

The New York City Department of Education

**2024 Specialized High Schools Admissions Test****GENERAL DIRECTIONS**

**Student Name:** \_\_\_\_\_

**Identifying Information**

Turn to Side 1 of the answer sheet.

**Notify the proctor immediately if you are ill or should not be taking this test. Do not sign the statement or begin the test. Return your answer sheet to the proctor.**

**Line 1:** Read the statement and sign your name in the space following the word "signature." Do not print your name.

**Line 2:** Print today's date, using the numbers of the month, the day, and the year. For example, the date September 21, 2024, would be 9-21-24.

**Line 3:** Print your birth date, using the numbers of the month, the day, and the year. For example, a birth date of March 1, 2009, would be 3-1-09.

**Grid 4:** Print the letters of your first name, or as many as will fit, in the boxes. If you have a middle initial, print it in the box labeled "MI." Then print the letters of your last name, or as much as will fit, in the boxes provided. Below each box, fill in the circle that contains the same letter as the box. If there is a space or a hyphen in your name, fill in the circle under the appropriate blank or hyphen.

**Make dark marks that completely fill the circles.** If you change a mark, be sure to erase the first mark completely.

**Grid 5:**

1. Print the name of the school where you are now enrolled in the space at the top of the grid.
2. In the boxes marked "SCHOOL CODE," print the six-digit code that identifies your school. Below each box, fill in the circle that contains the same letter or number as the box. (You can find your school code on your Test Ticket. If it is not there, tell the proctor, and the proctor will get the school code for you.)
3. If you attend a private or parochial school, fill in the circle marked "P."

**Grid 6:** Complete the grid with your date of birth. Print the first three letters of the month in the first box, the number of the day in the next box, and the year in the last box. Then fill in the corresponding circles.

**Grid 7:** Print your student ID number in Grid 7. You can find your student ID number on your Test Ticket. In the boxes, print your nine-digit student ID number. Below each box, fill in the circle containing the same number as in the box.

**Grid 8:** In most cases, Grid 8 is already filled in for you. If it is not, copy the letter and numbers shown in the upper-right corner of your test booklet into the boxes. Below each box, fill in the circle containing the same letter or number as the box.

Now review Side 1 to make sure you have completed all lines and grids correctly. Review each column to see that the filled-in circles correspond to the letters or numbers in the boxes above them.

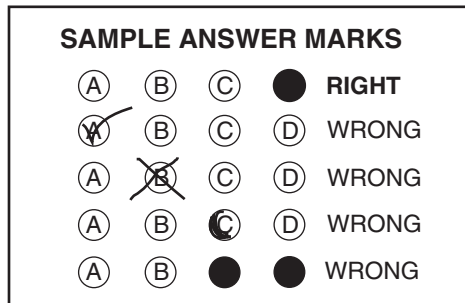
Turn your answer sheet to Side 2 and flip this booklet over to continue with General Directions.

## GENERAL DIRECTIONS, continued

Print your test booklet letter and numbers, and your name, first name **first**, in the spaces provided at the top of Side 2 of the answer sheet.

### Marking Your Answers

- Mark each of your answers on the answer sheet in the row of circles matching the question number printed in the test booklet.
- Use only a Number 2 pencil.
- If you change an answer, be sure to erase it completely.
- Be careful to avoid making any stray pencil marks on your answer sheet. **Do not make any marks on your answer sheet other than filling in your answer choices.**
- Each question has only one correct answer. If you mark more than one circle in any answer row, that question will be scored as incorrect.



- You can use your test booklet or the provided scrap paper to take notes or solve questions; however, your answers must be recorded on the answer sheet in order to be counted.
- **You will not be able to mark your answers on the answer sheet after time is up, and answers left in the test booklet will not be scored.**

### Planning Your Time

- You have 180 minutes to complete the entire test. **How you divide the time between the English Language Arts and Mathematics sections is up to you.**
- If you begin with the English Language Arts section, you may go on to the Mathematics section as soon as you are ready. Likewise, if you begin with the Mathematics section, you may go on to the English Language Arts section as soon as you are ready.
- Be sure to read the directions for each section carefully.
- Each question has only one correct answer. Choose the best answer for each question.
- When you finish a question, go on to the next, until you have completed the last question or run out of time.
- Your score is determined by the number of questions you answer correctly. **Answer every question, even if you may not be certain which answer is correct.**
- Don't spend too much time on a difficult question. Come back to it later if you have time.
- If you complete the test before the test time (180 minutes) is over, you may go back to review questions in either section.
- Students must stay for the entire test session (180 minutes).

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO**



# A



Copyright © 2024 Pearson. All rights reserved. No part of this document may be copied, reproduced, modified, or transmitted by any means, electronic or mechanical.

# PART 1 — ENGLISH LANGUAGE ARTS

57 QUESTIONS

## REVISING/EDITING

QUESTIONS 1-9 (PART A AND PART B)

### REVISING/EDITING PART A

**DIRECTIONS:** Read and answer the following questions. You will be asked to recognize and correct errors so that the sentences or short paragraphs follow the conventions of standard written English. You may write in your test booklet as needed to take notes. You should reread relevant parts of the sentences or paragraphs, while being mindful of time, before marking the **best** answer for each question.

1. Read this sentence.

The engineers tried some other things in the hope of finding a more effective insulation for the compartment.

What is the **most** precise revision for the words *The engineers tried some other things*?

- A. The engineers did experiments with several new materials
  - B. The engineers tested foam and fiberglass
  - C. The engineers examined two new materials
  - D. The engineers worked with foam and fiberglass
2. Which sentence contains an error in its construction and should be revised?

(1) Walking dogs, cleaning kennels, hand-feeding newborn kittens, and supporting the pet-adoption process, the animal shelter is looking for volunteers to help with a variety of tasks. (2) Working at the animal shelter is a great way for young people, especially those who aspire to care for and protect animals, to gain valuable work experience. (3) In addition to hands-on training with animal care, volunteers will learn important job skills, such as punctuality, responsibility, and personal initiative. (4) Caring for animals can also help volunteers develop empathy, which is the awareness and understanding of the feelings of others.

- E. sentence 1
- F. sentence 2
- G. sentence 3
- H. sentence 4

3. Which edit should be made to correct the sentence?

The Colosseum in Rome, Italy which is considered one of the “new” Seven Wonders of the World, is the largest amphitheater ever built and once could hold up to 50,000 spectators.

- A. Delete the comma after **Rome**.
  - B. Insert a comma after **Italy**.
  - C. Delete the comma after **World**.
  - D. Insert a comma after **built**.
4. Which pair of revisions need to be made in this paragraph?

(1) Both Italian gelato and American ice cream are delightful treats to have on a hot summer day, but many people wonder: what is the difference between the two? (2) To start with, the butterfat content is much higher in ice cream than it is in gelato, making the Italian treat a wiser decision for people looking to make healthier choices. (3) Additionally, the mixing process, which adds less air to the frozen treat, makes gelato denser than ice cream. (4) Finally, gelato is served 10 to 15 degrees warmer than ice cream, which enhances the texture and flavor of the gelato, and allow it to melt more quickly.

- E. Sentence 1: Delete the colon after **wonder** AND change **is** to **are**.
- F. Sentence 2: Delete the comma after **with** AND change **it is** to **they are**.
- G. Sentence 3: Delete the comma after **process** AND change **makes** to **make**.
- H. Sentence 4: Delete the comma after **gelato** AND change **allow** to **allows**.

---

## REVISING/EDITING PART B

**DIRECTIONS:** Read the text below and answer the questions following it. You will be asked to improve the writing quality of the text and to correct errors so that the text follows the conventions of standard written English. You should reread relevant parts of the text, while being mindful of time, before marking the **best** answer for each question.

---

### The Free College Debate

(1) A college degree has become an essential tool in an increasingly competitive job market. (2) Yet the price of higher education, at both private and public universities, continues to rise. (3) Helping students cover the cost of attending college is an important issue.

(4) Many people agree that a college education should be a financially realistic option for those who aspire to obtain a degree. (5) For example, in 2017, the New York State legislature passed a bill creating a program to cover the tuition costs for nearly one million students. (6) The state of Tennessee also has a program that offers all students scholarships and mentoring services if they attend one of the state's community colleges. (7) Proponents generally believe that these programs are a step in the right direction for making college affordable for students who would have had to take out loans or who would have decided not to pursue higher education at all.

(8) On the other hand, some people oppose bills like the ones in New York and Tennessee because they believe "free" college programs are unsustainable. (9) In order to implement these types of programs, a state pays the college on behalf of the students using funds from the state's budget, which primarily comes from state taxes. (10) As more students choose to attend college, more funds will be needed to cover the costs. (11) Additionally, many students do not finish college within four years because they switch majors or because they have to work. (12) Critics believe that these circumstances will inevitably lead to an increase in taxes, a decline in the quality of the education offered by the schools, or both. (13) They think narrower college-affordability efforts that target the students who need the most support, such as first-generation college students, may be more effective and viable solutions.

(14) Faculty and students at higher-education institutions can work to keep costs down. (15) In light of increased access to computers, mobile devices, and the Internet, there are more opportunities for students to take courses online, thus reducing the need for and cost of maintaining physical classrooms. (16) Additionally, colleges should account for experience by allowing students to demonstrate their knowledge in order to avoid having to pay to sit through classes on subjects they have already mastered. (17) Similarly, college-bound high school students need to be prepared for college-level work so that they do not have to spend money on remedial classes.

(18) The solutions to the problems associated with rising college costs are not simple. (19) Passing legislation that boosts college affordability will take time, input from experts with different ideas, and careful planning.

5. Which sentence should replace sentence 3 to **best** state the topic of the passage?
- A. Several states have implemented scholarship programs that allow students to attend public universities and community colleges at a very low tuition rate or for free.
  - B. Determining the most effective way to make college affordable is a complex issue, and there are differing opinions about how to approach the problem.
  - C. Higher-education institutions should reduce the cost of a college education by finding ways to help students avoid paying for unnecessary classes and materials.
  - D. The main concern related to the issue of college affordability is that helping students cover tuition could affect the quality of the education they receive.

6. Read this sentence.

Some note that several states have made their community or state colleges low-cost or free for students with limited resources.

Where should the sentence be added to **best** support the ideas in the second paragraph (sentences 4–7)?

- E. at the beginning of the paragraph (before sentence 4)
  - F. between sentences 4 and 5
  - G. between sentences 5 and 6
  - H. between sentences 6 and 7
7. Which sentence presents information that shifts away from the topic of the third paragraph (sentences 8–13) and should be deleted?
- A. sentence 10
  - B. sentence 11
  - C. sentence 12
  - D. sentence 13

8. Which phrase should be added before sentence 14 to **best** transition to the ideas in the fourth paragraph (sentences 14–17)?
- E. Because college affordability is a complicated issue,
  - F. With so many opinions about how to make college affordable,
  - G. Until college becomes more affordable,
  - H. Although some college affordability programs have been successful,
9. Which concluding sentence should be added after sentence 19 to support the topic of the passage?
- A. The increasing use of technology in college classrooms and the financial support from tuition scholarship programs will make colleges more affordable for many students.
  - B. Statewide tuition scholarship programs will make college more affordable for many students, but these programs may lead to new problems.
  - C. Until the problems associated with the rising cost of college are solved, many students will pursue other options after graduating high school.
  - D. When the issue of college affordability is resolved, students will be able to make decisions about pursuing higher education without cost being the deciding factor.

---

# READING COMPREHENSION

## QUESTIONS 10–57

**DIRECTIONS:** Read each of the following six texts and answer the related questions. You may write in your test booklet as needed to take notes. You should reread relevant parts of each text, while being mindful of time, before marking the **best** answer for each question. Base your answers only on the content within the text.

---

CONTINUE TO THE NEXT PAGE ►



*Zitkala-Sa (Gertrude Simmons Bonnin) was a Native American writer, musician, teacher, and political activist who was raised on the Yankton Sioux Reservation in South Dakota. In 1900 she published "Impressions of an Indian Childhood" (the term Indian was commonly used at the time to refer to Native American people) to expose readers to what life is like on a reservation.*

## Excerpt from "Impressions of an Indian Childhood"

by Zitkala-Sa

- 1 Soon after breakfast Mother sometimes began her beadwork. On a bright, clear day, she pulled out the wooden pegs that pinned the skirt of our wigwam<sup>1</sup> to the ground, and rolled the canvas part way up on its frame of slender poles. Then the cool morning breezes swept freely through our dwelling, now and then wafting the perfume of sweet grasses from newly burnt prairie.
- 2 Untying the long tasseled strings that bound a small brown buckskin<sup>2</sup> bag, my mother spread upon a mat beside her bunches of colored beads, just as an artist arranges the paints upon his palette. On a lapboard she smoothed out a double sheet of soft white buckskin; and drawing from a beaded case that hung on the left of her wide belt a long, narrow blade, she trimmed the buckskin into shape. Often she worked upon small moccasins for her small daughter. Then I became intensely interested in her designing. With a proud, beaming face, I watched her work. In [my] imagination, I saw myself walking in a new pair of snugly fitting moccasins. I felt the envious eyes of my playmates upon the pretty red beads decorating my feet.
- 3 Close beside my mother I sat on a rug, with a scrap of buckskin in one hand and an awl in the other. This was the beginning of my practical observation lessons in the art of beadwork. From a skein<sup>3</sup> of finely twisted threads of silvery sinews my mother pulled out a single one. With an awl she pierced the buckskin, and skillfully threaded it with the white sinew. Picking up the tiny beads one by one, she strung them with the point of her thread, always twisting it carefully after every stitch.
- 4 It took many trials before I learned how to knot my sinew thread on the point of my finger, as I saw her do. Then the next difficulty was in keeping my thread stiffly twisted, so that I could easily string my beads upon it. My mother required of me original designs for my lessons in beading. At first I frequently ensnared many a sunny hour into working a long design. Soon I learned from self-inflicted punishment to refrain from drawing complex patterns, for I had to finish whatever I began.
- 5 After some experience I usually drew easy and simple crosses and squares. These were some of the set forms. My original designs were not always symmetrical nor sufficiently characteristic, two faults with which my mother had little patience. The quietness of her oversight made me feel strongly responsible and dependent upon my own judgment. She treated me as a dignified little individual as long as I was on my good behavior; and how humiliated I was when some boldness of mine drew forth a rebuke from her!

---

<sup>1</sup>**wigwam:** hut with an arched framework of poles covered with bark, mats, or animal hides

<sup>2</sup>**buckskin:** leather made from the skin of a male deer

<sup>3</sup>**skein:** coiled length of yarn or other thread loosely wound on a reel

- 6 In the choice of colors she left me to my own taste. I was pleased with an outline of yellow upon a background of dark blue, or a combination of red and myrtle-green. There was another of red with a bluish-gray that was more conventionally used. When I became a little familiar with designing and the various pleasing combinations of color, a harder lesson was given me. It was the sewing on, instead of beads, some tinted porcupine quills, moistened and flattened between the nails of the thumb and forefinger. My mother cut off the prickly ends and burned them at once in the centre fire. These sharp points were poisonous, and worked into the flesh wherever they lodged. For this reason, my mother said, I should not do much alone in quills until I was as tall as my cousin Warca-Ziwin.
- 7 Always after these confining lessons I was wild with surplus spirits, and found joyous relief in running loose in the open again. Many a summer afternoon a party of four or five of my playmates roamed over the hills with me. We each carried a light sharpened rod about four feet long, with which we pried up certain sweet roots. When we had eaten all the choice roots we chanced upon, we shouldered our rods and strayed off into patches of a stalky plant under whose yellow blossoms we found little crystal drops of gum. Drop by drop we gathered this nature's rock-candy, until each of us could boast of a lump the size of a small bird's egg. Soon satiated with its woody flavor, we tossed away our gum, to return again to the sweet roots.

From "Impressions of an Indian Childhood" by Zitkala-Sa—Public Domain

A BRIEF HISTORY OF BEADWORK IN SOUTH DAKOTA

Date	Event
1500s	The Dakota use beads made from bones, shells, stones, and animal teeth. European traders bring glass beads to North America.
Late 1600s	The Dakota begin trading with the French in Minnesota.
1830s	The Dakota begin using glass beads in clothing, artwork, and decorations in place of Native-made beads.
1862–1865	The Dakota are expelled from their homelands in Minnesota as a result of the U.S.-Dakota War.
1900s–1920s	The Dakota create items to sell outside their community.

Source: MNopedia

- 10.** In paragraph 1, the phrases “cool morning breezes swept freely” and “wafting the perfume of sweet grasses” affect the tone of the excerpt by suggesting
- E.** the sadness that the author feels reflecting upon her former way of life.
  - F.** the enthusiasm with which the author approached her work indoors.
  - G.** the fond feelings that the author has toward her childhood experiences.
  - H.** the mix of emotions that the author feels toward her work and her mother.
- 11.** The author’s use of sequence in paragraphs 1 and 2 contributes to the development of ideas in the excerpt by
- A.** listing the many steps that are involved in the process of beading in order to explain its difficulty and complexity.
  - B.** conveying the importance of following the steps of the beading process in a precise order to work most efficiently.
  - C.** emphasizing the time required to fully prepare for and execute the many large and small tasks in the activity of beading.
  - D.** detailing each step in preparation for beading in order to highlight the author’s enthusiasm for the work.
- 12.** The phrase “just as an artist arranges the paints upon his palette” in paragraph 2 suggests that
- E.** beadwork is a true form of art.
  - F.** color is a source of artistic inspiration.
  - G.** all artistic activities begin with a series of steps.
  - H.** the beadworker tries to imitate art.
- 13.** The details in paragraph 3 convey a central idea of the excerpt by suggesting that
- A.** the author was interested in the work because she knew her mother was making something for her.
  - B.** the author had difficulty learning through observation but wanted to help her mother.
  - C.** the author was determined to behave according to her mother’s standards and sought her approval.
  - D.** the author had great admiration for her mother’s precision and mastery of her craft.

14. How does the author distinguish her point of view from that of her mother?
- E. by describing their techniques for knotting sinew thread (paragraph 4)
  - F. by describing their approaches to beadwork design (paragraph 5)
  - G. by stating her mother’s instructions on working with quills (paragraph 6)
  - H. by stating her mother’s ideas about activities after lessons (paragraph 7)

15. Read this sentence from paragraph 7.

**Always after these confining lessons I was wild with surplus spirits, and found joyous relief in running loose in the open again.**

Which sentence **best** describes how this sentence fits into the overall structure of the excerpt?

