. See explanation below.

B. Source #1 reports that college students from states requiring personal-finance classes were more likely to budget and save, while being less likely to max out credit cards and more likely to pay their balances in full.

ANSWER: B

Explanation:

The response should paraphrase evidence from Source #1 that directly challenges Source #2's claim that financial-literacy instruction does not improve financial behavior. Source #1 reports a University of Florida study of 15,700 college students from states with differing high-school personal-finance requirements. The study found that students who had been required to take such a course were more likely to make budgets and save money. They were also less likely to have reached their credit-card limits and were more likely to pay their credit-card balances in full. This is a strong refuting detail because it describes measurable financial behaviors associated with required coursework, rather than merely repeating an opinion that classes are valuable.

A complete answer should express this evidence in fresh language and identify the source. It may also clearly connect the study's findings to the opposing claim, although the central requirement is to paraphrase relevant information from Source #1 without copying the source's wording. The original article is available through [The New York Times](#). For broader context on financial education research and evaluation, see the [Consumer Financial Protection Bureau's financial well-being research](#).

QUESTION NO: 15

Which of these sentences uses the passive voice?

- A. The band played as the students shuffled into the auditorium.
- B. Our principal addressed the student body at the beginning of the assembly.
- C. Students from all over campus walked quickly to the auditorium for the assembly.
- D. Carlos' speech was read by him during the assembly.

ANSWER: D

Explanation:

"Carlos' speech was read by him during the assembly." uses passive voice. In a passive construction, the subject receives the action rather than performing it. Here, "Carlos' speech" is the grammatical subject, and it receives the action of being read. The verb phrase "was read" combines a form of *be* ("was") with the past participle "read," which is the standard structure for the passive voice. The phrase "by him" identifies the agent—the person who actually performed the reading—while keeping the focus on the speech itself. This focus is useful when the result, object, or recipient of an action is more important to the sentence than the person carrying out the action. The sentence could be expressed in active voice as "He read Carlos' speech during the assembly," but the passive version foregrounds the speech. For additional guidance on recognizing passive-voice verb forms, see the [Purdue Online Writing Lab's overview of active and passive voice](#) and [George Mason University Writing Center's passive-voice guide](#).

QUESTION NO: 16

Read the text and answer the question.

Blue Crabs Provide Evidence of Oil Tainting Gulf Food

Weeks ago, before engineers pumped in mud and cement to plug the gusher, scientists began finding specks of oil in crab larvae plucked from waters across the Gulf coast.

The government said last week that three-quarters of the spilled oil has been removed or naturally dissipated from the water. But the crab larvae discovery was an ominous sign that crude had already infiltrated the Gulf's vast food web—and could affect it for years to come.

"It would suggest the oil has reached a position where it can start moving up the food chain instead of just hanging in the water," said Bob Thomas, a biologist at Loyola University in New Orleans.

"Something likely will eat those oiled larvae . . . and then that animal will be eaten by something bigger and so on."

Tiny creatures might take in such low amounts of oil that they could survive, Thomas said. But those at the top of the chain, such as dolphins and tuna, could get fatal "megadoses."

Marine biologists routinely gather shellfish for study. Since the spill began, many of the crab larvae collected have had the distinctive orange oil droplets, said Harriet Perry, a biologist with the University of Southern Mississippi's Gulf Coast Research Laboratory.

"In my 42 years of studying crabs I've never seen this," Perry said.

She wouldn't estimate how much of the crab larvae are contaminated overall, but said about 40 percent of the area they are known to inhabit has been affected by oil from the spill. While fish can metabolize dispersant and oil, crabs may accumulate the hydrocarbons, which could harm their ability to reproduce, Perry said in an earlier interview with Science magazine. She told the magazine there are two encouraging signs for the wild larvae—they are alive when collected and may lose oil droplets when they molt.

Tulane University researchers are investigating whether the splotches also contain toxic chemical dispersants that were spread to break up the oil but have reached no conclusions, biologist Caz Taylor said.