- A. It introduces a shift from the author’s demanding relationship with her mother to her more relaxed relationships with friends.
  - B. It signals a change from the challenging aspects of life on the reservation to the advantages of living on the prairie.
  - C. It highlights a contrast between the focus and control required while working and the freedom of having fun outside.
  - D. It concludes the progression of events in the narrative by describing the sequence of events at the end of the author’s day.
16. Which sentence **best** summarizes the process of beading that is described in the excerpt?
- E. Take a buckskin bag full of beads and spread them out on a mat in different colors like a paint palette; take a double sheet of buckskin and smooth it out on a table; take a sinew and awl and thread the beads onto the buckskin in a desired pattern.
  - F. Cut the double sheet of buckskin into a shape; take a skein of sinew and pierce the buckskin with an awl; thread the sinew with beads of many different colors in a simple or complex pattern; twist the sinew to keep it tight after every stitch into the buckskin.
  - G. Arrange the beads into groups of colors on a mat; smooth out a double sheet of buckskin and cut it to shape; take a single thread of sinew; pierce the buckskin with an awl; thread the buckskin with the sinew and string it with beads, carefully twisting after every stitch.
  - H. Gather beads, buckskin, sinew, and awl and place them on a mat; cut the buckskin into the desired shape; decide on a pattern for the beads and create it using the sinews and the awl; thread the beads onto the sinew in the desired pattern and twist it tight.

17. The idea that mastering moccasin design and creation requires experience is **best** illustrated in the excerpt through
- A. the information about the advanced technique of incorporating porcupine quills into a design.
  - B. the descriptions of the special materials that must be used to make decorated moccasins.
  - C. the descriptions of the various color combinations that make an attractive moccasin design.
  - D. the example of the author successfully and independently using a sharpened rod.
18. The table after paragraph 7 expands on a central idea in the excerpt because it shows that
- E. the craft the author was learning was a tradition that endured through many generations and changes.
  - F. the author’s family incorporated traditional materials into their craft as a way of resisting the influence from European traders.
  - G. the uniqueness of the cultural tradition that the author learned as a child was eventually recognized in Europe.
  - H. the author was able to incorporate color into her craftwork as a result of trade with other peoples.

CONTINUE TO THE NEXT PAGE ►

# At Dusk

by Natasha Trethewey

At first I think she is calling a child,  
my neighbor, leaning through her doorway  
at dusk, street lamps just starting to hum  
the backdrop of evening. Then I hear  
5 the high-pitched wheedling<sup>1</sup> we send out  
to animals who know only sound, not  
the meanings of our words—*here here*—  
nor how they sometimes fall short.  
In another yard, beyond my neighbor’s  
10 sight, the cat lifts her ears, turns first  
toward the voice, then back  
to the constellation of fireflies flickering  
near her head. It’s as if she can’t decide  
whether to leap over the low hedge,  
15 the neat row of flowers, and bound  
onto the porch, into the steady circle  
of light, or stay where she is: luminous  
possibility—all that would keep her  
away from home—flitting before her.  
20 I listen as my neighbor’s voice trails off.  
She’s given up calling for now, left me  
to imagine her inside the house waiting,  
perhaps in a chair in front of the TV,  
or walking around, doing small tasks;  
25 left me to wonder that I too might lift  
my voice, sure of someone out there,  
send it over the lines stitching here  
to there, certain the sounds I make  
are enough to call someone home.

“At Dusk” from *NATIVE GUARD* by Natasha Trethewey, published by Houghton Mifflin Company. Copyright © 2006 by Natasha Trethewey. All rights reserved.

---

<sup>1</sup>**wheedling:** speaking in a flattering manner

19. Which lines from the poem **best** support the idea that the neighbor’s efforts to call the cat home directly affect the speaker?
- A. “At first I think she is calling a child, / my neighbor” (lines 1–2)
  - B. “the high-pitched wheedling we send out / to animals who know only sound” (lines 5–6)
  - C. “I listen as my neighbor’s voice trails off. / She’s given up calling for now” (lines 20–21)
  - D. “left me to wonder that I too might lift / my voice, sure of someone out there” (lines 25–26)
20. The isolation of the words “—*here here*—” in line 7 contributes to the meaning of the poem **mainly** by
- E. demonstrating how people try to communicate in familiar ways but are still sometimes misunderstood.
  - F. showing how people can feel desperate to connect with others but give up quickly when their first attempts are ignored.
  - G. using the unspoken bond between the neighbor and her cat to highlight the understanding people have with their pets.
  - H. illustrating the use of a simple expression to call home those who are loved and missed.
21. The details in lines 10–17 about the cat convey a central idea of the poem by
- A. showing that returning home after experiencing independence is challenging.
  - B. suggesting that caring for others means allowing them to grow and to roam freely.
  - C. implying that expecting to feel at home in the natural world leads to disappointment.
  - D. emphasizing the conflicting desires to return to the familiar and to explore the unknown.
22. The phrases “luminous possibility” and “all that would keep her / away from home” (lines 17–19) affect the poem by
- E. highlighting the cat’s lack of concern for the neighbor.
  - F. implying that the speaker finds the cat’s current situation interesting.
  - G. suggesting that the cat is compelled by its sense of wonder to remain outdoors.
  - H. indicating that the speaker supports the cat’s decision to ignore the neighbor.



23. Read lines 11–13 from the poem.

**toward the voice, then back  
to the constellation of fireflies flickering  
near her head**

Which idea from the poem does the imagery in these lines help convey?

- A. The cat lacks a preference for going in or staying out.
- B. The cat is eager to see what will happen next.
- C. The cat wants to understand the unpredictable behavior of the fireflies.
- D. The cat is fascinated by the natural world and finds the indoors unremarkable.

24. How does the setting affect the events of the poem?

- E. It enables the speaker to regularly overhear the neighbor calling for her cat at dusk.
- F. It allows the speaker to observe the neighbor quietly without interacting with her.
- G. It shows how living in close proximity helps the speaker feel connected to the neighbor.
- H. It shows how feeling isolated causes the speaker to imagine interactions with the neighbor.

25. The poet develops a theme about making connections with others **mainly** through the

- A. exploration of the desires of the speaker and the neighbor.
- B. speaker's observations of the sights and sounds in the neighborhood.
- C. speculations the speaker makes about what the neighbor does inside her house.
- D. speaker's explanation of the cat's thoughts and actions.

CONTINUE TO THE NEXT PAGE ►

## Champion of the Channel

- 1 In 1926 an editor at the *London Daily News* predicted that Gertrude Ederle, an American swimmer with eighteen world records and three Olympic medals, would fail in her attempt to swim across the English Channel. He claimed that “even the most uncompromising champion of the rights and capacities of women must admit that in contests of physical skill, speed and endurance they must remain forever the weaker sex.” Yet, at only nineteen years old, Ederle not only became the first woman to accomplish this feat, she also broke the men’s record by two hours. Gertrude Ederle’s triumphant swim across the English Channel was a testimony to her determination, innovative spirit, and passion for swimming.
- 2 Crossing the English Channel is a daunting task for any swimmer. At its narrowest point, the channel measures twenty-one miles across. Its icy waters hover around sixty degrees Fahrenheit, and its unruly tides and currents toss swimmers about like bobbing corks. Stinging jellyfish, seaweed, and floating debris from shipwrecks and lost cargoes present added hazards.
- 3 For decades the channel’s perils have defeated countless swimmers. Ederle, too, failed in her first attempt to cross the channel in 1925. Just six miles short of finishing, she became ill, and her coach had to haul her out of the water. Undeterred, Ederle decided to try again. Ederle knew that if she did not complete the challenge this time, she might never get the opportunity to set this record, because a rival female swimmer was preparing to make her second attempt at the crossing as well.
- 4 To prepare for the marathon swim, Ederle found ways to improve her equipment. She and her sister Meg discovered that melted candle wax perfectly sealed goggle edges, effectively waterproofing Ederle’s goggles against hammering waves. The sisters also designed a two-piece silk swimsuit for Ederle. During her first channel-crossing attempt she had worn a standard one-piece swimsuit that, after the lengthy hours of swimming across the channel, had stretched out, filling with water and creating drag, making an already challenging task almost insurmountable. Unlike the cumbersome typical bathing suit, this silk invention weighed little and allowed for easy movement.
- 5 On August 6, 1926, Ederle waded into the channel near Cape Gris-Nez, France. At first she shivered in the bone-chilling water even though she had covered her body in eight layers of grease for insulation. Her limbs felt stiff. Her strokes were irregular. Driving forward, she fought to clear her mind and find what she called her “sphere,” a place where the sea became her only companion and the shrieks of gulls and the humming of boat engines faded away. Using a new overhand stroke called the American crawl, Ederle eventually settled into a steady pace, briskly breaking through waves.
- 6 Throughout Ederle’s swim, two tugboats accompanied her. One carried newspaper reporters who wired dispatches of her progress to shore. The other, displaying a sign that read “This way, ole kid!” with an arrow pointing forward, transported her coach, family, and friends. Her coach played songs, such as “Yes, We Have No Bananas,” on a phonograph so that Ederle could time her strokes to the rhythm. Using a net, her coach also passed her baby bottles of broth for nourishment.

- 7 For hours Ederle swam, dodging debris with an amused smile. However, as she neared the English shore, a sudden fierce storm erupted. The tides and waves forced Ederle backward, and she fought the stubborn swells for several hours. The salty water caused her tongue to swell and inflamed her ears. Yet Ederle felt indescribably happy as she churned through the sea. Finally, as she neared the English shore, the storm abated, and the tide turned. No longer fighting against her, the sea pushed her toward the shore and victory.
- 8 After fourteen hours and thirty-one minutes, Ederle, on wobbly legs, stepped onto the English shore. The waiting crowd roared, honked their automobile horns, blasted their tugboat whistles, and set off flares that flashed in the sky. Ederle had swum into history.
- 9 When Ederle returned to New York, she received a parade, where thousands of people shouted "Trudy!" Not only were everyday American citizens proud of Ederle, but also she inspired them to be more active. Over the next few years, more than 60,000 people credited her with motivating them to earn their American Red Cross swimming certificates. Gertrude Ederle's accomplishment proved to the world that with determination and passion, it was possible for a person to achieve his or her goals.

#### SOLO SWIMS ACROSS THE ENGLISH CHANNEL

<b>Earliest Speed Records</b>		
<b>Year</b>	<b>Swimmer</b>	<b>Time</b>
1875	Matthew Webb (M)	21 hours, 45 minutes
1923	Enrico Tiraboschi (M)	16 hours, 33 minutes
1926	Gertrude Ederle (F)	14 hours, 31 minutes
1926	Arnst Vierkotter (M)	12 hours, 38 minutes
<b>Current Speed Records</b>		
<b>Year</b>	<b>Swimmer</b>	<b>Time</b>
2006	Yveta Hlavacova (F)	7 hours, 25 minutes
2012	Trent Grimsey (M)	6 hours, 55 minutes

26. What do the newspaper editor’s comments in paragraph 1 reveal about the challenges Ederle faced in attempting her feat?

- E. Regardless of her ability, being an American put Ederle at a serious disadvantage over a Londoner, who would be more familiar with the English Channel.
- F. At the time, Ederle still needed more training in order to succeed in the daunting task of swimming the English Channel.
- G. While Ederle could participate in athletic competition, some people were not comfortable with her attempt to swim the channel because no woman had ever attempted it before.
- H. In spite of her previous achievements, Ederle still experienced social as well as physical obstacles in attempting to swim the channel.

27. Read this sentence from paragraph 4.

**During her first channel-crossing attempt she had worn a standard one-piece swimsuit that, after the lengthy hours of swimming across the channel, had stretched out, filling with water and creating drag, making an already challenging task almost insurmountable.**

The word “insurmountable” is used to highlight

- A. how the bathing suit made it impossible for Ederle to make it across the channel.
- B. how Ederle and her sister decided to improve Ederle’s swimming equipment in a creative way.
- C. that the flaws in Ederle’s bathing suit made a difficult task even more complicated.
- D. that the swimming equipment Ederle used needed to be custom made for her attempt.

28. Which statement describes how the author’s use of a problem-and-solution structure in paragraph 5 contributes to the development of ideas in the passage?

- E. Detailing the challenges presented by the cold channel waters highlights the effectiveness of Ederle’s training.
- F. Describing Ederle’s physical difficulties during her swim provides evidence of the team effort required to ensure her safety.
- G. Explaining the difficulties that arose early in the effort helps predict the additional obstacles that occurred during Ederle’s attempt.
- H. Illustrating Ederle’s process of blocking out her discomfort shows that swimming the channel was both a mental and a physical challenge.

29. Which sentence **best** supports the idea that Ederle succeeded in swimming across the channel because of her innovative approach to the challenge?
- A. "Yet, at only nineteen years old, Ederle not only became the first woman to accomplish this feat, she also broke the men's record by two hours." (paragraph 1)
  - B. "At first she shivered in the bone-chilling water even though she had covered her body in eight layers of grease for insulation." (paragraph 5)
  - C. "Using a new overhand stroke called the American crawl, Ederle eventually settled into a steady pace, briskly breaking through waves." (paragraph 5)
  - D. "The other [tugboat], displaying a sign that read 'This way, ole kid!' with an arrow pointing forward, transported her coach, family, and friends." (paragraph 6)
30. Paragraph 7 contributes to the development of a central idea of the passage by
- E. illustrating that Ederle's physical strength and mental fortitude allowed her to stay focused on her goal.
  - F. conveying that Ederle pushed herself to the edge of her physical capabilities in order to complete the swim.
  - G. highlighting the impact the severe weather had on Ederle's emotions during her swim.
  - H. emphasizing the surge of emotions Ederle felt as she came closer to achieving a personal goal.
31. Which sentence from the passage **best** conveys the author's perspective regarding the impact of Ederle's accomplishment?
- A. "Undeterred, Ederle decided to try again." (paragraph 3)
  - B. "For hours Ederle swam, dodging debris with an amused smile." (paragraph 7)
  - C. "Yet Ederle felt indescribably happy as she churned through the sea." (paragraph 7)
  - D. "Ederle had swum into history." (paragraph 8)

32. Which sentence is the **best** summary of the steps that Ederle took to prepare for her second attempt to swim across the English Channel?
- E. Working with her sister, Ederle waterproofed her goggles using melted candle wax to seal the edges and designed a two-piece silk swimsuit that was lightweight and would not stretch out during the long swim.
  - F. Ederle covered her body in numerous layers of grease for insulation and focused on finding her “sphere” during her swim.
  - G. Ederle began training with her coach, who played music while she swam to help her time her strokes to the music.
  - H. Ederle focused on developing better equipment than the standard bathing suit that proved cumbersome during her first attempt to cross the channel.
33. The idea that many people were interested in Ederle’s attempt to swim the channel is illustrated in the passage **mainly** through the
- A. information about Ederle’s competition with another female swimmer who was also attempting to cross the channel.
  - B. details about the reports of Ederle’s progress during the swim and the celebration of her successful completion of the swim.
  - C. details about how Ederle’s historic swim contributed to an increase in the number of people learning how to swim.
  - D. information about the resources Ederle used throughout her swim to maintain her motivation and stamina.
34. The table builds on the information in the passage **mainly** by
- E. emphasizing that people have continued to swim across the channel and have significantly improved the speed record.
  - F. suggesting that Ederle inspired many women to swim across the channel to attempt to break the current speed record.
  - G. revealing that other women competed with Ederle to set a record time for swimming across the English Channel.
  - H. providing a comparison between the earliest channel-swimming records and the current record times.

CONTINUE TO THE NEXT PAGE ►



# 5 Reasons Physical Books Might Be Better Than E-Books

by Shaunacy Ferro

1 Though e-book<sup>1</sup> readers have become a more common sight around town, traditional books still have their evangelists.<sup>2</sup> According to *The New York Times*, e-book sales have been falling in 2015. Print definitely isn't dead. In fact, according to some research, it may actually be a better choice for some readers. While scientists are still trying to tease out exactly how digital reading affects us differently, here are five ways e-books might be inferior to their dead-tree cousins.

## **E-books can reduce reading comprehension.**

2 In a study of middle schoolers, West Chester University researchers found that students who read on iPads<sup>3</sup> had lower reading comprehension than when they read traditional printed books. They discovered that the kids sometimes skipped text in favor of interactive features in the e-books, suggesting that certain multimedia in children's e-books can be detrimental to the practice of reading itself. However, the researchers noted that some interactive features in e-books are designed to enhance comprehension, and that those might be more helpful than game-type interactive graphics.

## **Young kids can get distracted by e-books.**

3 Similar results were found by a small study by the Joan Ganz Cooney Center that consisted of 32 kids reading e-books and print books with their parents. It found that "enhanced" e-books might be distracting. Kids who read enhanced e-books—ones with interactive, multimedia experiences—were more engaged with them physically, but in the end they remembered fewer narrative details than those who read print books or basic e-books.

## **You remember less about a book's timeline.**

4 Another study of adults also found that e-books can be hard to absorb. The researchers asked 25 people to read a 28-page story on a Kindle<sup>4</sup> and 25 to read the story in paperback, then asked the readers to put 14 events from the story in chronological order. Those who read the story on a Kindle performed worse on the chronology test than the book readers, though they performed about the same as print readers in other tests. Earlier research by the same scholars, from Stavanger University in Norway, found that Norwegian 10th graders also remembered more about texts if they read them in print rather than on a computer screen.

## **They're not great as textbooks.**

5 While e-book textbooks are often cheaper (and easier<sup>5</sup> to carry) than traditional door-stop<sup>5</sup> textbooks, college students often don't prefer them. In some surveys of college kids, the majority

---

<sup>1</sup>**e-book:** an electronic book, a publication made available digitally for reading on a computer or other device

<sup>2</sup>**evangelists:** advocates or supporters

<sup>3</sup>**iPads:** tablet computers

<sup>4</sup>**Kindle:** device for reading e-books

<sup>5</sup>**door-stop:** a reference to the idea that some textbooks are large and heavy enough to hold a door open

of students have reported preferring print books. However, a 2012 study from the UK’s National Literacy Trust of kids ages 8 to 16 found that more than 50 percent of children reported preferring screen reading.