If large numbers of blue crab larvae are tainted, their population is virtually certain to take a hit over the next year and perhaps longer, scientists say. The spawning season occurs between April and October, but the peak months are in July and August.

How large the die-off would be is unclear, Perry said. An estimated 207 million gallons of oil have spewed into the Gulf since an April 20 drilling rig explosion triggered the spill, and thousands of gallons of dispersant chemicals have been dumped.

Scientists will be focusing on crabs because they're a "keystone species" that play a crucial role in the food web as both predator and prey, Perry said.

Richard Condrey, a Louisiana State University oceanographer, said the crabs are "a living repository of information on the health of the environment."

Named for the light-blue tint of their claws, the crabs have thick shells and 10 legs, allowing them to swim and scuttle across bottomlands. As adults, they live in the Gulf's bays and estuaries amid marshes that offer protection and abundant food, including snails, tiny shellfish, plants and even smaller crabs. In turn, they provide sustenance for a variety of wildlife, from redfish to raccoons and whooping cranes.

Adults could be harmed by direct contact with oil and from eating polluted food. But scientists are particularly worried about the vulnerable larvae.

That's because females don't lay their eggs in sheltered places, but in areas where estuaries meet the open sea. Condrey discovered several years ago that some even deposit offspring on shoals miles offshore in the Gulf.

The larvae grow as they drift with the currents back toward the estuaries for a month or longer. Many are eaten by predators and only a handful of the 3 million or so eggs from a single female live to adulthood.

But their survival could drop even lower if the larvae run into oil and dispersants.

"Crabs are very abundant. I don't think we're looking at extinction or anything close to it," said Taylor, one of the researchers who discovered the orange spots.

Still, crabs and other estuary-dependent species such as shrimp and red snapper could feel the effects of remnants of the spill for years, Perry said.

"There could be some mortality, but how much is impossible to say at this point," said Vince Guillory, biologist manager with the Louisiana Department of Wildlife and Fisheries.

Perry, Taylor and Condrey will be among scientists monitoring crabs for negative effects such as population drop-offs and damage to reproductive capabilities and growth rates.

Crabs are big business in the region. In Louisiana alone, some 33 million pounds are harvested annually, generating nearly \$300 million in economic activity, Guillory said.

Blue crabs are harvested year-round, but summer and early fall are peak months for harvesting, Guillory said.

Prices for live blue crab generally have gone up, partly because of the Louisiana catch scaling back due to fishing closures, said Steve Hedlund, editor of SeafoodSource.com, a website that covers the global seafood industry.

Fishers who can make a six-figure income off crabs in a good year now are now idled – and worried about the future.

"If they'd let us go out and fish today, we'd probably catch crabs," said Glen Despaux, 37, who sets his traps in Louisiana's Barataria Bay. "But what's going to happen next year, if this water is polluted and it's killing the eggs and the larvae? I think it's going to be a long-term problem." Excerpt from "Blue Crabs Provide Evidence of Oil Tainting Gulf Food Web" by John Flesher.

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Choose the two sentences from the text that best support the inference that blue crabs may be less impacted by the oil spill than some scientists predict.

- A. Tiny creatures might take in such low amounts of oil that they could survive, Thomas said.
- B. "In my 42 years of studying crabs I've never seen this", Perry said.
- C. She told the magazine there are two encouraging signs for the wild larvae—they are alive when collected and may lose oil droplets when they molt.
- D. "Crabs are very abundant. I don't think we're looking at extinction or anything close to it," said Taylor, one of the researchers who discovered the orange spots.
- E. Still crabs and other estuary-dependent species such as shrimp and red snapper could feel the effects of remnants of the spill for years, Perry said.

ANSWER: C D

Explanation:

"She told the magazine there are two encouraging signs for the wild larvae—they are alive when collected and may lose oil droplets when they molt." directly supplies evidence that the oil's effects may not be as severe as feared. Larvae remaining alive after exposure indicates that contamination has not necessarily caused immediate death. In addition, the possibility that larvae shed oil droplets while molting supports the reasonable inference that some contamination may lessen as the crabs develop. Both details point to potential recovery or survival despite contact with oil.