**They’re tiring.**

- 6 Staring at a lit screen can be tiring for the eyes and the brain. A 2005 study from Sweden found that reading digitally required a higher cognitive workload than reading on paper. Furthermore, staring at LED<sup>6</sup> screens at night can disrupt sleep patterns. A 2014 Harvard study found that people who used e-readers with LED screens at night slept worse and were more tired the next day. So, if you’re going to go for an e-book, go for one without the backlight.
- 7 The take-away message? If you’re really trying to absorb material, you might want to go for a physical book. And if you’re going to be up all night studying, turn off the backlight.
- 8 However, all this may not mean that reading on a Kindle is really going to melt your brain. For instance, reading an e-book on a computer is a much different experience than reading on a Kindle, which is specifically designed for consuming books. So, too, is playing with an interactive e-book on an iPad, compared to using a simpler e-book device that only presents the text, with no opportunities to click away into digital distractions.
- 9 And some studies have found that part of the difference between the way people absorb information from e-books versus paper might be due to approaching e-books differently—in one test, participants didn’t regulate their study time with digital books like they did with paper texts, leading to worse performances. It’s possible that our expectations of e-book reading—as well as the different designs of the digital reading experience on a computer or iPad or Kindle—might affect how we approach the text and how much effort we put into studying them. As generations of e-book readers evolve, and people become more accustomed to the idea of sitting down with a digital textbook, these factors could change—for better or for worse.

“5 Reasons Physical Books Might Be Better Than E-Books” by Shaunacy Ferro from MENTAL FLOSS, October 2, 2015. Copyright © 2015 Mental Floss, Inc.

---

<sup>6</sup>**LED:** Light-emitting diode; LEDs are often used as a backlight for electronic devices such as smart phones and tablets.

35. The details in paragraph 1 convey a central idea of the passage by noting that
- A. fewer people are buying e-books than printed books.
  - B. printed books have some advantages over e-books.
  - C. printed books rely on natural materials more than e-books.
  - D. some people recommend buying printed books over e-books.
36. Which evidence from the passage **best** supports the claim that “print definitely isn’t dead” (paragraph 1)?
- E. Most college students prefer using paper books to using e-books.
  - F. Scientists are still studying the effects of reading on a screen.
  - G. Paper books are less disruptive to sleep patterns than e-books are.
  - H. Reading on a screen can affect both the eyes and the brain.
37. Which sentence from the passage suggests that people in the future will likely choose e-books over print books?
- A. “They discovered that the kids sometimes skipped text in favor of interactive features in the e-books, suggesting that certain multimedia in children’s e-books can be detrimental to the practice of reading itself.” (paragraph 2)
  - B. “However, the researchers noted that some interactive features in e-books are designed to enhance comprehension, and that those might be more helpful than game-type interactive graphics.” (paragraph 2)
  - C. “Kids who read enhanced e-books—ones with interactive, multimedia experiences—were more engaged with them physically, but in the end they remembered fewer narrative details than those who read print books or basic e-books.” (paragraph 3)
  - D. “However, a 2012 study from the UK’s National Literacy Trust of kids ages 8 to 16 found that more than 50 percent of children reported preferring screen reading.” (paragraph 5)

- 38.** How does paragraph 7 fit into the overall structure of the passage?
- E.** It indicates where the author changes the purpose of the writing.
  - F.** It introduces the author’s opinion on the issue.
  - G.** It signals a shift in the position of the author.
  - H.** It begins the author’s commentary on the preceding information.
- 39.** Which sentence from the passage **best** reveals the author’s point of view about e-books?
- A.** “While scientists are still trying to tease out exactly how digital reading affects us differently, here are five ways e-books might be inferior to their dead-tree cousins.” (paragraph 1)
  - B.** “While e-book textbooks are often cheaper (and easier to carry) than traditional door-stop textbooks, college students often don’t prefer them.” (paragraph 5)
  - C.** “For instance, reading an e-book on a computer is a much different experience than reading on a Kindle, which is specifically designed for consuming books.” (paragraph 8)
  - D.** “So, too, is playing with an interactive e-book on an iPad, compared to using a simpler e-book device that only presents the text, with no opportunities to click away into digital distractions.” (paragraph 8)
- 40.** The studies described in paragraph 6 are important to the author’s observations in paragraphs 7 and 8 because the findings
- E.** show that the author has personal opinions to share beyond the ideas included in the studies.
  - F.** give the author the opportunity to reach practical conclusions about reading that are based on scientific evidence.
  - G.** highlight the author’s statement that digital reading experiences vary based on the individual and the device.
  - H.** support the author’s inference that more studies on more types of devices are needed.

41. Which evidence in the passage is **most** relevant to the author’s claim that “our expectations of e-book reading . . . might affect how we approach the text” (paragraph 9)?
- A. Studies found that students used their study time less productively with e-books than with print books.
  - B. A study found that e-books enhanced with multimedia engaged children to interact physically with the e-books.
  - C. Adult readers recalled more details from a story read in a print book than in an e-book.
  - D. One study found that people who read e-books had poor recall of chronological events.
42. What is the **best** summary of the research into the effects of e-book reading?
- E. E-books are disliked by college students and preferred by kids, and their interactive features are distracting.
  - F. Some e-books can aid comprehension, but most e-book readers remember few details.
  - G. E-books reduce reading comprehension and increase distraction, and they are tiring for the eyes and brain.
  - H. Enhanced e-books engage children, but they offer them too many opportunities to be distracted by non-reading activities.

CONTINUE TO THE NEXT PAGE ►

*The narrator's summer job is collecting marine specimens in Puget Sound, Washington. In this excerpt, he is looking for specimens in the mudflats before daybreak. Mudflats, or flats, are coastal landforms created when sediment and silt from tides are deposited as the tides recede.*

## Excerpt from *The Highest Tide*

by Jim Lynch

- 1 I rounded the oyster beds, to the far side. . . . It was low tide by then, and I saw the water hesitating at its apex, neither leaving nor returning, patiently waiting for the gravitational gears to shift. Dozens of anxious clams started squirting in unison like they did whenever vibrating grains of sand warned them predators were approaching. I stopped and waited with them, to actually see the moment when the tide started returning with its invisible buffet of plankton for the clams, oysters, mussels and other filter feeders. It was right then, ankle deep in the Sound, feet numbing, eyes relaxed, that I saw the nudibranch.<sup>1</sup>
- 2 In all my time on the flats I'd never seen one before. I'd read about them, sure. I'd handled them at aquariums but never in the wild, and I'd never even seen a photo of one this stunning. It was just three inches long but with dozens of fluorescent, orange-tipped hornlike plumes jutting from the back of its see-through body that appeared to be lit from within.
- 3 Nudibranchs are often called the butterflies of the sea, but even that understates their dazzle. Almost everything else in the northern Pacific is dressed to blend with pale surroundings. Nudibranchs don't bother, in part because they taste so lousy they don't need camouflage to survive. But also, I decided right then, because their beauty is so startling it earns them a free pass, the same way everyday life brakes for peacocks, parade floats. . . .
- 4 The dark mudflats loomed like wet, flattened dunes stretching deep into Skookumchuck Bay in front of our house. From a distance, they looked too barren to support sea life. Up close, they still did, unless you knew where to find the hearty clams, worms and tiny creatures that flourish in mud. . . . I'm not sure why I decided to take a look. It was still an hour before sunrise, and I knew exactly what the bars<sup>2</sup> looked like in the moonlight, but for some reason, I couldn't resist.
- 5 I heard it long before I saw it. It was an exhale, a release of sorts, and I instantly wondered if a whale was stranded again. We had a young minke<sup>3</sup> stuck out there two summers prior, and it made similar noises until the tide rose high enough for rescuers to help free it. . . . I looked for a hulking silhouette but couldn't find one. I waited, but there were no more sounds. Still, I went toward what I thought I'd heard, avoiding stepping into the mud until I had to. I knew the flats well enough to know I could get stuck just about anywhere. The general rule was you didn't venture out past the shells and gravel with an incoming tide. I sank up to my knees twice, and numbing water filled my boots.

---

<sup>1</sup>**nudibranch:** type of sea slug

<sup>2</sup>**bars:** sandbars

<sup>3</sup>**minke:** species of small whale

- 6 . . . I kept stepping toward the one sound I'd heard, a growing part of me hoping I'd find nothing at all. When I stopped to rest and yank up my socks, my headlamp crossed it. My first thought? A giant octopus.
- 7 Puget Sound has some of the biggest octopi in the world. They often balloon to a hundred pounds. Even the great Jacques Cousteau<sup>4</sup> himself came to study them. But when I saw the long tubular shape of its upper body and the tangle of tentacles below it, I knew it was more than an octopus. I came closer, within fifty feet, close enough to see its large cylindrical siphon<sup>5</sup> quiver. I couldn't tell if it was making any sounds at that point, because it was impossible to hear anything over the blood in my ears. . . .
- 8 The creature's body came to a triangular point above narrow fins that lay flat on the mud like wings, but it was hard to be sure exactly where it all began or ended, or how long its tentacles truly were, because I was afraid to pry my eyes off its jumble of arms for more than half a second. I didn't know whether I was within reach, and its arms were as big around as my ankle and lined with suckers the size of half-dollars. If they even twitched I would have run. So, I was looking at it and not looking at it while my heart spangled my vision. I saw fragments, pieces, and tried to fuse them in my mind but couldn't be certain of the whole. I knew what it had to be, but I wouldn't allow myself to even think the two words. Then I gradually realized the dark shiny disc in the middle of the rubbery mass was too perfectly round to be mud or a reflection.
- 9 It was too late to smother my scream. Its eye was the size of a hubcap.<sup>6</sup>

From THE HIGHEST TIDE by Jim Lynch. Copyright © 2005 by Jim Lynch. Used by permission of Bloomsbury USA. All rights reserved.

---

<sup>4</sup>**Jacques Cousteau:** renowned French oceanographer

<sup>5</sup>**siphon:** tube-like organ that is used for drawing in or removing fluids

<sup>6</sup>**hubcap:** removable cap over the end of a wheel axle

43. In paragraph 3, the phrase “the butterflies of the sea” conveys the idea that
- A. nudibranchs do not have to work as hard as other animals to survive in the ocean.
  - B. nudibranchs have colorful features that make them stand out.
  - C. nudibranchs are delicate and have trouble adapting to their environment.
  - D. nudibranchs are rare and difficult to find in the ocean.



44. Read these sentences from paragraph 4.

**I'm not sure why I decided to take a look. It was still an hour before sunrise, and I knew exactly what the bars looked like in the moonlight, but for some reason, I couldn't resist.**

The sentences contribute to the overall structure of the excerpt by

- E. introducing the mysterious creature that the narrator discovers.
  - F. indicating a shift from the narrator recalling the past to the narrator reflecting on the present.
  - G. establishing a struggle with fear that the narrator must overcome.
  - H. building tension through indicating that the narrator is going to see something unexpected.
45. The narrator's actions in paragraph 5 reveal that he is
- A. expecting to see the familiar sight of a stranded minke.
  - B. confident about exploring farther into the mudflats.
  - C. unconcerned about becoming stuck in the mudflats.
  - D. determined to discover the source of the sound.
46. How does the setting affect the plot of the excerpt?
- E. The darkness of the mudflats before sunrise causes the narrator to pay close attention to his surroundings.
  - F. The rugged terrain of the mudflats makes it more difficult for the narrator to do his job.
  - G. The slow return of the tide along the mudflats forces the narrator to be patient during his journey.
  - H. The barren appearance of the mudflats creates a sense of mystery that unsettles the narrator.
47. Which sentence from paragraph 5 supports the idea that the narrator is taking a risk?
- A. "It was an exhale, a release of sorts, and I instantly wondered if a whale was stranded again."
  - B. "I looked for a hulking silhouette but couldn't find one."
  - C. "I waited, but there were no more sounds."
  - D. "I knew the flats well enough to know I could get stuck just about anywhere."

48. Read this sentence from paragraph 6.

**I kept stepping toward the one sound I'd heard, a growing part of me hoping I'd find nothing at all.**

How do the narrator's actions develop a central idea of the excerpt?

- E. The narrator's concern about the origin of the noise shows dedication to helping preserve sea life in the mudflats.
- F. The narrator's curiosity about the sea life in the mudflats outweighs any fear about the situation.
- G. The narrator's knowledge about a variety of sea life encourages a search for more specimens to study.
- H. The narrator's eagerness about new specimens of sea life outweighs the reality that the area is an unlikely place to find them.

49. Read these sentences from paragraph 8.

**So, I was looking at it and not looking at it while my heart spangled my vision. I saw fragments, pieces, and tried to fuse them in my mind but couldn't be certain of the whole.**

The sensory language "spangled my vision," "I saw fragments, pieces," and "tried to fuse them in my mind" conveys the narrator's

- A. extreme excitement about making a great discovery.
- B. reluctant acceptance that he needs to leave the mudflats.
- C. terrified confusion about the creature in the mudflats.
- D. sudden concern about his personal safety.

50. The author develops the narrator's point of view when the narrator sees the creature by

- E. describing the narrator's movements as he approaches the creature.
- F. emphasizing the odds of finding the creature in an area inhabited by a rival species.
- G. showing the narrator's growing realization of the creature's identity.
- H. comparing the size of the creature to the size of a vehicle.

*The author of this opinion article attended a symposium, or conference, in Missoula, Montana, at which biologists and other scientists discussed species of plants and animals that are not native to the areas in which they live.*

## Excerpt from “It’s Time to Stop Thinking That All Non-Native Species Are Evil”

by Emma Marris

- 1 Invasive species are scary. It was ecologist Charles Elton, back in the 1950s, who introduced the militaristic “invasion” metaphor to describe exotic plants and animals—but there’s no question some can be extremely destructive.
- 2 The brown tree snake has eaten a dozen kinds of forest birds in Guam to extinction; zebra mussels clog pipes around the Great Lakes; the common house cat turns out to be, in Australia, a mercilessly effective killer of cute, fluffy marsupials like the bilby and the numbat.
- 3 As scientists have sounded the alarm about these pests, the public has gotten the message. Citizen groups rip out non-native plants. Native gardens have become increasingly popular, both as ways to celebrate the unique flora of each region and as tiny hot spots of diversity. Native trees provide food for native bugs, which feed native birds. Food chains developed over thousands of years of co-evolution unfold in our backyards. . . .
- 4 So we’ve learned, scientists and laypeople alike, that native species are good and non-natives are bad.
- 5 Julian Olden, a biologist at the University of Washington, Seattle, who co-organized the symposium, recently polled nearly 2,000 ecologists. Among his findings: a substantial number of them said they would immediately eradicate a hypothetical non-native forest plant, even if it were shown to have no effect on the forest. Olden calls this the “guilty even when proven innocent” approach.
- 6 That kind of approach is not very useful on a rapidly changing planet.

### **Exotics Are Everywhere**

- 7 Climate change is making it harder even to decide who the invaders are.
- 8 How, scientists at the symposium wondered, do you define “native” on a warming planet, when plants and animals are already moving toward the poles or up mountainsides in search of climate conditions they can tolerate? Should we consider them “invasive” in their new homes? Regardless of what we label them, conservationists will be reluctant to remove them from their new environs—to do so would stymie<sup>1</sup> their chances of adapting to the warmer future we’re creating.
- 9 And then there are the non-natives that we actually like. Most domestic crops are exotic in most of the places they’re grown, but there are even wild exotics that “do good,” forming useful relationships with native species.

---

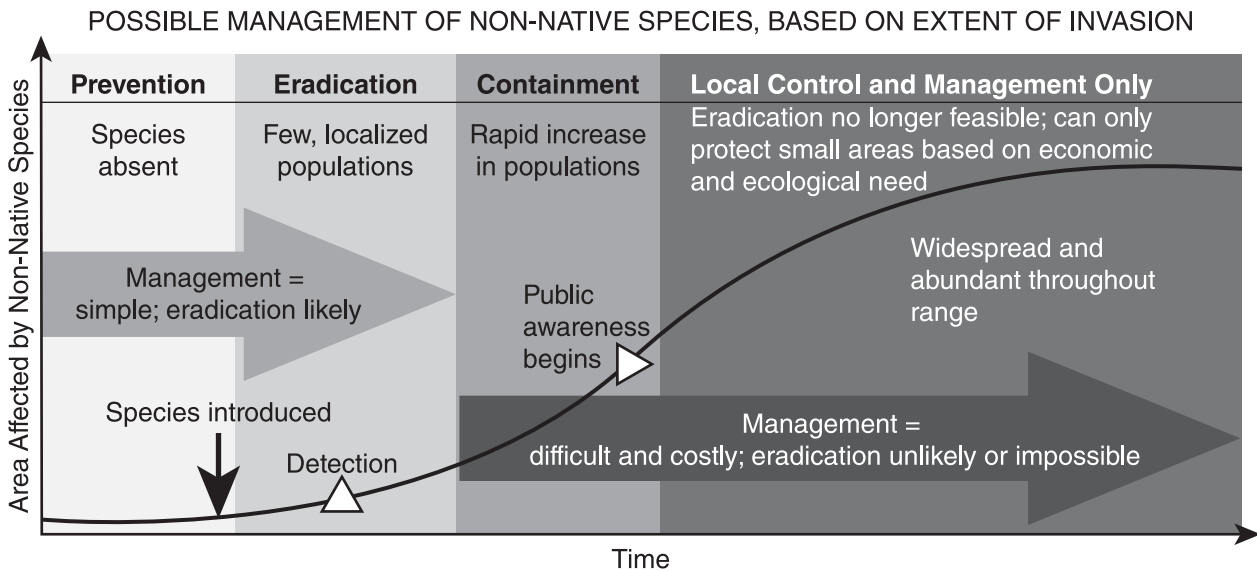
<sup>1</sup>**stymie:** hinder or interfere with

- 10 Edwin Grosholz of the University of California, Davis, told the recent symposium about one such relationship. On beaches in his state, non-native spartina grass has become important habitat for the endangered California clapper rail, a plump shorebird with a downward curving bill more at home on land than in the air. A project to rip out and poison the spartina—which grows in dense swaths that exclude many other shorebirds—saw clapper rail numbers go tumbling downward.
- 11 There are other examples like that. The endangered southwestern willow flycatcher nests in “invasive” tamarisk shrubs. Many native (and beautiful) Hawaiian flowers are now pollinated by the Japanese white-eye bird—because the native pollinators have been driven extinct by other non-native species.
- 12 Should we impose further risk on already endangered natives by severing these relationships? Or should we admire the resilience of nature and let such “well-behaved” exotics stay? . . .
- 13 Leave them alone, more and more conservationists are arguing, and stop focusing obsessively on categorizing species as native or non-native. Mark Davis, an ecologist at Macalester College in St. Paul, Minnesota, once considered himself an “invasion biologist”—but not anymore. “I am actively trying to get the field to retire the invader narrative,” he said in Missoula.

#### **A Good Thing, Not the Only Thing**

- 14 After all, nativeness is just one environmental value, and arguably not as important as preventing extinctions and preserving biodiversity. In some cases we can best serve biodiversity by leaving the non-natives alone or even—brace yourself, now—introducing them on purpose.
- 15 This is the thinking behind, for example, installing the Aldabra tortoise on the islands of Mauritius. The islands lost their own large tortoises, and the fruiting plants that formerly had their seeds moved around by these fruit-loving reptiles have been on the decline. A tortoise that’s related to the island’s large tortoises—a non-native from the Seychelles in the Indian Ocean that was intentionally introduced in 2004—is now handling some of that work.
- 16 Most of the time, for the time being, conserving species still means focusing on supporting them in their historical habitats, planting natives and removing non-natives. We can and should do that in places where it is feasible and important to us.

From “It’s Time to Stop Thinking That All Non-Native Species Are Evil” by Emma Marris from NATIONAL GEOGRAPHIC MAGAZINE, July 24, 2014. Copyright © 2014 by National Geographic Society.



- 51.** Which sentence from the excerpt supports the conclusion that Elton’s “militaristic ‘invasion’ metaphor” (paragraph 1) has influenced scientific understanding of non-native species?
- A.** “Among [Olden’s] findings: a substantial number of them said they would immediately eradicate a hypothetical non-native forest plant, even if it were shown to have no effect on the forest.” (paragraph 5)
  - B.** “Regardless of what we label them, conservationists will be reluctant to remove them from their new environs—to do so would stymie their chances of adapting to the warmer future we’re creating.” (paragraph 8)
  - C.** “A project to rip out and poison the spartina—which grows in dense swaths that exclude many other shorebirds—saw clapper rail numbers go tumbling downward.” (paragraph 10)
  - D.** “In some cases we can best serve biodiversity by leaving the non-natives alone or even—brace yourself, now—introducing them on purpose.” (paragraph 14)
- 52.** Which detail provides the **most** relevant support for the claim that “climate change is making it harder even to decide who the invaders are” (paragraph 7)?
- E.** the mention in paragraph 8 of non-native species that are forced to seek new habitats
  - F.** the acknowledgment in paragraph 9 that non-native species include many domestic crops
  - G.** the description in paragraph 11 of the interactions between native and non-native species
  - H.** the account in paragraph 13 of an ecologist who changed his beliefs about non-native species

- 53.** The author’s use of cause and effect in paragraphs 10–11 **mainly** emphasizes the idea that
- A.** some non-native species have helped their environments while others have had harmful impacts.
  - B.** attempts to remove non-native species have seldom produced desired results.
  - C.** some endangered native species have flourished because of the presence of non-native species.
  - D.** interactions between endangered native species and non-native species must be carefully monitored.
- 54.** Which sentence from the excerpt supports the idea that some species are able to adjust to change?
- E.** “Native gardens have become increasingly popular, both as ways to celebrate the unique flora of each region and as tiny hot spots of diversity.” (paragraph 3)
  - F.** “Many native (and beautiful) Hawaiian flowers are now pollinated by the Japanese white-eye bird—because the native pollinators have been driven extinct by other non-native species.” (paragraph 11)
  - G.** “After all, nativeness is just one environmental value, and arguably not as important as preventing extinctions and preserving biodiversity.” (paragraph 14)
  - H.** “The islands lost their own large tortoises, and the fruiting plants that formerly had their seeds moved around by these fruit-loving reptiles have been on the decline.” (paragraph 15)
- 55.** The details in the section “A Good Thing, Not the Only Thing” convey a central idea of the excerpt by suggesting that
- A.** some non-native species can replace native species that are unable to survive on their own.
  - B.** decisions about whether to keep non-native species should be considered on an individual basis.
  - C.** the scientists who study rapidly changing ecosystems agree that non-native species enhance biodiversity.
  - D.** a natural habitat that is healthy should be able to support a blend of native and non-native species.

- 56.** Climate change has affected efforts to manage invasive species **mainly** by causing ecologists to
- E.** call upon the public to be more tolerant of the presence of non-native species.
  - F.** admit that past attempts to eliminate non-native species have damaged the environment.
  - G.** find ways of ensuring that native species are not harmed by the arrival of new species.
  - H.** acknowledge that it is not realistic for some species to remain in their native habitats.
- 57.** How does the chart provide additional support for a central idea of the excerpt?
- A.** by implying that the public becomes aware of non-native species only after removal is impossible
  - B.** by showing that the complete removal of non-native species is usually not achievable after a certain period of time
  - C.** by demonstrating why non-native species can be destructive if they are not removed from an area immediately
  - D.** by explaining how some conservation groups have approached the removal of non-native species

CONTINUE TO THE NEXT PAGE ►



# PART 2 — MATHEMATICS

## 57 QUESTIONS

### IMPORTANT NOTES

- (1) Formulas and definitions of mathematical terms and symbols are **not** provided.
- (2) Diagrams other than graphs are **not** necessarily drawn to scale. Do not assume any relationship in a diagram unless it is specifically stated or can be determined from the information given.
- (3) Assume that a diagram is in one plane unless the question specifically states that it is not.
- (4) Graphs are drawn to scale. Unless stated otherwise, you can assume relationships according to appearance. For example, lines on a graph that appear to be parallel can be assumed to be parallel. This is also true for concurrent lines, straight lines, collinear points, right angles, etc.
- (5) Reduce (simplify) all fractions to lowest terms.

### GRID-IN QUESTION NOTES

- (1) For each grid-in question, write your answer at the top of the grid.
- (2) Begin recording your answer in the columns on the far left.
- (3) Fill in the circle under the box that matches the number or symbol you wrote. Leave the negative sign bubble blank if your answer is positive.

(Answer:  $-1.5$ )

	-	1	.	5	
Negative sign →	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	← Decimal point
	0	0	0	0	
	<input checked="" type="radio"/>	1	1	1	
	2	2	2	2	
	3	3	3	3	
	4	4	4	4	
	5	5	<input checked="" type="radio"/>	5	
	6	6	6	6	
	7	7	7	7	
	8	8	8	8	
	9	9	9	9	

(Answer:  $3.2$ )

	3	.	2		
Negative sign →	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	← Decimal point
	0	0	0	0	
	1	1	1	1	
	2	2	<input checked="" type="radio"/>	2	
	<input checked="" type="radio"/>	3	3	3	
	4	4	4	4	
	5	5	5	5	
	6	6	6	6	
	7	7	7	7	
	8	8	8	8	
	9	9	9	9	

CONTINUE TO THE NEXT PAGE ►

---

# GRID-IN QUESTIONS

## QUESTIONS 58–62

**DIRECTIONS:** Solve each problem. On the answer sheet, write your answer in the boxes at the top of the grid. Start on the left side of each grid. Print only one number or symbol in each box. Under each box, fill in the circle that matches the number or symbol you wrote above.

- Do not fill in a circle under an unused box.
  - Do not leave a box blank in the middle of an answer.
- 

58. Simplify:

$$-3.8 + 2.3 - (-1.1)$$

---

59. Angle M and angle R are supplementary. The measure of angle R is 5 times the measure of angle M. What is the measure of angle R, in degrees?

60. A juice mixture contains  $\frac{3}{16}$  gallon of apple juice and  $\frac{3}{40}$  gallon of cranberry juice. How many gallons of apple juice per gallon of cranberry juice does the mixture contain? (Express your answer as a decimal.)

61. Mr. Chan's lawn grows  $2\frac{1}{8}$  inches every 2 weeks. He mows his lawn every 2 weeks and cuts off the top  $1\frac{3}{4}$  inches of lawn. If Mr. Chan's lawn was 4 inches tall at the beginning of the season, how many inches tall, in decimal form, is Mr. Chan's lawn after 8 weeks?

62.

RESULTS FROM SURVEY OF 110 FAMILIES

Number of Children in the Family	Number of Families
0	45
1	32
2	19
3	8
4	6

The table above shows the number of children in each of 110 families. What is the median number of children in these families?

# MULTIPLE CHOICE QUESTIONS

## QUESTIONS 63–114

**DIRECTIONS:** Solve each problem. Select the answer from the choices given. Mark the letter of your answer on the answer sheet. When you are solving problems, you can write in the test booklet or on the scrap paper given to you.

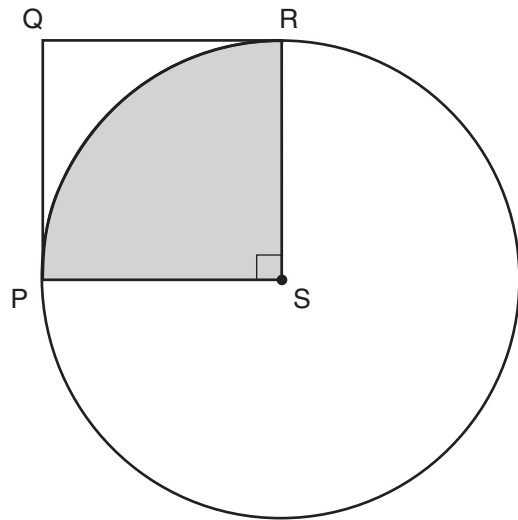
63. Mr. Jones has 550 goats, which is 10% more than Mr. King has. How many **more** goats does Mr. Jones have than Mr. King?

A. 50  
B. 55  
C. 495  
D. 500

64. If  $\frac{2y}{x} - \frac{y}{2x} = \frac{\square}{2x}$  and  $x \neq 0$ , what expression is represented by  $\square$ ?

E.  $y$   
F.  $2y$   
G.  $3y$   
H.  $4y$

- 65.



In the figure above, PQRS is a square. Point S is the center of the circle, and points P and R are on the circle. If the area of the square is 4 square centimeters, what is the area, in square centimeters, of the shaded quarter of the circle?

A.  $\frac{\pi}{4}$   
B.  $\pi$   
C.  $2\pi$   
D.  $4\pi$

- 
- 66.** A list of consecutive integers begins with  $m$  and ends with  $n$ . If  $n - m = 66$ , how many integers are in the list?

**E.** 2  
**F.** 33  
**G.** 66  
**H.** 67

- 
- 67.** Simplify:

$$\frac{\left(\frac{39(x-3)}{3}\right) + 39}{13}$$

**A.**  $x$   
**B.**  $x - 2$   
**C.**  $13x - 36$   
**D.**  $x + \frac{36}{13}$

- 68.** Jar 1 and Jar 2 each contain  $\frac{1}{2}$  cup of water. If  $\frac{1}{4}$  of the water in Jar 1 is poured into Jar 2, how much water is now in Jar 2?

**E.**  $\frac{1}{8}$  cup  
**F.**  $\frac{1}{4}$  cup  
**G.**  $\frac{5}{8}$  cup  
**H.**  $\frac{3}{4}$  cup

- 
- 69.** If  $n$  is a whole number, and 0.01 is between  $\frac{1}{n}$  and  $\frac{1}{n+2}$ , what is the value of  $n$ ?

**A.** 0  
**B.** 1  
**C.** 2  
**D.** 99

---

**70.** When asked a certain question in a poll, 72% of the people polled answered yes. If 56 people did **not** answer yes to that question, what is the total number of people who were polled?

- E.** 78
- F.** 128
- G.** 144
- H.** 200

---

**71.** A museum has a room in the shape of a rectangle. The area of the floor is 960 square feet. In a scale drawing of the museum, 1 inch = 20 feet. If the length of the room is 2 inches in the scale drawing, what is the width of this room in the scale drawing?

- A.**  $1\frac{1}{5}$  in.
- B.**  $1\frac{1}{4}$  in.
- C.** 24 in.
- D.** 40 in.

**72.** A program on a computer randomly generates a sequence of whole numbers from 1 to 9, inclusive. If the computer generates a sequence of 300 numbers, what is the best prediction of the number of odd numbers in the sequence?

- E.** 120
- F.** 133
- G.** 150
- H.** 167

---

**73.** A truck rental company charges a one-time fee of \$40 plus \$1 per mile driven. Dalia rented a truck and used a coupon for 20% off the total rental cost. After the coupon was applied, she spent a total of \$60. How many miles did she drive?

- A.** 8
- B.** 20
- C.** 32
- D.** 35

- 
- 74.** The probability of drawing a red candy at random from a bag of 25 candies is  $\frac{2}{5}$ . After 5 red candies are removed from the bag, what is the probability of randomly drawing a red candy from the bag?
- E.** 0
- F.**  $\frac{1}{10}$
- G.**  $\frac{1}{5}$
- H.**  $\frac{1}{4}$

- 
- 75.** Each number in a sequence is formed by doubling the previous number and then adding 1. If the 9th number in the sequence is 63, what is the 10th number minus the 7th number?
- A.** 96
- B.** 111
- C.** 112
- D.** 127

**76.**

8.9, 8.2, 8.5, 9.0, 8.4, 8.6, 8.8

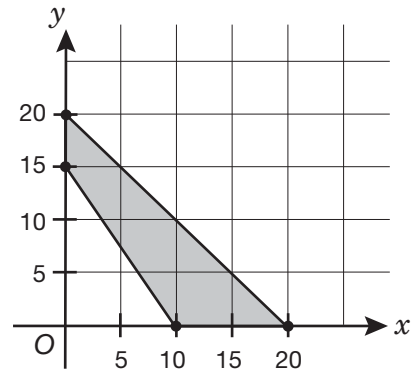
At a skating championship, there are seven judges who each award a score for each skater's performance. The highest and lowest scores given to each skater are discarded, and the mean of the remaining scores is then calculated and reported as the skater's final score. What is the final score for the skater who received the scores shown above from the judges?

- E.** 8.60
- F.** 8.62
- G.** 8.64
- H.** 8.70

77. A piece of wood that is  $4\frac{1}{2}$  feet long is cut into 2 pieces of different lengths. The shorter piece has a length of  $x$  feet. Which inequality expresses all possible values of  $x$ ?

- A.  $0 < x < 2\frac{1}{4}$
- B.  $0 \leq x \leq 2\frac{1}{4}$
- C.  $0 < x < 4\frac{1}{2}$
- D.  $2\frac{1}{4} < x < 4\frac{1}{2}$

78.



What is the area, in square units, of the shaded region shown in the figure above?

- E. 75
- F. 125
- G. 150
- H. 200

79.

$$F = \frac{9}{5}C + 32$$

Yesterday in Centerville, the highest Fahrenheit temperature,  $F$ , was  $86^\circ$ , and the lowest was  $68^\circ$ . What was the difference between these temperatures, in degrees Celsius,  $C$ ?

- A.  $10.0^\circ \text{ C}$
- B.  $15.0^\circ \text{ C}$
- C.  $20.0^\circ \text{ C}$
- D.  $32.4^\circ \text{ C}$



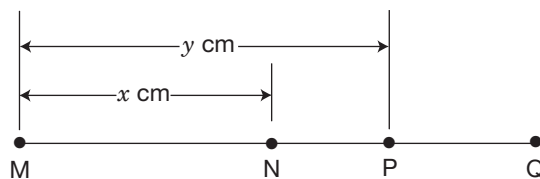
80. Let  $x$  be an odd number. In terms of  $x$ , what is the sum of the two even numbers closest to  $x$ ?

- E.  $x$
- F.  $2x$
- G.  $2x - 2$
- H.  $2x - 4$

81. In 1991, the total public debt of the United States was about \$3,600,000,000,000. In that year, there were about 250,000,000 people in the United States. Which amount is the best estimate of the public debt per person for that year?

- A. \$1,440
- B. \$14,400
- C. \$144,000
- D. \$14,400,000,000

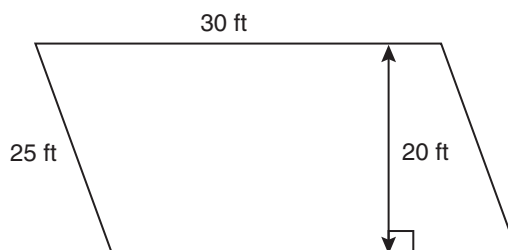
82.



In the figure above, N is the midpoint of  $\overline{MQ}$ . Which segment has length  $(2x - y)$  centimeters?

- E.  $\overline{PQ}$
- F.  $\overline{NP}$
- G.  $\overline{MQ}$
- H.  $\overline{MP}$

83.



What is the area of the parallelogram shown above?

- A. 750 sq ft
- B. 600 sq ft
- C. 500 sq ft
- D. 300 sq ft

- 84.** On Wednesday, a baker produced 100 more loaves of bread than were produced on Tuesday. On Thursday, the baker produced 50 fewer loaves than were produced on Tuesday. If the total number of loaves produced on all three days was 230, how many loaves were produced on Wednesday?

- E.** 60
- F.** 80
- G.** 120
- H.** 160

**85.**

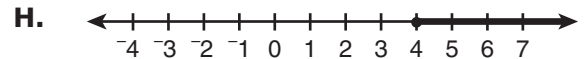
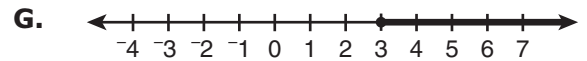
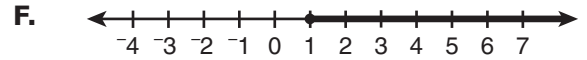
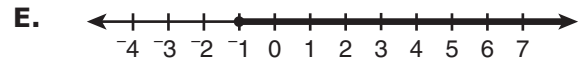
QUIZ SCORES IN  
MRS. ARCH'S CLASS

Quiz Score	Number of Students
60	9
70	7
80	4
90	5
100	3

In the table above, what is the mean quiz score?

- A.** 60
- B.** 70
- C.** 75
- D.** 80

- 86.** Which graph represents the solution to the inequality  $x + 4 \geq 3$ ?



- 87.** The reciprocal of  $\frac{1}{4}$  is added to the reciprocal of 3. What is the reciprocal of this sum?

- A.**  $\frac{3}{13}$
- B.**  $\frac{3}{4}$
- C.**  $\frac{4}{5}$
- D.**  $\frac{13}{4}$

**88.** Nura made a square poster with a side length of 13 inches. Latrice made a square poster with a side length of 15 inches. What is the difference, in square inches, between the area of Latrice’s poster and the area of Nura’s poster?