"Crabs are very abundant. I don't think we're looking at extinction or anything close to it," said Taylor, one of the researchers who discovered the orange spots." also supports a less dire prediction. The scientist acknowledges the oil evidence while stating that the large abundance of blue crabs makes an extreme population outcome unlikely. This is relevant evidence because it addresses the likely scale of the spill's long-term effect on the species rather than merely documenting exposure. Selecting textual evidence that directly supports an inference aligns with the reading expectation to cite evidence that supports conclusions drawn from a text; see the [Common Core reading evidence standard](#) and the [Smarter Balanced assessment overview](#).

QUESTION NO: 17

A student is writing a research report about the Iditarod Trail and annual dogsled race in northern Alaska. Read the paragraphs from her report and the directions that follow.

Alaska's Iditarod National Historic Trail has a long and rich history of travel and trade routes, including during the Gold Rush of the nineteenth century. Located close to the Arctic Circle, the one-thousand-mile trail system is known for its rugged terrain and harsh winters. But it is primarily known for the internationally famous Iditarod Trail Sled Dog Race, commonly referred to as simply the Iditarod. The Iditarod was founded in the 1970s by a few Alaskans determined to commemorate the state's rich history of dogsledding and to honor a famous event: the halt of a serious diphtheria epidemic in 1925, when a crucial medical serum was delivered by dogsled to the Alaskan citizens in need.

'The Iditarod is an epic challenge for man and man's best friend: it's a grueling 1150-mile trek from Anchorage to Nome, Alaska. Although held in early spring, the conditions are extremely harsh. Each team consists of a human captain (also called a musher) leading a team of more than a dozen sled dogs—mostly Siberian Huskies, Alaskan Malamutes, or Eskimo Dogs. Together, they brave frigid conditions, including frozen tundra and icy forests. "The Last Great Race on Earth," as it is also called, starts during the first week in March with teams generally reaching home in 10-15 days.

Choose two credible sources that would most likely give the student more information for her paragraphs.

A. "Snow Huskies" Commercial Film

This 1998 PG-13 film is a heartwarming tale about a team of ragtag Alaskan Malamutes who save their owner's ranch by winning the nation's premier dogsled race.

B. www.northernparks.com

This website has information about all of Alaska's state parks for tourists planning a visit to the country's largest state.

C. www.racetheiditarod.com

Our business will provide you with all the information you will need to race in the Iditarod. Let our team of experts help you register your dogs, find local veterinarians, and secure housing and supplies.

D. Balto: Our Hero by C.R. Benson

This book, first published in 1957 by children's literature author C.R. Benson, tells the true dramatic tale of Balto, the lead sled dog in a race against time to deliver serum during the 1925 diphtheria epidemic in Nome, Alaska.

E. "The Iditarod Trail Dog Sled Race"

United States Geographical Society www.usgeog.com/iditarod

In celebration of its 100-year history of documenting our planet's uniqueness, our staff ventured to the 49th state to cover the Iditarod. This article chronicles the history of one of the most grueling competitions in the world, nicknamed "The Last Great Race."

F. "MUSH! Alaska's Most Challenging Race"

Documentary Film

This 2007 six-hour miniseries documentary by award-winning filmmaker, Bernard Kerns, details the history and route of the famous Iditarod.

ANSWER: E F

Explanation:

"The Iditarod Trail Dog Sled Race" is a strong source because it is presented as an article from a geographical organization whose staff researched and documented the event. Its stated focus on the race's history and its coverage of the competition known as "The Last Great Race" directly support the report's discussion of the Iditarod's origins, historical significance, difficult conditions, and annual event. "MUSH! Alaska's Most Challenging Race" is also appropriate because it is a documentary miniseries specifically devoted to the history and route of the Iditarod. A long-form documentary by an identified, award-winning filmmaker can provide detailed visual and historical information about the trail, its terrain, the race route, and the experiences of mushers and sled dogs. Together, these sources address both central topics in the report: the historical background of the trail and the modern dogsled race. For factual research, the student can corroborate details about the historic trail through the [National Park Service's Iditarod National Historic Trail resource](#) and race-related facts through the [Iditarod Trail Committee's race overview](#).

QUESTION NO: 18

Read the story attached.

"Roughing It" by Mark Twain

My brother had just been appointed Secretary of Nevada Territory – an office of such majesty that it concentrated in itself the duties and dignities of Treasurer, Comptroller, Secretary of State, and Acting Governor in the Governor's absence. A salary of eighteen hundred dollars a year and the title of "Mr. Secretary," gave to the great position an air of wild and imposing grandeur. I was young and ignorant, and I envied my brother. I coveted his distinction and his financial splendor, but particularly and especially the long, strange journey he was going to make, and the curious new world he was going to explore. He was going to travel! I never had been away from home, and that word "travel" had a seductive charm for me. Pretty soon he would be hundreds and hundreds of miles away on the great plains and deserts, and among the mountains of the Far West, and would see buffaloes and Indians, and prairie dogs, and antelopes, and have all kinds of adventures, and

may be get hanged or scalped, and have ever such a fine time, and write home and tell us all about it, and be a hero. And he would see the gold mines and the silver mines, and maybe go about of an afternoon when his work was done, and pick up two or three pailfuls of shining slugs, and nuggets of gold and silver on the hillside. And by and by he would become very rich, and return home by sea, and be able to talk as calmly about San Francisco and the ocean, and “the isthmus” as if it was nothing of any consequence to have seen those marvels face to face.

What I suffered in contemplating his happiness, pen cannot describe. And so, when he offered me, in cold blood, the sublime position of private secretary under him, it appeared to me that the heavens and the earth passed away, and the firmament was rolled together as a scroll! I had nothing more to desire. My contentment was complete.

At the end of an hour or two I was ready for the journey. Not much packing up was necessary, because we were going in the overland stage from the Missouri frontier to Nevada, and passengers were only allowed a small quantity of baggage apiece. There was no Pacific railroad in those fine times of ten or twelve years ago – not a single rail of it. I only proposed to stay in Nevada three months—I had no thought of staying longer than that. I meant to see all I could that was new and strange, and then hurry home to business. I little thought that I would not see the end of that three-month pleasure excursion for six or seven uncommonly long years! I dreamed all night about Indians, deserts, and silver bars, and in due time, next day, we took shipping at the St. Louis wharf on board a steamboat bound up the Missouri River. We were six days going from St. Louis to “St. Jo.” – a trip that was so dull, and sleepy, and eventless that it has left no more impression on my memory than if its duration had been six minutes instead of that many days. No record is left in my mind, now, concerning it, but a confused jumble of savage-looking snags, which we deliberately walked over with one wheel or the other; and of reefs which we butted and butted, and then retired from and climbed over in some softer place; and of sand-bars which we roosted on occasionally, and rested, and then got out our crutches and sparred over.

In fact, the boat might almost as well have gone to St. Jo. by land, for she was walking most of the time, anyhow – climbing over reefs and clambering over snags patiently and laboriously all day long. The captain said she was a “bully” boat, and all she wanted was more “shear” and a bigger wheel. I thought she wanted a pair of stilts, but I had the deep sagacity not to say so.

What is most likely the author’s intent in mentioning the difficult time when traveling from St. Louis to “St. Jo”?

- A. to show he now regrets accepting the offer to travel with his brother to Nevada Territory
- B. to show that riverboat captains were often unprepared for the hidden dangers in the rivers they navigated, which meant there were unnecessary delays
- C. to show the difficulty and drudgery of traveling in those days, which is juxtaposed against the excitement and anticipation he felt about the opportunity to travel earlier on in the passage
- D. to show how much railways eased the travel burden (Whereas the boat he traveled on kept getting caught on the sandbars and river bottom, making progress slow, a railroad would have sped up the trip immensely.)