- E.** 56
- F.** 8
- G.** 4
- H.** 2

**89.**

INGREDIENTS FOR  
4 SERVINGS  
OF OATMEAL

<b>Ingredient</b>	<b>Cups</b>
Oats	$\frac{2}{3}$
Water	$3\frac{1}{4}$

The table shows the cups of ingredients used to make 4 servings of oatmeal. What is the unit rate for cups of oats per cup of water?

- A.**  $\frac{1}{6}$
- B.**  $\frac{8}{39}$
- C.**  $\frac{13}{16}$
- D.**  $\frac{13}{8}$

90. If  $\left(\frac{3}{5} - \frac{1}{2}\right)x = \frac{1}{4} + \frac{2}{3}$ , what is the value of  $x$ ?

E.  $\frac{11}{120}$

F.  $\frac{2}{7}$

G.  $\frac{5}{6}$

H.  $\frac{55}{6}$

91. In a certain state, the sales tax rate increased from 7.0% to 7.5%. What was the increase in the sales tax on a \$200 item?

- A. \$1
- B. \$10
- C. \$14
- D. \$15

92. Evaluate:

$$\left|(-8) - 12 + (-17) - (-31)\right| - |24|$$

E. -30

F. -18

G. 18

H. 44

93.

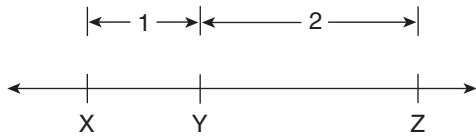
CELL PHONE SALES BY COLOR

Color	Percentage of Cell Phones Sold
White	$8k$
Black	30
Blue	$30 - 2k$
Red	$k + 5$
Total	100

The table above shows cell phone sales by color. What percentage of the cell phones sold were blue?

- A. 18%
- B. 20%
- C. 22%
- D. 28%

94.



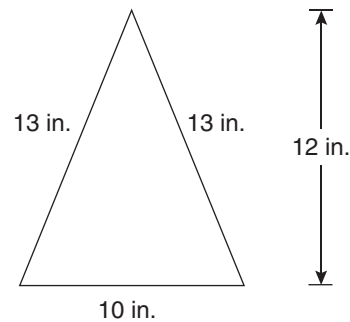
On the number line above, the distance between X and Y is 1 unit, and the distance between Y and Z is 2 units. What is the distance, in units, between Y and the midpoint of X and Z?

- E.  $\frac{1}{2}$
- F. 1
- G.  $1\frac{1}{2}$
- H. 3

95. By what percent did the price of a cup of coffee increase if its price was increased from \$1.25 to \$1.35?

- A. 7%
- B. 8%
- C. 10%
- D. 12%

96.



Raquel is cutting out pieces of cardboard to make a pyramid. She will use a square piece for the base and identical triangular pieces for the sides. The figure above shows the dimensions of the triangle for each side. What will be the total surface area, in square inches, of the pyramid, including the square base?

- E. 280
- F. 295
- G. 340
- H. 360

97. The price of a sandwich was raised from \$6.25 to \$6.75. What was the percent increase in the price?

- A. 5%
- B. 8%
- C. 7%
- D. 50%

---

**98.** Terrell played 5 computer games and earned a mean score of 8 points per game. If his mean score for the first 4 games was 7 points per game, how many points was his score in the fifth game?

- E.** 9
- F.** 11
- G.** 12
- H.** 14

---

**99.** Lian bought enough oranges to fill 4 bags. Each bag contains 8 oranges. The total cost was \$11.52. At that rate, how much would Lian pay for 42 oranges?

- A.** \$17.28
- B.** \$15.12
- C.** \$15.02
- D.** \$12.52

---

**100.**  $3.6 \div 0.018 =$

- E.** 0.005
- F.** 0.648
- G.** 20
- H.** 200

**101.** A tank with a 500-gallon capacity currently contains 75 gallons of water. Additional water is poured into this tank at a rate of 5 gallons per minute. After 45 minutes of adding water, what percentage of the tank's total capacity will be filled? (Assume that there is no loss of water from the tank.)

- A.** 45%
- B.** 55%
- C.** 60%
- D.** 70%

---

**102.** Misha wants to use ribbon to make 2 straps for a backpack. The ribbon costs \$5.00 a yard. If each strap requires  $1\frac{1}{4}$  yards of ribbon, how much will Misha pay for the ribbon (not including tax)?

- E.** \$4.00
- F.** \$6.25
- G.** \$11.25
- H.** \$12.50

- 
- 103.** A graph shows the proportional relationship between the number of test questions a student gets correct,  $x$ , and the student's test score,  $y$ . The ordered pair  $\left(1, \frac{5}{4}\right)$  is on the graph. What does the  $y$ -coordinate of the ordered pair represent in this relationship?
- A.** The test will last  $1\frac{1}{4}$  hours.
  - B.** Each test question is worth  $1\frac{1}{4}$  points.
  - C.** An average student can answer 5 questions in 4 minutes.
  - D.** A student who answers 5 questions correctly will earn 4 points.

- 104.** In a survey of 200 adults in the town of Waskegon, 45 reported reading the online version of the *Waskegon Bulletin* the previous day. If 25,000 adults live in Waskegon, which number is the best estimate of the number of adults who read the online version of the *Waskegon Bulletin* the previous day?
- E.** 5,600
  - F.** 9,000
  - G.** 11,300
  - H.** 24,800

- 
- 105.** A hiker plans on hiking 17 miles in 3 days. Which equation describes the relationship between the number of days hiked,  $x$ , and the number of miles traveled,  $y$ ?
- A.**  $y = \frac{3}{17}x$
  - B.**  $y = 3x$
  - C.**  $y = \frac{17}{3}x$
  - D.**  $y = 17x$

---

**106.** Carolyn walked 3 miles from her house to the library and then  $2\frac{1}{2}$  miles farther to the grocery store. Returning home by the same route, she walked  $1\frac{2}{3}$  miles before stopping at a friend's house. How many miles did Carolyn have left to walk home?

**E.**  $3\frac{5}{6}$

**F.**  $4\frac{1}{6}$

**G.**  $4\frac{2}{3}$

**H.**  $7\frac{1}{6}$

---

**107.** A child grows  $1\frac{1}{4}$  inches in  $\frac{1}{3}$  of a year. What would be his yearly growth rate in inches per year?

**A.**  $\frac{5}{12}$

**B.**  $3\frac{1}{4}$

**C.**  $3\frac{3}{4}$

**D.**  $4\frac{1}{4}$

**108.**  $3(0.01) - 3(0.1) =$

**E.**  $-0.33$

**F.**  $-0.27$

**G.**  $0$

**H.**  $0.33$

---

**109.** What is the value of

$$10\frac{1}{2} + \left(-5\frac{1}{3}\right) - \left(-2\frac{3}{4}\right)?$$

**A.**  $2\frac{5}{12}$

**B.**  $7\frac{11}{12}$

**C.**  $13\frac{1}{12}$

**D.**  $18\frac{7}{12}$



---

**110.** Carlos has \$350 in a savings account that earns 5% simple interest each year. How much will he have in the account after 1 year, if there is no money withdrawn?

- E.** \$17.50
- F.** \$175.00
- G.** \$367.50
- H.** \$525.00

---

**111.** The probability of an event occurring is 0.05. What is the chance that the event will occur?

- A.** likely
- B.** unlikely
- C.** impossible
- D.** neither likely nor unlikely

**112.** The table below shows the number of cups of red paint and blue paint used to make a purple paint mixture.

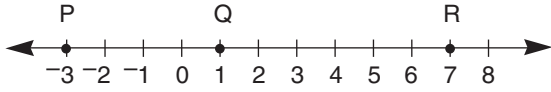
PURPLE PAINT

Cups of Red Paint	Cups of Blue Paint
1	1.5
4	6
11	$y$

Based on the relationship between the number of cups of red paint and the number of cups of blue paint, what is the value of  $y$ ?

- E.** 10.5
- F.** 13
- G.** 16.5
- H.** 24

113.



On the number line above, what is the distance, in units, between the midpoint of  $\overline{PQ}$  and the midpoint of  $\overline{QR}$ ?

- A. 3
- B. 4
- C. 5
- D. 6

114. An ice cream shop sells 16 cups of ice cream for \$48 and 4 cups for \$12. There is a proportional relationship between the number of cups of ice cream and the cost. What is the constant of proportionality for this relationship?

- E. 3 cups per dollar
- F. 3 dollars per cup
- G. 4 cups per dollar
- H. 4 dollars per cup

THIS IS THE END OF THE TEST.  
IF TIME REMAINS, YOU SHOULD CHECK  
YOUR ANSWERS. BE SURE THAT THERE  
ARE NO STRAY MARKS, PARTIALLY  
FILLED ANSWER CIRCLES, OR  
INCOMPLETE ERASURES ON YOUR  
ANSWER SHEET. ■

## Form A

# Sample Test – English Language Arts Explanations of Correct Answers

### REVISING/EDITING PART A

1. The question asks for the **most** precise revision for the words “The engineers tried some other things.”
  - A. Incorrect. This revision uses the word “materials” rather than precisely identifying what the engineers used.
  - B. **CORRECT.** This option revises the words to be more precise by using the specific words “tested” for the verb and “foam and fiberglass” for the materials.
  - C. Incorrect. This revision uses the word “examined” rather than a word indicating a process of experimental trial and error. The sentence also uses the word “materials” rather than precisely identifying what the engineers used.
  - D. Incorrect. This revision identifies the materials, but the imprecise verb “worked with” does not specify what the engineers were doing.

---
2. The question asks for the identification of the sentence in the paragraph that has an error in its construction and should be revised.
  - E. **CORRECT.** Sentence 1 contains a structural error. The sentence begins with a list of modifying phrases: “Walking dogs, cleaning kennels, hand-feeding newborn kittens, and supporting the pet-adoption process.” As written, this list modifies the closest noun phrase, “the animal shelter,” which is illogical because the list describes tasks at the animal shelter, not the shelter itself. The list should follow the word it modifies, “tasks,” at the end of the sentence, so that it is closer to the word that it modifies.
  - F. Incorrect. Sentence 2 does not contain structural errors. The phrase “especially those who aspire to care for and protect animals” in sentence 2 correctly modifies “young people.”
  - G. Incorrect. Sentence 3 does not contain structural errors. The structure of sentence 3 allows the words “In addition to hands-on training with animal care” to correctly modify “volunteers will learn.”
  - H. Incorrect. Sentence 4 does not contain structural errors. The phrase “which is the awareness and understanding of the feelings of others” in sentence 4 correctly modifies the word “empathy.”

3. The question asks for the correction needed for an error in the sentence.
- A. Incorrect. When a place name has more than one element, a comma is used to separate the elements for clarity.
  - B. **CORRECT.** The sentence needs a comma to set off the clause “which is considered one of the ‘new’ Seven Wonders of the World,” because the clause is not essential to the meaning of the sentence (nonrestrictive clause). This option is correct because it places a comma where it is needed, after “Italy,” to set off the nonrestrictive clause that follows.
  - C. Incorrect. This edit would remove the comma at the end of the nonrestrictive clause, which should be set off by commas at the beginning and the end.
  - D. Incorrect. A comma after “built” would separate the predicate “and once could hold up to 50,000 spectators” from the subject of the main clause. The predicates “is the largest amphitheater ever built” and “once could hold up to 50,000 spectators” both relate to the same subject (“The Colosseum in Rome, Italy”), so a comma should not be used to separate the second predicate from that subject.
- 

4. The question asks for the revisions that are needed to correct errors in the paragraph.
- E. Incorrect. The revisions introduce new errors. The colon after “wonder” is needed to set off the question “what is the difference between the two?” from the rest of the sentence. In addition, changing the verb “is” to “are” would be incorrect with the use of the singular noun “difference,” which is the subject of the question.
  - F. Incorrect. The revisions introduce new errors. The comma following the introductory phrase “To start with” helps with clarity and is needed to separate the phrase from the rest of the sentence. Changing “it is” to “they are” would be incorrect with the use of the singular noun “butterfat content,” which is what the words “it is” refer to in the sentence.
  - G. Incorrect. The revisions introduce new errors. The comma following “process” is necessary to set off the nonrestrictive clause “which adds less air to the frozen treat” from the rest of the sentence. This clause is considered a nonrestrictive clause because it provides additional, but not essential, information about the mixing process. Changing the verb “makes” to “make” would be incorrect with the use of the singular noun “mixing process,” which is the subject of the sentence.
  - H. **CORRECT.** Deleting the comma after “gelato” would include the clause “and allow it to melt more quickly” with the first part of the clause “which enhances the texture and flavor of the gelato.” The word “and” between the two verb phrases (“enhances the texture and flavor of the gelato” and “allow it to melt more quickly”) indicates that the two verb phrases share a subject, “which” (referring to the act of serving gelato 10 to 15 degrees warmer than ice cream). The two ideas should not be separated by a comma within the clause. The entire clause “which enhances the texture and flavor of the gelato and allow it to melt more quickly” should be separated from the main clause only by the comma after “cream” because the entire clause is a nonrestrictive clause. This clause provides additional, but not essential, information about the purpose of serving gelato at a warmer temperature than ice cream. Changing the verb “allow” to “allows” is also necessary to match the use of the singular pronoun “which.”

## REVISING/EDITING PART B

### The Free College Debate

5. The question asks which sentence should replace sentence 3 to **best** state the topic of the passage.
- A. Incorrect. Although this sentence mentions that “several states have implemented scholarship programs,” it does not clearly introduce the topic of the passage, which is differing opinions about and approaches to solving the problem of the cost of college.
  - B. **CORRECT.** This sentence best replaces sentence 3 because it clearly states the topic of “determining the most effective way to make college affordable.” It also provides an introduction to the “differing opinions” of proponents, who believe that states should provide low-cost or free tuition, and opponents, who believe that such state programs are “unsustainable” (sentence 8).
  - C. Incorrect. This sentence mentions the role of higher-education institutions in helping “reduce the cost of a college education” for students, which is a idea discussed in sentences 14 and 15 in the passage. Although the sentence provides details to support the topic of the passage by referring to “ways to help students avoid paying for unnecessary classes and materials,” it does not state the topic, which is differing opinions about and approaches to solving the problem of the cost of college.
  - D. Incorrect. Even though this sentence mentions “college affordability,” it is primarily focused on a problem that is related to, but different from, the issue discussed in the passage. The passage is concerned with “the price of higher education” (sentence 2), not how tuition rates “affect the quality of the education [students] receive.”
- 
6. The question asks where the sentence should be added to **best** support the ideas in the second paragraph (sentences 4–7).
- E. Incorrect. Sentence 4 introduces the main idea of the second paragraph (making college “a financially realistic option for those who aspire to obtain a degree”) and should not be preceded by the added sentence, which focuses more narrowly on the specific ways that some states are implementing that idea.
  - F. **CORRECT.** The added sentence provides a proposed solution to the issue stated in sentence 4, that “a college education should be a financially realistic option.” Sentence 5 is an example of the programs discussed in the added sentence.
  - G. Incorrect. Sentences 5 and 6 offer examples of state governments providing “low-cost or free” tuition. The added sentence introduces this idea in the second paragraph and should come before these specific examples are provided as evidence.
  - H. Incorrect. Sentence 6 provides an example of the state government of Tennessee providing “low-cost or free” tuition, and sentence 7 further explains the opinion of those in favor of such programs (“a step in the right direction for making college affordable”). However, the ideas in sentences 6 and 7 follow from and support the idea in the added sentence. Therefore, the added sentence should be placed before sentences 6 and 7, which help elaborate its idea.

7. The question asks which sentence presents information that shifts away from the topic of the third paragraph (sentences 8–13) and should be deleted.
- A. Incorrect. Sentence 9 explains that scholarship funding comes “from the state’s budget, which primarily comes from state taxes.” Sentence 10 logically follows the idea in sentence 9 by explaining that “as more students choose to attend college, more funds will be needed to cover the costs.” Therefore, sentence 10 should not be deleted, because it does not shift away from the topic of the paragraph.
  - B. **CORRECT.** Sentence 10 makes the claim that “as more students choose to attend college, more funds will be needed to cover the costs.” Sentence 11 shifts away from this topic by focusing on how switching majors or working affects students’ ability to finish college, rather than on the additional funds that will be needed for scholarship programs. Therefore, sentence 11 should be deleted.
  - C. Incorrect. Sentence 9 states that scholarship program funding comes “from the state’s budget, which primarily comes from state taxes.” Sentence 10 points out that “as more students choose to attend college, more funds will be needed to cover the costs.” Sentence 12 elaborates on the critics’ opinions discussed in sentences 8–10. It reflects the belief that the “circumstances” described in sentences 9 and 10 “will inevitably lead to an increase in taxes, a decline in the quality of the education offered by the schools, or both.” Thus, sentence 12 should not be deleted, because it does not shift away from the topic of the paragraph.
  - D. Incorrect. Sentence 13 refers back to the “critics” mentioned in sentence 12 and expands on the critics’ concern about increased taxes mentioned in sentence 12 by stating that “narrower college-affordability efforts . . . may be more effective and viable solutions.” Therefore, sentence 13 should not be deleted because it logically follows the ideas in sentence 12 and serves as a concluding sentence for the paragraph.

8. The question asks which phrase should be added before sentence 14 to **best** transition to the ideas in the fourth paragraph (sentences 14–17).
- E.** Incorrect. Sentence 13 summarizes the viewpoint of opponents, who believe that targeted approaches to funding education “may be more effective and viable solutions,” and sentence 14 serves to introduce how “faculty and students at higher-education institutions can work to keep costs down.” Affordability is “a complicated issue,” but the use of the word “Because” suggests that the ideas that follow in sentences 14–17 will explain a cause-and-effect relationship. However, sentences 14–17 discuss ways faculty and students should work together to keep the cost of college down while waiting for a long-term solution to the problem, not a causal relationship.
- F.** Incorrect. Sentences 4–13 provide information about the viewpoint of proponents, who believe that “a college education should be a financially realistic option for those who aspire to obtain a degree” (sentence 4), and opponents, who believe free college programs are “unsustainable” (sentence 8). Although the phrase in this option mentions “opinions,” it indicates that the fourth paragraph will discuss why the number of opinions makes affordability a debatable issue. Instead, the fourth paragraph discusses ways faculty and students can help keep costs down until a solution is reached.
- G. CORRECT.** Sentence 13 summarizes the viewpoint of opponents, who believe that targeted approaches to funding education “may be more effective and viable solutions,” while proponents “generally believe that these [government] programs are a step in the right direction for making college affordable” (sentence 7). However, sentences 14–17 offer three possible solutions that could alleviate the problem in the meantime. Therefore, the phrase in this option should be added before sentence 14 to best transition to the ideas in the fourth paragraph because it suggests that until the issue of affordability is resolved, alternatives are available to help make a college education more affordable.
- H.** Incorrect. This phrase mentions “college affordability,” a topic discussed in the fourth paragraph. However, the ideas introduced in the phrase do not logically lead into the ideas discussed in sentences 14–17, because the phrase mentions “programs [that] have been successful,” whereas the paragraph states that “faculty and students at higher-education institutions can work to keep costs down” (sentence 14) and that colleges “should account for experience by allowing students to demonstrate their knowledge in order to avoid having to pay to sit through classes on subjects they have already mastered” (sentence 16). Use of the words “can” and “should” in these sentences indicates that the actions or programs mentioned in the paragraph have not been completed.

9. The question asks which concluding sentence should be added after sentence 19 to support the topic of the passage.
- A. Incorrect. Although sentence 15 cites “increased access to computers, mobile devices, and the Internet” and states that “there are more opportunities for students to take courses online, thus reducing the need for and cost of maintaining physical classrooms,” the primary topic discussed throughout the passage is that state and federal governments, not faculty and students, must resolve the issue of college affordability. Therefore, the sentence should not be added after sentence 19, because it does not support the topic.
  - B. Incorrect. Sentence 5 presents the example of the New York State legislature, which “passed a bill creating a program to cover the tuition costs for nearly one million students.” Sentence 12 states that critics of this type of program believe that certain circumstances “will inevitably lead to an increase in taxes” or other issues such as low-quality education. However, the idea that these types of programs may lead to new problems is not thoroughly discussed in the passage. Therefore, the sentence should not be added after sentence 19, because it does not support the topic.
  - C. Incorrect. Although sentence 7 states that scholarship programs are helpful “for students who would have had to take out loans or who would have decided not to pursue higher education at all,” the passage does not state that many students will stop pursuing higher education until the affordability issues are solved. In fact, sentence 14 states that there are ways faculty and students can “work to keep costs down.” Therefore, the sentence should not be added after sentence 19, because it does not support the topic.
  - D. **CORRECT.** The sentence in this option should be added after sentence 19 to support the topic because it acknowledges that the issue of college affordability discussed throughout the passage is not “resolved” but that when it is, students will be able to make decisions about attending college without concerns about cost. Sentence 18 states that “the solutions to the problems associated with rising college costs are not simple,” and sentence 19 adds that “passing legislation that boosts college affordability will take time,” ideas, and planning.



## READING COMPREHENSION

### Excerpt from "Impressions of an Indian Childhood"

- 10.** The question asks how the phrases "cool morning breezes swept freely" and "wafting the perfume of sweet grasses" affect the tone of paragraph 1 in the excerpt.
- E.** Incorrect. Although the author describes in paragraph 1 the setting of her childhood experiences, the positive wording of the phrases the author uses in the paragraph ("swept freely" and "perfume of sweet grasses") does not suggest a tone of sadness the author feels when she reflects on her former way of life.
  - F.** Incorrect. Although the phrases "cool morning breezes swept freely" and "wafting the perfume of sweet grasses" used in paragraph 1 create a positive tone, the phrases do not suggest an enthusiasm for the author's work but rather suggest an appreciation of the peaceful beauty of her childhood.
  - G. CORRECT.** In paragraph 1, the phrases "cool morning breezes swept freely" and "wafting the perfume of sweet grasses" are used to describe where the author's childhood experiences took place. The phrases create a tone of fondness and evoke a feeling of happiness through their lyrical sensory detail: "swept freely" suggests a sense of joyful possibility, while "perfume," "sweet," and "cool" convey delight.
  - H.** Incorrect. Although the author describes her mother's beadwork lessons as "confining" in paragraph 7, the phrases in paragraph 1 do not suggest that the author feels conflicting or mixed emotions toward her work and her mother. Instead, the phrases convey a positive tone by affectionately describing the author's childhood home.

- 11.** The question asks how the author’s use of sequence in paragraphs 1 and 2 contributes to the development of ideas in the excerpt.
- A.** Incorrect. In paragraph 2, the author does list the steps her mother takes in preparation to do beadwork, such as “untying the long tasseled strings” of the bag of beads, spreading the beads beside her on a mat, and using “a long, narrow blade” to trim the buckskin into shape. However, the language used to describe this sequence does not indicate that preparing to work with beads is difficult or complex.
  - B.** Incorrect. Although the author’s description of untying the bag of beads, spreading the beads upon a mat, smoothing out a sheet of buckskin, and trimming the buckskin into shape in paragraph 2 indicates that the mother follows a certain routine, it does not place any emphasis on working most efficiently by following the steps of the beading process in a precise order.
  - C.** Incorrect. In paragraph 2, the author describes her mother “untying the long tasseled strings that bound a small brown buckskin bag,” “spread[ing them] upon a mat beside her bunches of colored beads,” “smooth[ing] out a double sheet of soft white buckskin; and drawing from a beaded case that hung on the left of her wide belt a long, narrow blade” to trim the buckskin. Although these descriptions do outline the steps in her process for creating beadwork, they do not emphasize the time required to do so, since the author does not mention in the excerpt how long it took her mother to fully prepare for and complete the large and small tasks in the activity of beading.
  - D. CORRECT.** In paragraph 1, the author describes how the morning begins with her mother rolling up the canvas of the wigwam and allowing the breeze to come in. In paragraph 2, the author uses sensory language and precise sequencing to describe the way her mother prepares the beading materials by untying “the long tasseled strings that bound a small brown buckskin bag,” spreading the “bunches of colored beads” beside her, and smoothing out “a double sheet of soft white buckskin.” This combination of sequence and sensory language highlights the author’s enthusiasm for beadwork by emphasizing that the author pays close attention to her mother’s preparations.

- 12.** The question asks what the phrase “just as an artist arranges the paints upon his palette” in paragraph 2 suggests in the excerpt.
- E. CORRECT.** In paragraph 2, by comparing the way her mother arranges the beads to the way a painter “arranges the paints upon his palette,” the author emphasizes that her mother approaches her craft just as a painter does, thus suggesting that beadwork is a true form of art.
- F.** Incorrect. Although the author mentions “bunches of colored beads” in paragraph 2, this detail does not provide enough evidence for the idea that color inspires beadworkers. The phrase “just as an artist arranges the paints upon his palette” indicates the connection of beadwork to other forms of art in general, not necessarily to the specifics of color as a source of inspiration.
- G.** Incorrect. In paragraph 2, the author describes her mother “untying the long tasseled strings” and then spreading “upon a mat beside her bunches of colored beads.” However, the phrase “just as an artist arranges the paints upon his palette” does not suggest that all artistic activities begin with a series of steps. There is no mention in the passage of any other artistic activities involving multiple initial steps.
- H.** Incorrect. In paragraph 2, the author describes how her mother “spread upon a mat beside her bunches of colored beads” as the first step in the artistic process described in the passage. Therefore, the comparison between the mother’s process and a painter arranging paints on a palette suggests that the mother is creating art, not imitating it. There is no indication that the mother is copying a technique she has seen in other art forms.

- 13.** The question asks how the details in paragraph 3 convey a central idea of the excerpt.
- A.** Incorrect. In paragraph 2, the author mentions how her mother “worked upon small moccasins for her small daughter” and when she did, the author “became intensely interested in her [mother’s] designing.” However, in paragraph 3, the author is interested in her mother’s work mainly as part of her “lessons in the art of beadwork,” not because she knew her mother was making something for her.
  - B.** Incorrect. In paragraph 3, the author receives “practical observation lessons in the art of beadwork” and describes how “from a skein of finely twisted threads of silvery sinews my mother pulled out a single one” and “pierced the buckskin, and skillfully threaded it with the white sinew.” The author describes the process in such detail that she provides no indication that she had difficulty learning through observation. The author also does not give any indication in the paragraph that she wanted to help her mother; she was there merely to observe and learn.
  - C.** Incorrect. Although the author refers to her beading lessons with her mother as “practical observation lessons in the art of beadwork” and indicates that she sat “close beside” her mother while observing her beadwork, the author provides no indication in the paragraph that she was determined to behave according to her mother’s standards or that she sought her mother’s approval.
  - D. CORRECT.** In paragraph 3, the author describes her mother’s artistry and craftsmanship by using language such as “skillfully threaded,” “picking up the tiny beads one by one,” and “twisting it carefully after every stitch.” These close observations indicate that the author greatly admired her mother’s mastery of her craft and the precision that went into every detail of her work.

- 14.** The question asks how the author distinguishes her point of view from that of her mother.
- E.** Incorrect. In paragraph 4, the author explains that “it took many trials before I learned how to knot my sinew thread on the point of my finger, as I saw her do” and that the “difficulty was in keeping my thread stiffly twisted, so that I could easily string my beads upon it.” Although this explanation describes the author’s difficulty in performing the same task as her mother, it does not distinguish her point of view from that of her mother. In fact, they seem to share the same point of view regarding the importance of the technique the author is attempting to learn.
  - F. CORRECT.** In paragraph 5, the author distinguishes her point of view from that of her mother by describing their approaches to beadwork design. In the paragraph, the author states, “I usually drew easy and simple crosses and squares” and “My original designs were not always symmetrical nor sufficiently characteristic, two faults with which my mother had little patience.” The author also distinguishes her point of view from that of her mother by stating that “the quietness of [my mother’s] oversight made me feel strongly responsible and dependent upon my own judgment.”
  - G.** Incorrect. In paragraph 6, the author states, “My mother cut off the prickly ends and burned them at once in the centre fire. These sharp points were poisonous, and worked into the flesh wherever they lodged. For this reason, my mother said, I should not do much alone in quills until I was as tall as my cousin Warca-Ziwin.” Although these instructions explain the importance of having experience and skill when working with quills, they do not distinguish the author’s point of view from that of her mother.
  - H.** Incorrect. In paragraph 7, the author describes her beadwork lessons as “confining” and states that she liked to roam “over the hills” with her playmates after the lessons. However, she makes no mention of her mother in paragraph 7; the activities and ideas stated there belong to the author, not the mother.

15. The question asks which sentence **best** describes how the sentence from paragraph 7 fits into the overall structure of the excerpt.
- A. Incorrect. Though the author feels humiliated “when some boldness of mine drew forth a rebuke from” her mother (paragraph 5) and characterizes her lessons with her mother as “confining” (paragraph 7), the overall passage does not portray a demanding relationship between the author and the mother. The shift introduced in the sentence from paragraph 7 is not from one of the author’s relationships to another; it is from work to play.
  - B. Incorrect. In paragraph 6, the author explains how working with porcupine quills is difficult because the “sharp points were poisonous, and worked into the flesh wherever they lodged.” Although this sentence suggests that working with porcupine quills was challenging, the sentence from paragraph 7 does not signal a change from the challenging aspects of life on the reservation to the advantages of living on the prairie. Most of paragraph 6 describes the author’s pleasure in creating designs in different colors.
  - C. **CORRECT.** In the sentence from paragraph 7, the author refers to her beadwork lessons as “confining” and states that after the lessons, she “was wild with surplus spirits” and “found joyous relief” in being outside and running around. The phrases “surplus spirits” and “joyous relief” highlight a sense of freedom that stands in strong contrast to the “confining” nature of the author’s beadwork lessons, which required intense focus and control.
  - D. Incorrect. In paragraph 7, the author describes how “many a summer afternoon” after her beadwork lessons, she and her friends used “a light sharpened rod” to gather “sweet roots” and “little crystal drops of gum.” She then explains that they later “tossed away our gum, to return again to the sweet roots.” However, the sentence from paragraph 7 does not conclude the progression of events in the narrative by describing the sequence of events at the end of the author’s day; the sentence appears at the beginning of paragraph 7 and provides a contrast with events from the previous paragraph.

16. The question asks which sentence **best** summarizes the process of beading that is described in the excerpt.
- E.** Incorrect. In paragraphs 2 and 3, the author describes how at the beginning of the process her mother “smoothed out a double sheet of soft white buckskin” on a lapboard (paragraph 2) and how she strings the beads into a pattern. However, this sentence does not describe the steps that take place between the preparation and the stringing of the beads. Thus, this sentence does not best summarize the beading process.
- F.** Incorrect. In paragraphs 2 and 3, the author describes the process her mother uses to string the beads with “the point of her thread, always twisting it carefully after every stitch” (paragraph 3). While this sentence includes some of the steps in the beading process, it does not describe the necessary preparation, namely spreading the beads and the buckskin out on a table. Thus, this sentence does not best summarize the beading process.
- G. CORRECT.** This sentence best summarizes the process of beading that is described in the excerpt because it includes details about each step in the process. In paragraph 2, the author explains how her mother “spread upon a mat beside her bunches of colored beads” and how “on a lapboard she smoothed out a double sheet of soft white buckskin; and drawing from a beaded case that hung on the left of her wide belt a long, narrow blade, she trimmed the buckskin into shape.” The author continues her description in paragraph 3, stating, “From a skein of finely twisted threads of silvery sinews my mother pulled out a single one. With an awl she pierced the buckskin, and skillfully threaded it with the white sinew. Picking up the tiny beads one by one, she strung them with the point of her thread, always twisting it carefully after every stitch.”
- H.** Incorrect. In paragraphs 2 and 3, the author describes the process her mother uses as she “smoothed out a double sheet of soft white buckskin” (paragraph 2) on a lapboard before stringing the beads. While this sentence includes most of the steps in the beading process, it excludes the step of piercing the buckskin. This sentence also provides few details about the process of beading and uses vague wording to describe each step. Therefore, the sentence does not best summarize the beading process.

**17.** The question asks how the idea that mastering moccasin design and creation requires experience is **best** illustrated in the excerpt.

- A. CORRECT.** In paragraph 6, the author states that when she became more familiar with elements of design, “a harder lesson was given me.” According to the author, sewing on porcupine quills is a much more difficult task to master because it requires experience in handling the poisonous porcupine quills, which is why her mother told her not to “do much alone in quills” until she was older (paragraph 6). This information best illustrates the idea that mastering moccasin design and creation requires experience.
- B.** Incorrect. Although the author provides detailed descriptions of the materials used to make decorated moccasins (“colored beads” [paragraph 2]; “a skein of finely twisted threads of silvery sinews” [paragraph 3]; “tinted porcupine quills, moistened and flattened between the nails of the thumb and forefinger” [paragraph 6]), these descriptions do not illustrate the experience that is needed to gain mastery of moccasin design and creation.
- C.** Incorrect. Although the author describes the color combinations she used in making moccasins (“I was pleased with an outline of yellow upon a background of dark blue, or a combination of red and myrtle-green. There was another of red with a bluish-gray that was more conventionally used” [paragraph 6]), this information mainly illustrates the author’s satisfaction with her moccasin design, not the importance of experience in mastering the creation and design of moccasins.
- D.** Incorrect. In paragraph 7, the author tells of using a sharpened rod to spear gum from trees. She explains that she and her playmates used the rods to “[pry] up certain sweet roots” to find the gum. The detail of the sharpened rod is from a recollection about the playtime that followed the “confining lessons” of moccasin making. However, the sharpened rod was not used to create moccasins.



- 18.** The question asks how the table after paragraph 7 expands on a central idea in the excerpt.
- E. CORRECT.** The table provides the chronology from the 1500s, when the Dakota created beadwork using “beads made from bones, shells, stones, and animal teeth,” to the 1830s, when the Dakota began “using glass beads,” and the 1900s, when they created items to “sell outside their community.” Thus, the table helps expand on a central idea by showing that the craft the author was learning is a tradition that has endured through many generations.
- F.** Incorrect. Although the table shows that the Dakota used “beads made from bones, shells, stones, and animal teeth” in the 1500s and that by the 1830s began “using glass beads in clothing, artwork, and decorations in place of Native-made beads,” it does not provide any information about the type of materials used by the author’s family.
- G.** Incorrect. While the information included in the table states that “European traders [brought] glass beads to North America” in the 1500s and that by the 1920s the Dakota created “items to sell outside their community,” there is no mention of whether the uniqueness of Dakota beadwork was recognized in Europe.
- H.** Incorrect. The table indicates that by the late 1600s the Dakota began trading with French traders from Europe who brought glass beads to the Americas and that by 1830 the Dakota were “using glass beads in clothing, artwork, and decorations in place of Native-made beads.” However, the table provides no information about whether this work incorporated color. Therefore, the table does not show that the author was able to incorporate color into her craftwork as a result of trade with other peoples.

## At Dusk

19. The question asks for the **best** textual support for the idea that the neighbor's actions in calling the cat directly affect the speaker of the poem.
- A. Incorrect. Lines 1–2 show that the speaker has noticed the neighbor's calling and guessed the reason for it. The speaker at first believes that the neighbor is "calling a child," but then the speaker notices a sound associated with the time of day—the "street lamps just starting to hum / the backdrop of evening" (lines 3–4). However, the poem does not describe any direct effects on the speaker's own opinions or behavior caused by these aspects of the surroundings.
  - B. Incorrect. The "high-pitched wheedling" sound the speaker mentions in line 5 might be assumed to have an annoying effect. However, the poem includes no indication that the sound has any direct effect on the speaker or that the speaker has any personal reaction to the sound. Instead, in lines 6–7, the speaker concentrates on explaining the reason people make the sound: to communicate with "animals who know only sound, not / the meanings of our words."
  - C. Incorrect. In lines 20–21, the speaker actively listens "as my neighbor's voice trails off," which could be interpreted as an effect of the neighbor's call. However, the speaker's listening soon comes to an end because the neighbor has "given up calling for now," and the poem does not describe any direct effects on the speaker's own opinions or behavior caused by listening. Therefore, lines 20–21 do not best support the idea that the neighbor's actions directly affect the speaker of the poem.
  - D. **CORRECT.** In lines 25–26, after observing the neighbor calling the cat, the speaker begins to reflect on the speaker's own behavior and motivations, wondering if, like the neighbor, the speaker "might lift" the speaker's voice to call someone who is surely "out there." The speaker's description of being left "to wonder" indicates that the speaker's thoughts are a direct effect of observing the neighbor's efforts to call the cat.