ANSWER: C

Explanation:

The author mentions the slow, tedious steamboat trip to emphasize the contrast between his earlier romantic expectations of travel and its unglamorous reality. Before leaving, the narrator imagines the journey as a thrilling entrance into a world of plains, mountains, adventures, mines, and heroic possibilities. His language conveys youthful eagerness: travel has a “seductive charm,” and he expects new and strange sights. The account of the trip from St. Louis to “St. Jo.” deliberately shifts that tone. Six days are described as “dull, and sleepy, and eventless,” while the vessel repeatedly struggles with snags, reefs, and sandbars. The humorous comparison that the boat was practically “walking” makes the physical difficulty and monotony especially vivid. This juxtaposition supports Twain’s characteristic use of comic exaggeration and retrospective narration: a journey anticipated as exciting begins with inconvenience, delay, and drudgery. It also helps establish the realistic hardships involved in western travel before the transcontinental railroad. The passage appears in the opening of Twain’s *Roughing It*, available through [Project Gutenberg](#). This reading of author’s purpose aligns with Smarter Balanced reading expectations that students use details from a literary text to determine how an author develops ideas, as described in the [Smarter Balanced English language arts assessment resources](#).

QUESTION NO: 19 - (HOTSPOT)

HOTSPOT

Michael took 12 tests in his math class. His lowest test score was 78. His highest test score was 98. On the 13th test, he earned a 64. Choose whether the value of each statistic for his test scores increased, decreased, or could not be determined when the last test score was added.

Hot Area:

	Standard Deviation	Median	Mean
Increased	☐	☐	☐
Decreased	☐	☐	☐
Could Not Be Determined	☐	☐	☐

ANSWER:

	Standard Deviation	Median	Mean
Increased	☒	☐	☐
Decreased	☐	☐	☒
Could Not Be Determined	☐	☒	☐

Explanation:

Adding the score of 64 affects each measure in a specific way. The mean decreases because 64 is below every one of Michael's original 12 scores, which ranged from 78 to 98. Since the added value is below the original mean, including it in the total and then dividing by 13 produces a lower average. This is a standard property of the arithmetic mean: adding a value below the current average pulls the average downward. For a review of mean and its behavior, see [Khan Academy's mean, median, and mode review](#).

The standard deviation increases. Before the new score was added, all scores were between 78 and 98. The score of 64 lies below that entire original range, so it introduces a value that is substantially farther from the center of the data than the earlier low score. This makes the scores more spread out overall. Standard deviation measures the typical distance of data values from their mean, so adding this low, more distant score increases the spread. The meaning of standard deviation as a measure of variability is described by [NIST's Engineering Statistics Handbook](#).

The median could not be determined from the information provided. With 12 original scores in order, the median is the average of the sixth and seventh scores. After inserting 64 at the beginning of the ordered list, there are 13 scores and the median becomes the sixth score from the original list. That value may be lower than the former average of the sixth and seventh scores, or it may equal it if those two middle original scores were the same. Because the individual scores are not given, the exact change in the median cannot be known.

QUESTION NO: 20

This list is meant to be increasing in value from top to bottom. Which two values are out of place?

a) $\log_2 25$ b) $\log_{310}$ c) $\log_{28}$ d) $\log_{999}$ e) $\log_{465}$

A. b, c

B. d, e

C. c, d

D. a, b

E. a, d

ANSWER: E**Explanation:**

The correct pair is **a, d**. Evaluating the logarithms approximately shows the intended increasing order. The values are: $\log_2 25 \approx 4.644$, $\log_3 10 \approx 2.096$, $\log_2 8 = 3$, $\log_9 99 \approx 2.091$, and $\log_4 65 \approx 3.012$. The entries that are already in their proper relative increasing order are $\log_3 10$, $\log_2 8$, and $\log_4 65$, since $2.096 < 3 < 3.012$. The two remaining values must be repositioned: $\log_9 99$ belongs just before $\log_3 10$ because it is slightly smaller, while $\log_2 25$ belongs after $\log_4 65$ because it is the largest value. Thus, removing a and d leaves the correctly increasing subsequence, and placing those two values in their appropriate positions gives the complete order $\log_9 99$, $\log_3 10$, $\log_2 8$, $\log_4 65$, $\log_2 25$. Logarithms can be compared by evaluating them with the change-of-base formula, $\log_b(x) = \ln(x)/\ln(b)$, as described by [Khan Academy's change-of-base lesson](#) and [the change-of-base formula reference](#).