20. The question asks how the isolation of the words “—*here here*—” in line 7 **mainly** contributes to the meaning of the poem.
- E.** Incorrect. The words “—*here here*—” do interrupt the speaker’s observation in lines 7–8 that “our words . . . / . . . sometimes fall short.” However, in lines 5–7, the speaker observes that the neighbor accompanies her words with a “high-pitched wheedling” that people “send out” because they are aware that animals “know only sound, not / the meanings of our words,” indicating that the neighbor does not actually expect her words to be understood. The description of the cat’s response in lines 10–11 (“the cat lifts her ears, turns first / toward the voice, then back”) does not suggest that the neighbor’s message is misunderstood but rather suggests that the cat prefers not to respond to it.
- F.** Incorrect. In lines 20–21, the “neighbor’s voice trails off,” and she does give up calling the cat. However, rather than any desperation to connect, the neighbor’s use of a “high-pitched wheedling” (line 5) simply indicates her understanding that the cat, like other animals, understands “only sound, not / the meanings of our words” (lines 6–7) such as “*here here*.” Furthermore, the neighbor does not give up quickly. In lines 21–22, the speaker says the neighbor has “given up calling for now” but is still “waiting” for the cat.
- G.** Incorrect. In lines 4–7, the speaker describes the neighbor calling to the cat with a “high-pitched wheedling.” The sound may indicate a bond between the neighbor and the cat because the neighbor does understand that animals “know only sound, not / the meanings of our words” (lines 6–7). However, the use of the words “*here here*” in line 7 do not indicate that bond, because they are used as an example of the type of words that animals do not understand.
- H. CORRECT.** The speaker’s initial thought in line 1 that the neighbor is calling a child, rather than a cat, suggests that the neighbor loves and misses the cat. Lines 4–7 then present the speaker’s observation that the neighbor uses a “high-pitched wheedling,” to emphasize the simple words of her call, “—*here here*—.” The idea that the words are an example of a simple expression used to call home a missed loved one is reinforced in lines 25–29, when the speaker is “left . . . to wonder” whether the speaker, too, “might lift / [his or her] voice” and be able “to call someone home.”

21. The question asks how the details in lines 10–17 convey a central idea of the poem.
- A. Incorrect. In lines 10–17, the speaker says that the cat’s actions—she “turns first / toward the voice, then back”—makes the cat seem “as if she can’t decide” whether to return home or to explore “the constellation of fireflies flickering / near her head.” However, while the cat is indecisive, it is not the experience of independence that causes this conflict for the cat but rather the “luminous / possibility . . . flitting before her” (lines 17–19).
  - B. Incorrect. The neighbor’s calling of the cat indicates that she does allow it to roam outside regularly. However, the details in these lines focus not on whether allowing the cat to roam is an expression of caring but on the cat’s reaction to the neighbor’s calls, “as if she can’t decide” (line 13) whether to return home “into the steady circle / of light” (lines 16–17) or stay and enjoy the “luminous / possibility” (lines 17–18) that the night offers. Furthermore, the neighbor’s “wheedling” (line 5) and the timing of her call, “at dusk” (line 3), introduce the possibility that encouraging others to come home expresses more caring than allowing them to roam freely.
  - C. Incorrect. Lines 10–17 describe the reactions of the cat, who is exploring the natural world, including a “constellation of fireflies flickering / near her head,” when the neighbor calls to her. The poet describes the cat’s conflict by saying that “It’s as if she can’t decide” whether to stay outdoors or return “into the steady circle / of light” at home with the neighbor. However, the cat’s indecision demonstrates that, rather than being a disappointment, the natural world is as appealing as home.
  - D. **CORRECT.** Lines 10–11 describe how the cat “turns first / toward the voice, then back,” indicating that the cat is experiencing a conflict. To the speaker, the cat seems “as if she can’t decide” (line 13) between exploring “the constellation of fireflies” (line 12) outdoors and returning to the familiar “steady circle / of light” (lines 16–17) indoors. This central idea that someone might experience a conflict between exploring and returning to the familiar is suggested again in lines 28–29 when the speaker wonders whether “the sounds I make / are enough to call someone home.”

- 22.** The question asks how the phrases “luminous possibility” and “all that would keep her / away from home” (lines 17–19) affect the poem.
- E.** Incorrect. In lines 20–21, the neighbor’s voice “trails off,” and the speaker states that “she’s given up calling for now,” which could be interpreted as a lack of concern. However, these lines describe the neighbor rather than the cat. The phrases from lines 17–19 are used to explain that what keeps the cat from returning home is the allure of “luminous possibility.” The use of the phrase “all that would keep her” suggests that the cat would likely return home to the security of “the steady circle / of light” (lines 16–17) if not for the possibilities offered by the night, implying that the cat usually prefers to be at home with the neighbor. The phrases do not highlight a lack of concern for the neighbor on the part of the cat.
- F.** Incorrect. While the phrase “luminous possibility” does convey a high degree of interest, it is used to describe why being outside at night appeals to the cat. It does not describe the speaker’s interest in the cat. The speaker observes the cat as it tries to decide between returning home and staying out and then concludes that it is only “luminous / possibility . . . that would keep [the cat] / away from home.”
- G. CORRECT.** The phrases are used to explain that the cat, though tempted to return home, is also tempted or compelled by “luminous possibility” to remain outdoors. The phrases convey a sense of wonder about what the night may offer, and it is the powerful effect of this sense of wonder (“all that would keep her / away from home”) that ultimately tempts the cat to remain outdoors rather than return to the comforts of home.
- H.** Incorrect. Lines 17–19 present the speaker’s observations about the cat as it tries to decide whether to stay where it is or return home. The speaker explains that it is only “luminous possibility” that can convince the cat to stay rather than return to the comforts of home. While the speaker then imagines the neighbor indoors, there is no indication that the speaker supports the cat’s decision. The speaker merely notes that the neighbor stops calling to the cat “for now” (line 21), and then the speaker reflects on the possible results of calling someone home.

23. The question asks which idea the imagery in lines 11–13 helps convey.
- A. Incorrect. Line 13 includes the speaker’s observation that the cat seems “as if she can’t decide” whether to stay outside or go to the neighbor. However, the imagery of the “constellation of fireflies flickering” in line 12 suggests that the cat does have a preference for exploring the more exciting “luminous / possibility” (lines 17–18) of the outdoors.
  - B. Incorrect. The imagery in lines 10–11 of the cat turning “first / toward the voice, then back” might seem to suggest that the cat is eagerly watching both the neighbor and the fireflies to see what will happen next. However, line 13, in which the cat seems “as if she can’t decide,” indicates that what will happen next is actually under the cat’s control.
  - C. Incorrect. The imagery in lines 12–13 of the “fireflies flickering / near her head” does indicate the fireflies’ unpredictable behavior. However, the imagery in lines 10–11 of the cat turning “first / toward the voice, then back” establishes that the cat’s attention is split between the fireflies and the “high-pitched wheedling” (line 5) of the neighbor’s voice, rather than being fully captured by wanting to understand the fireflies.
  - D. **CORRECT.** The imagery in line 12 of “the constellation of fireflies flickering” suggests that the outdoors holds fascinating attractions, an idea supported by the description in lines 17–18 of the cat’s current location outdoors as one filled with “luminous / possibility.” The imagery in lines 10–11 of the cat turning “first / toward the voice, then back” indicates that the cat has considered but rejected the option of returning indoors, and the description in lines 16–17 of the indoors as offering only a “steady circle / of light” suggests that the indoors seems unremarkable to the cat in comparison to the outdoors.

24. The question asks how the setting affects the events discussed in the poem.
- E. Incorrect. In line 2, the speaker refers to the woman calling for her cat as “my neighbor,” which clearly suggests that the speaker lives next door to the woman. However, although the two live next door to each other, line 1 suggests that perhaps the speaker does not regularly overhear the neighbor because the speaker initially thinks that the neighbor is “calling a child” and only later realizes the neighbor is calling to a cat. Although the setting places the speaker and the neighbor in close proximity, the poem does not indicate the frequency or regularity with which the speaker overhears the neighbor.
  - F. **CORRECT.** In the first four lines, the speaker observes the actions of the neighbor as the neighbor leans out to call for the cat at dusk. Despite the speaker’s observation of the neighbor, there is no indication that the neighbor notices the speaker. The reader can conclude that because of the time of day and the speaker being in the house next door, the speaker can observe the neighbor without being observed by her or having to interact with her.
  - G. Incorrect. The setting of the poem is a neighborhood at nightfall, as indicated by “at dusk” in line 3, the reference to “another yard” in line 9, and the flickering fireflies in line 12. However, while the speaker is close enough to the neighbor to overhear her calling to the cat, there is no indication that the speaker feels connected to the neighbor. Instead, the speaker expresses curiosity about the neighbor after the neighbor goes inside, and the speaker is “left . . . / to imagine her inside the house waiting” (lines 21–22). The fact the speaker initially thought that the neighbor was calling a child indicates that the speaker is not familiar with the neighbor and her habits, and there is no indication that the speaker feels connected to the neighbor.
  - H. Incorrect. In lines 22–24, the speaker imagines what the neighbor may be doing while the neighbor is waiting inside for the cat to return, but the speaker is imagining the neighbor’s solitary experience after the neighbor has momentarily “given up” on calling to the cat (line 21). The speaker does not imagine personally interacting with the neighbor but rather briefly imagines what the neighbor is doing at home while the cat is away.

25. The question asks for an explanation of how the poet develops a theme about making connections with others.
- A. CORRECT.** The speaker first describes the neighbor calling the cat in a “high-pitched wheedling” (line 5) voice before giving up and returning indoors. The neighbor’s desire to have the cat return home prompts the speaker to wonder whether the speaker could call out and be “certain the sounds . . . / are enough to call someone home” (lines 28–29). These final lines most develop the theme of connection by conveying a desire to be able to prompt someone’s return.
- B.** Incorrect. Line 1, in which the speaker at first thinks the sound in the neighborhood is the neighbor “calling a child,” might be assumed to introduce a theme of making connections with others. However, other descriptions of the sights and sounds of the neighborhood, including the time of day—“at dusk, street lamps just starting to hum / the backdrop of evening” (lines 3–4) and “constellation of fireflies flickering” (line 12) near the cat—have no relationship to a theme of connection.
- C.** Incorrect. In lines 22–24, the speaker imagines the neighbor’s activities inside her house: “perhaps in a chair in front of the TV, / or walking around, doing small tasks.” Although the speaker does imagine the neighbor is doing these things to pass time while “waiting” (line 22) for the cat, the neighbor’s actions—and even the speaker’s imagining—are carried out alone, so they do not develop a theme of connection.
- D.** Incorrect. Lines 10–19 present the speaker’s observations of the cat, which “turns first / toward the voice, then back” when the neighbor calls, then appears “as if she can’t decide” whether to return to the neighbor or stay outside. Although the cat’s indecision about whether to heed the neighbor’s call might seem to develop a theme about making connections, lines 10–19 focus more on the relative appeal of the cat’s two options—returning to “the steady circle / of light” at home or pursuing the “luminous / possibility . . . flitting before her”—than on any connection between the cat and its owner or between the speaker and the neighbor.



## Champion of the Channel

26. The question asks what the newspaper editor's comments in paragraph 1 reveal about Ederle's challenges leading up to her attempt to swim across the channel.
- E. Incorrect. The idea that Ederle was at a disadvantage because she was American rather than English, and thus less familiar with the channel, was not the basis for the newspaper editor's comments about the outcome of her swim.
  - F. Incorrect. The passage establishes that Ederle was a highly accomplished swimmer who had won major world competitions ("Gertrude Ederle, an American swimmer with eighteen world records and three Olympic medals" [paragraph 1]).
  - G. Incorrect. The newspaper editor's point was that Ederle would be unsuccessful in her attempt to complete the swim because she was a woman, not that people were uncomfortable with the idea since no woman had attempted it before.
  - H. **CORRECT.** The comments reveal a lack of social support since many people believed that a woman, no matter how skilled a swimmer, did not have the strength to overcome the physical challenges that the dangerous channel waters presented ("He claimed that 'even the most uncompromising champion of the rights and capacities of women must admit that in contests of physical skill, speed and endurance they must remain forever the weaker sex.' " [paragraph 1]).
- 
27. The question asks about the effect of the word "insurmountable," which means "incapable of being overcome," in paragraph 4.
- A. Incorrect. Ederle did not complete her first swim because she became ill ("Just six miles short of finishing, she became ill, and her coach had to haul her out of the water." [paragraph 3]), not because the suit made it impossible for Ederle to complete her swim.
  - B. Incorrect. The author uses the word "insurmountable" to draw attention to the increased difficulty caused by the suit, not to draw attention to the sisters' creativity in solving the problem.
  - C. **CORRECT.** The suit Ederle wore during her first attempt to swim the channel "stretched out, filling with water and creating drag" (paragraph 4), which likely contributed to her failed attempt to swim across the channel.
  - D. Incorrect. The passage does not address whether the original suit was custom made, simply that the suit created additional difficulties for Ederle in a situation that was already difficult.

**28.** The question asks how a problem-and-solution structure in paragraph 5 contributes to the ideas presented in the passage.

- E.** Incorrect. The details in paragraph 5 do not provide a connection between the cold temperature of the water and the effectiveness of Ederle’s training.
  - F.** Incorrect. The difficulties Ederle encountered were only partially relieved by her team, and her team’s efforts to ensure Ederle’s safety are not explained in the passage.
  - G.** Incorrect. The paragraph does not focus on the relationship between the problems Ederle encountered at the start of her swim and the problems she encountered during or near the end of her swim.
  - H. CORRECT.** The paragraph describes how the water’s temperature made Ederle uncomfortable and made it difficult for her to regulate her stroke. The paragraph continues with the explanation of how she overcame these issues by focusing her mind on the sea and tuning out the distractions in her surroundings (“the sea became her only companion and the shrieks of gulls and the humming of boat engines faded away” [paragraph 5]).
- 

**29.** The question asks for the **best** support for the idea that Ederle’s swim across the channel was successful because of her innovative approach to the challenge.

- A.** Incorrect. The sentence from paragraph 1 shows that Ederle’s performance was groundbreaking but not necessarily innovative.
- B.** Incorrect. The layers of grease mentioned in the sentence from paragraph 5 primarily served to insulate Ederle (keep her warm) by helping her maintain her body temperature in the cold water; neither the sentence in paragraph 5 nor the surrounding text evidence establishes that this was an innovative practice. Furthermore, the sentence does not show that she succeeded as a result of this approach.
- C. CORRECT.** The sentence from paragraph 5 explains that Ederle employed a newly developed, or innovative, type of stroke that allowed her to maintain her pace through the rough water.
- D.** Incorrect. The tugboat carrying Ederle’s supporters referenced in the sentence from paragraph 6 likely provided encouragement during Ederle’s swim, but the sentence does not show that this approach was innovative or that it enabled Ederle’s success.

- 30.** The question asks for an explanation of how paragraph 7 contributes to the development of a central idea of the passage.
- E.** Incorrect. Although Ederle needed to remain focused on her goal, the idea that her physical strength and mental fortitude allowed her to maintain this focus is not illustrated in paragraph 7. Paragraph 7 instead contributes to the development of a central idea by emphasizing Ederle’s emotional responses over the course of her swim.
  - F.** Incorrect. While paragraph 7 describes some of the physical challenges that Ederle faced (“The salty water caused her tongue to swell and inflamed her ears”), the statement that she “pushed herself to the edge of her physical capabilities” is not the most accurate way to describe the focus of this paragraph. This option is incorrect because it omits the paragraph’s focus on Ederle’s emotional responses to the challenging circumstances of her swim.
  - G.** Incorrect. While paragraph 7 describes Ederle’s feelings of happiness and amusement during her swim, these feelings were caused by her anticipation and excitement as she approached achieving her goal, not by the severe weather.
  - H. CORRECT.** Paragraph 7 contributes to the development of a central idea by describing Ederle’s emotional state over the course of her swim. A central idea of the passage is that Ederle’s passion and determination allowed her to accomplish her goal of being the first woman to cross the English Channel. Paragraph 7 shows her passion and determination by emphasizing the positive emotions Ederle felt as she progressed during her swim, despite the unfavorable conditions (“For hours Ederle swam, dodging debris with an amused smile” and “Yet Ederle felt indescribably happy as she churned through the sea”).
- 

- 31.** The question asks for the sentence from the passage that **best** conveys the author’s perspective about the impact of Ederle’s swim.
- A.** Incorrect. Although this option shows Ederle’s determination to accomplish her goal, it does not convey the author’s perspective. Rather, the option reinforces Ederle’s own perspective about the challenge that she was facing.
  - B.** Incorrect. The sentence presented in this option is incorrect because it relates to Ederle’s state of mind as she came closer to achieving her goal and does not provide details about the author’s opinion of the impact of Ederle’s accomplishment.
  - C.** Incorrect. The sentence presented in this option is incorrect because it simply presents Ederle’s emotional state as she nears her goal and does not provide information about the author’s perspective.
  - D. CORRECT.** This option is correct because, throughout the passage, the author emphasizes that Ederle’s accomplishment was memorable and great, which is best stated in the sentence from paragraph 8.