QUESTION NO: 21

Read the story attached.

“Roughing It” by Mark Twain

My brother had just been appointed Secretary of Nevada Territory – an office of such majesty that it concentrated in itself the duties and dignities of Treasurer, Comptroller, Secretary of State, and Acting Governor in the Governor’s absence. A salary of eighteen hundred dollars a year and the title of “Mr. Secretary,” gave to the great position an air of wild and imposing grandeur. I was young and ignorant, and I envied my brother. I coveted his distinction and his financial splendor, but particularly and especially the long, strange journey he was going to make, and the curious new world he was going to explore. He was going to travel! I never had been away from home, and that word “travel” had a seductive charm for me. Pretty soon he would be hundreds and hundreds of miles away on the great plains and deserts, and among the mountains of the Far West, and would see buffaloes and Indians, and prairie dogs, and antelopes, and have all kinds of adventures, and may be get hanged or scalped, and have ever such a fine time, and write home and tell us all about it, and be a hero. And he would see the gold mines and the silver mines, and maybe go about of an afternoon when his work was done, and pick up two or three pailfuls of shining slugs, and nuggets of gold and silver on the hillside. And by and by he would become very rich, and return home by sea, and be able to talk as calmly about San Francisco and the ocean, and “the isthmus” as if it was nothing of any consequence to have seen those marvels face to face.

What I suffered in contemplating his happiness, pen cannot describe. And so, when he offered me, in cold blood, the sublime position of private secretary under him, it appeared to me that the heavens and the earth passed away, and the firmament was rolled together as a scroll! I had nothing more to desire. My contentment was complete.

At the end of an hour or two I was ready for the journey. Not much packing up was necessary, because we were going in the overland stage from the Missouri frontier to Nevada, and passengers were only allowed a small quantity of baggage apiece. There was no Pacific railroad in those fine times of ten or twelve years ago – not a single rail of it. I only proposed to stay in Nevada three months – I had no thought of staying longer than that. I meant to see all I could that was new and strange, and then hurry home to business. I little thought that I would not see the end of that three-month pleasure excursion for six or seven uncommonly long years!

I dreamed all night about Indians, deserts, and silver bars, and in due time, next day, we took shipping at the St. Louis wharf on board a steamboat bound up the Missouri River. We were six days going from St. Louis to “St. Jo.” – a trip that was so dull, and sleepy, and eventless that it has left no more impression on my memory than if its duration had been six minutes instead of that many days. No record is left in my mind, now, concerning it, but a confused jumble of savage-looking snags, which we deliberately walked over with one wheel or the other; and of reefs which we butted and butted, and then retired from and climbed over in some softer place; and of sand-bars which we roosted on occasionally, and rested, and then got out our crutches and sparred over.

In fact, the boat might almost as well have gone to St. Jo. by land, for she was walking most of the time, anyhow – climbing over reefs and clambering over snags patiently and laboriously all day long. The captain said she was a “bully” boat, and all she wanted was more “shear” and a bigger wheel. I thought she wanted a pair of stilts, but I had the deep sagacity not to say so.

Reread the last paragraph of the attached passage (reproduced here). “In fact, the boat might almost as well have gone to St. Jo by land, for she was walking most of the time, anyhow – climbing over reefs and clambering over snags patiently and laboriously all day long. The captain had said she was a “bully” boat, and all she wanted was more “shear” and a bigger wheel. I thought she wanted a pair of stilts, but I had the deep sagacity not to say so.” Which literary device does the narrator use in this paragraph?

A. symbolism of the reefs and snags being obstacles in life to overcome

B. euphemism with the description of “climbing over reefs” rather than “scraping along the bottom”

C. alliteration with the “bully” boat description

D. personification of the boat as a “she”

ANSWER: D

Explanation:

The correct answer is *personification of the boat as a “she”*. Personification gives human qualities, actions, or characteristics to something nonhuman. In this passage, the narrator treats the steamboat as though it were a person capable of walking, climbing, and clambering. These are actions associated with a traveler moving over difficult land, not with a vessel moving through water. Referring to the boat as “she” also supports the humorous human-like portrayal, but the strongest evidence is the extended description of the boat laboriously navigating obstacles as if it had legs. The final image of the boat needing “a pair of stilts” continues the same imaginative comparison, making the dangerous, slow river journey vivid and comic. Twain’s use of personification helps establish the narrator’s dry, exaggerated tone while allowing readers to picture how awkwardly the boat moved along the river. Definitions of personification describe it as attributing human traits or behavior to nonhuman things; see [Merriam-Webster’s definition of personification](#) and the [Poetry Foundation glossary entry](#).

QUESTION NO: 22

A student is writing an article about safety in high school athletics. Read the draft of the article and complete the task that follows.

Just how safe are high school athletics? Critics would argue that most sports are highly dangerous to those teens who participate in them. Recently football has been the most closely scrutinized. The dangers of the high school gridiron are many: head injuries, knee injuries, and heat exhaustion. It seems as if every year more studies are released implicating the immediate and long-term effects of this highly physical sport. Football, however, is not the only sport that has drawn attention. Any sport that involves contact (basketball, hockey, lacrosse) can leave its players vulnerable to injury. The question then becomes: what is being done to prevent these injuries?

Steps are being taken to reduce the most serious complications of all sports. One way that these issues are being addressed is through the development of new equipment. Another way is through more stringent rules that govern practices as well as game time situations. Most importantly, educating players, coaches, and parents to the real dangers of athletics has taken a new priority. Through education, regulations, and equipment, high school sports can continue to be a source of entertainment, not danger.

Choose the two sentences that provide the best evidence to support the main idea of the paper.

A. It has been estimated that nearly half of all high school participates in athletics on some level.

B. This school district reports that each high school has a minimum of five varsity sports; this number does not include junior varsity or community leagues.

C. Bob Jones, Southern High’s athletic director, added this comment: “We had a very successful season; injuries did not play a measurable role in our record.”

D. District wide data indicates that students are injured on school property at a relatively low rate; last year only thirty-three accidents were reported that resulted in student injury.

E. One of the most visible educational campaigns has been launched by the National Football League (NFL); it is entitled “Heads UP” and trains coaches and student athletes on techniques to avoid head injuries.

F. In a 2010 study, American University found that close to 80 percent of high school athletes had reported injuries during their athletic careers; approximately 25 percent of these injuries were considered serious.

ANSWER: E F

Explanation:

The best supporting evidence is “One of the most visible educational campaigns has been launched by the National Football League (NFL); it is entitled “Heads UP” and trains coaches and student athletes on techniques to avoid head injuries.” This concrete example directly supports the article’s central claim that education is being used to reduce athletic injuries. It identifies a specific prevention effort, its intended audience, and its safety purpose. Educational concussion-prevention programs are a documented component of sports safety; the CDC’s HEADS UP materials similarly provide training and resources for coaches, athletes, and families ([CDC HEADS UP](#)).

“In a 2010 study, American University found that close to 80 percent of high school athletes had reported injuries during their athletic careers; approximately 25 percent of these injuries were considered serious.” also provides relevant statistical evidence. The reported injury frequency and seriousness establish why safety measures, such as the education, regulations, and improved equipment discussed in the article, are important. Together, the two sentences supply both a factual reason for concern and a specific example of action intended to prevent harm. This aligns with the National Federation of State High School Associations’ emphasis on injury prevention and athlete well-being in school sports ([NFHS Sports Medicine](#)).