- 32.** The question asks for the **best** summary of Ederle’s steps to prepare for her second attempt to swim across the English Channel.
- E. CORRECT.** Ederle’s preparation is outlined in paragraph 4. This option is correct because it acknowledges the idea that Ederle involved her sister in this process, and it details the efforts the two took to improve Ederle’s equipment, including sealing her goggles with wax and designing a better swimsuit.
  - F.** Incorrect. The option focuses on Ederle’s actions in the moments before her swim (covering her body with grease for insulation) and during her swim (finding her “sphere”), not her overall preparation methods.
  - G.** Incorrect. The option refers to a way that Ederle’s coach helped Ederle keep her strokes in rhythm during her swim. While this option suggests that Ederle and her coach had made thoughtful preparations, it does not address the many other steps that Ederle took to prepare for the swim.
  - H.** Incorrect. The option does not refer to the series of steps that Ederle took to prepare for her swim, but rather to just one of the efforts made (improving equipment), without acknowledging her sister’s contributions.
- 

- 33.** The question asks how the idea that many people were interested in Ederle’s attempt to swim the channel is **mainly** illustrated in the passage.
- A.** Incorrect. While paragraph 3 states that “a rival female swimmer was preparing to make her second attempt at the crossing as well,” which suggests that Ederle’s competitor was interested in Ederle’s attempt to swim the channel, this information does not establish that many people were interested in Ederle’s attempt.
  - B. CORRECT.** Paragraph 6 includes the detail that newspaper reporters followed Ederle on a tugboat and “wired dispatches of her progress to shore,” which suggests that an audience was waiting for news about Ederle’s progress. Paragraph 8 states that when Ederle reached the shore, “the waiting crowd roared, honked their automobile horns, blasted their tugboat whistles, and set off flares that flashed in the sky.” Further, paragraph 9 states that when Ederle returned to New York, “thousands of people” attended a parade in her honor. These details describing the celebration of Ederle’s feat further illustrate the idea that many people were interested in what she had accomplished.
  - C.** Incorrect. While paragraph 9 states that “more than 60,000 people credited [Ederle] with motivating them to earn their American Red Cross swimming certificates,” this detail describes how Ederle’s historic swim influenced people after the fact but does not illustrate the level of public interest during the attempt itself.
  - D.** Incorrect. Paragraph 6 provides details about how Ederle’s “coach, family, and friends” displayed signs, played songs, and “passed her baby bottles of broth” to help her maintain her motivation and stamina. However, these resources do not suggest the idea that people beyond Ederle’s immediate support team were interested in her attempt to swim the channel.

- 34.** The question asks how the table **mainly** builds on the information in the passage.
- E. CORRECT.** The table supports the information in the passage by showing that people have continued to swim the channel and have significantly improved on past records. The information in the table about records set by those who came after Ederle builds on the idea that “Gertrude Ederle’s accomplishment proved to the world that with determination and passion, it was possible for a person to achieve his or her goals” (paragraph 9).
  - F.** Incorrect. Even though paragraph 9 states that Ederle “inspired [everyday American citizens] to be more active” and the table presents the time for the current female record holder, there is no indication in the passage or in the table that the subsequent female record holders were inspired to swim across the channel by Ederle.
  - G.** Incorrect. Although paragraph 3 mentions that Ederle had a female rival and the table includes the speed record of another female swimmer, the passage does not provide information about other female swimmers competing with Ederle to set the channel-swim record.
  - H.** Incorrect. Although paragraph 1 mentions that Ederle “broke the men’s record by two hours” and the table allows for comparisons between the earliest speed records and those of the present day, there is no mention in the passage of past, present, or future channel-swim records. The table allows for comparison, but this aspect of the table does not build on the information presented in the passage.

## 5 Reasons Physical Books Might Be Better Than E-Books

- 35.** The question asks how the details in paragraph 1 convey a central idea of the passage. A specific central idea that needs to be identified in order to correctly answer this question is that reading a digital book “might be inferior” (paragraph 1) to reading a traditional book.
- A.** Incorrect. In paragraph 1, the author notes that despite the popularity of e-books, their sales fell in 2015, leading to the author’s statement that “print definitely isn’t dead.” While these statements suggest that readers still purchase and enjoy printed books, sales information between print and e-books is not compared. Therefore, these details do not convey a central idea of the passage.
- B. CORRECT.** The author states in paragraph 1 that “according to some research,” reading a traditional book “may actually be a better choice for some readers” because “digital reading affects us differently.” The author then supports this statement throughout the passage, detailing five advantages that printed books have over e-books. This detail helps convey a central idea of the passage.
- C.** Incorrect. In paragraph 1, the author refers to printed books as “traditional books” and the “dead-tree cousins” of e-books. Although these references suggest that printed books rely on natural materials more than e-books do, the author does not provide additional details in the passage to convey this idea. Therefore, this detail does not help convey a central idea of the passage.
- D.** Incorrect. Although the author states in paragraph 1 that “traditional books still have their evangelists,” the author does not provide additional statistics or details in the passage to convey the idea that some people recommend buying printed books over e-books. Therefore, this detail does not help convey a central idea of the passage.

- 36.** The question asks which evidence from the passage **best** supports the claim in paragraph 1 that “print definitely isn’t dead.”
- E. CORRECT.** In paragraph 5, the author points out that “while e-book textbooks are often cheaper (and easier to carry) than traditional door-stop textbooks, college students often don’t prefer them.” The author adds that “in some surveys of college kids, the majority of students have reported preferring print books.” As a result, this evidence from the passage supports the claim in paragraph 1 that “print definitely isn’t dead.”
  - F.** Incorrect. In the passage, the author cites several studies that provide evidence that younger students “who read on iPads had lower reading comprehension than when they read traditional printed books” (paragraph 2). While this evidence supports the benefits of using traditional print material, it does not fully support the claim in paragraph 1 that “print definitely isn’t dead.”
  - G.** Incorrect. Although the main idea of paragraph 6 is supported by the 2014 study that showed that “people who used e-readers with LED screens at night slept worse and were more tired the next day,” this detail does not support the claim in paragraph 1 that “print definitely isn’t dead.”
  - H.** Incorrect. The author states in paragraph 6 that “staring at a lit screen can be tiring for the eyes and the brain” and that “reading digitally required a higher cognitive workload.” Although these details illustrate how using e-readers can have negative physical and mental effects, they do not support the claim in paragraph 1 that “print definitely isn’t dead.”
- 
- 37.** The question asks which sentence from the passage suggests that people in the future will likely choose e-books over print books.
- A.** Incorrect. While this sentence from paragraph 2 implies high engagement with the interactive features of e-books, it does not provide explicit evidence indicating that engagement with e-books is a reason for choosing them over print books.
  - B.** Incorrect. While this sentence from paragraph 2 highlights some of the benefits of e-books, such as the potential to “enhance comprehension,” those benefits are not explicitly linked to readers choosing e-books over print books.
  - C.** Incorrect. This sentence from paragraph 3 provides evidence that shows both benefits and drawbacks of reading e-books, including higher engagement but a decreased ability to recall details. Therefore, the sentence does not clarify why readers would choose e-books over print books.
  - D. CORRECT.** In this sentence from paragraph 5, the author cites a 2012 study that found that over 50 percent of 8- to 16-year-olds “reported preferring screen reading.” Since this specific age group will one day influence the future of reading and the results of the study point to a significant percentage preferring screen reading, this sentence provides compelling evidence for what readers will prefer in the future.

- 38.** The question asks for an explanation of the role of paragraph 7 in the overall structure of the passage.
- E.** Incorrect. The purpose of paragraphs 2–6 is to present reasons physical books might be better than e-books, and paragraph 7 offers summarizing “take-away” advice based on those reasons. As a result, it may seem as though the author’s purpose for writing the entire passage has shifted. However, the author’s advice in paragraph 7, that readers who want to learn from reading “might want to go for a physical book,” makes it clear that paragraph 7, like paragraphs 2–6, continues to serve the same purpose for the passage that the writer expresses in paragraph 1: to inform readers that printed books “may actually be a better choice for some readers” than e-books.
- F.** Incorrect. In paragraph 7, the author does offer the advice that readers who want to absorb material “might want to go for a physical book” rather than an e-book. Even though the author makes the statement favoring physical books for those who want to learn from their reading, the author is not sharing a personal opinion. Instead, the author offers the advice as a summary of the information presented in paragraphs 2–6, which explore various studies about the advantages of physical books over e-books. Furthermore, the idea that physical books are sometimes a better option is not introduced for the first time in paragraph 7. Instead, it is introduced early in the passage, when the author states in paragraph 1 that physical books “may actually be a better choice for some readers.”
- G.** Incorrect. Paragraph 7 presents a clear shift in style and content from paragraphs 2–6. Paragraphs 2–6 are each preceded by a heading stating a reason physical books might be a better choice than e-books, and each paragraph provides research evidence. Paragraph 7 shifts to stating a “take-away message”—the author’s advice—which is based on the reasons in paragraphs 2–6. Paragraph 7’s different style and content do not, however, signal a change in the author’s position. Instead, the author’s advice in paragraph 7 (“if you’re really trying to absorb material, you might want to go for a physical book”) actually reinforces the position first introduced in paragraph 1 that physical books “may actually be a better choice for some readers.”
- H. CORRECT.** The author uses paragraphs 2–6 to present “five ways e-books might be inferior” (paragraph 1) to physical books. Each of paragraphs 2–6 presents one reason for the inferiority of e-books, based on a scientific study. Paragraph 7 indicates a shift because it describes neither a reason e-books might be inferior nor a scientific study. Instead, it presents personal commentary: the “take-away,” or conclusion, the author draws from the studies and evidence presented in paragraphs 2–6. That commentary consists of the author’s own practical advice to readers who want to retain information that they read (“you might want to go for a physical book”) and to those who are “going to be up all night studying” (“turn off the backlight”).



39. The question asks which sentence from the passage **best** reveals the author’s point of view about e-books.
- A. **CORRECT.** The sentence from paragraph 1 best reveals the author’s point of view because it introduces the author’s argument that “e-books might be inferior,” which is illustrated throughout the text.
  - B. Incorrect. The sentence from paragraph 5 provides a small detail about college students preferring traditional books over e-books despite the fact that e-books may seem ideal by being “cheaper (and easier to carry).” This statement supports one point made in the text but not the author’s broader point of view about e-books in general.
  - C. Incorrect. In the second sentence from paragraph 8, the author discusses answers to why “all this may not mean that reading on a Kindle is really going to melt your brain” and compares reading on a Kindle with reading on a computer to explain how they are different. The sentence focuses on the experiences with using two types of e-book devices rather than on the author’s broader opinion about e-books.
  - D. Incorrect. In the last sentence from paragraph 8, the author uses the previous comparison between reading on a Kindle and reading on a computer to illustrate the differences between “playing with an interactive e-book on an iPad” and using “a simpler e-book device that only presents the text” and limits distractions. However, similar to the sentence in Option C, this sentence focuses on the experiences of using two types of e-book devices rather than on the author’s broader point of view about e-books.

- 40.** The question asks how the findings from the studies described in paragraph 6 are important to the author’s observations in paragraphs 7 and 8.
- E.** Incorrect. The evidence from the studies mentioned in paragraph 6 is not substantially supported by the personal opinions the author shares in paragraph 7 (“And if you’re going to be up all night studying, turn off the backlight”) or in paragraph 8 (“melt your brain” and “digital distractions”).
- F. CORRECT.** In paragraph 6, the author cites studies from 2005 and 2014 that found that LED screens can “disrupt sleep patterns” and that “people who used e-readers with LED screens at night slept worse and were more tired the next day.” Then, in paragraph 7, the author suggests that “if you’re going to be up all night studying, turn off the backlight,” and in paragraph 8, the author explains some differences between reading e-books on various devices. This information is not based on a personal opinion; instead, it is based on practical conclusions drawn from scientific evidence.
- G.** Incorrect. In paragraph 6, the author cites a 2005 study in which researchers found that “reading digitally required a higher cognitive workload than reading on paper.” Then, in paragraph 8, the author concludes that “reading an e-book on a computer is a much different experience than reading on a Kindle, which is specifically designed for consuming books.” Although the findings in paragraph 6 are important, they do not highlight the information presented by the author that digital reading experiences vary based on the reader and the device.
- H.** Incorrect. The author states in paragraph 8 that “reading an e-book on a computer is a much different experience than reading on a Kindle” and mentions how the same thing is true for “an interactive e-book on an iPad” compared with an e-book on “a simpler e-book device.” Readers may conclude that this statement is meant to indicate the author’s belief that more studies on more types of devices are needed. However, the author does not state or imply this belief in the passage.

41. The question asks which evidence in the passage is **most** relevant to the author’s claim that “our expectations of e-book reading . . . might affect how we approach the text” (paragraph 9).
- A. CORRECT.** According to information in the passage, “kids sometimes skipped text in favor of interactive features” (paragraph 2) and they “remembered fewer narrative details” (paragraph 3). Additionally, a study found that “participants didn’t regulate their study time with digital books like they did with paper texts, leading to worse performances” (paragraph 9). This information directly demonstrates the author’s claim that expectations of e-book reading might be affected by how people approach the text.
- B.** Incorrect. In paragraph 3, the author states that e-books may be physically engaging, but they are also “distracting,” and readers who used them “remembered fewer narrative details.” While this evidence is important in helping readers understand why children who read e-books may comprehend less information than children who read print text, the evidence does not as strongly relate to the author’s claim as the idea in the correct answer does.
- C.** Incorrect. The author states that one “study of adults also found that e-books can be hard to absorb” (paragraph 4) and that “if you’re really trying to absorb material, you might want to go for a physical book” (paragraph 7). Although the evidence presented here provides support for the idea that retaining information from an e-book is more difficult than from a print book, it does not as strongly relate to the author’s claim as the idea in the correct answer does.
- D.** Incorrect. The author points out in paragraph 4 that adults “who read the story on a Kindle performed worse on the chronology test than the book readers.” Although this evidence shows how well adults can recall a series of events read in an e-book versus how well adults can recall a series of events read in a print book, the evidence does not as strongly relate to the author’s claim as the idea in the correct answer does.

42. The question asks which sentence is the **best** summary of the research into the effects of e-book reading.

- E.** Incorrect. In paragraph 5, the author notes that “college students often don’t prefer” e-book textbooks but that more than half the children in a study reported “preferring screen reading.” Paragraph 3 describes a study that showed that “ ‘enhanced’ ” e-books might be distracting for young children. Therefore, this sentence is not the best summary, because it overstates the opinions of college students and implies that college students are distracted by interactive features, which is not discussed in the text.
- F.** Incorrect. According to the information in paragraph 3, children who read “ ‘enhanced’ ” e-books “remembered fewer narrative details than those who read print books or basic e-books.” A study conducted with a group of tenth graders showed that these students “remembered more about texts if they read them in print rather than on a computer screen” (paragraph 4). Although the author points out in paragraph 2 that “some interactive features in e-books are designed to enhance comprehension,” a study found that “ ‘enhanced’ e-books might be distracting” (paragraph 3). Therefore, this sentence does not provide the best summary of the research about e-book reading, because the author does not show that e-books aid in reading comprehension.
- G. CORRECT.** The author states in paragraph 2 that studies found that “students who read on iPads had lower reading comprehension than when they read traditional printed books” and that “e-books can be detrimental to the practice of reading itself.” In paragraph 3, the author also points out that a study found that “ ‘enhanced’ e-books might be distracting” and that children “remembered fewer narrative details than those who read print books or basic e-books.” Finally, in paragraph 6, the author states that “staring at a lit screen can be tiring for the eyes and the brain” and that “a 2005 study from Sweden found that reading digitally required a higher cognitive workload than reading on paper.” Therefore, this sentence provides the best summary of the research about e-book reading, because it includes accurate information about the results of the studies discussed in the text.
- H.** Incorrect. In paragraph 2, the author does point out that “researchers noted that some interactive features in e-books are designed to enhance comprehension, and that those might be more helpful than game-type interactive graphics.” The author also explains in paragraph 3 how children “were more engaged with [e-books] physically.” But because this sentence does not include important details about reading comprehension or the physical toll of e-book reading on readers, it does not provide the best summary of the research about e-book reading.

**Excerpt from *The Highest Tide***

- 43.** The question asks what idea the phrase “the butterflies of the sea” in paragraph 3 conveys.
- A.** Incorrect. While the narrator does say that they “taste so lousy they don’t need camouflage to survive” (paragraph 3), the phrase explains that their bright appearance poses no threat to their lives.
  - B. CORRECT.** The narrator describes the vibrant colors of the nudibranch in paragraph 2. Then in paragraph 3, the narrator says that “their beauty is so startling.” The nudibranchs are colorful and unique, just as many butterflies are.
  - C.** Incorrect. The narrator describes the distinct appearance of the nudibranch but does not suggest that nudibranchs struggle to adapt to their environment because of this trait.
  - D.** Incorrect. In paragraph 2, the narrator states, “I’d handled them at aquariums but never in the wild, and I’d never even seen a photo of one this stunning.” Although this suggests that the narrator has rarely encountered a nudibranch in the wild, it does not suggest that they are rare in the wild in general.
- 
- 44.** The question asks for an explanation of how selected sentences from paragraph 4 contribute to the overall structure of the excerpt.
- E.** Incorrect. These sentences set a tense and mysterious tone for what is about to happen in the excerpt, but they do not introduce the creature the narrator discovers.
  - F.** Incorrect. While the narrator reveals that he is familiar with the terrain (“I knew exactly what the bars looked like in the moonlight”), this does not show the narrator recalling the past or reflecting on the present; it demonstrates the narrator’s knowledge of the mudflats.
  - G.** Incorrect. These sentences reveal the narrator’s curiosity, which is his prime motivation for venturing out to the mudflats, and his familiarity with the terrain shows that at this point, he does not feel afraid.
  - H. CORRECT.** The narrator creates a feeling of mystery and suspense with language that shows how the situation is unknown. Phrases such as “I couldn’t resist” and “I’m not sure why” reveal the narrator’s curiosity, as well as the tension of feeling drawn to explore the mudflats in the moonlight.

45. The question asks what the narrator's actions in paragraph 5 reveal about him.
- A. Incorrect. The paragraph begins with the narrator wondering "if a whale was stranded again" because of one that had gotten stuck before and had "made similar noises." However, the narrator explains that he "looked for a hulking silhouette but couldn't find one" before he "went toward what [he] thought [he'd] heard," so readers can conclude that he continues to walk through the dangerous mudflats not because he expects to find a whale but because he is curious to find out what made the noise.
  - B. Incorrect. The fact that the narrator knows about a whale that was stranded on the mudflats "two summers prior" indicates that he is familiar with the area, and he does mention that he has some knowledge of the mudflats. However, in the paragraph, he reveals that his knowledge is of the dangers there: "I knew the flats well enough to know I could get stuck just about anywhere." He also explains that as he moves, he avoids "stepping into the mud until [he] had to." The fact that he acknowledges the danger and tries to avoid it indicates that he is cautious rather than confident.
  - C. Incorrect. In the paragraph, the narrator's recollection that even though he could not see the silhouette of a whale, "still, [he] went toward what [he] thought [he'd] heard" might make him seem unconcerned about getting stuck. However, even as he continues, he moves carefully, avoiding "stepping into the mud until [he] had to" because he knows the mudflats "well enough to know [he] could get stuck just about anywhere."
  - D. **CORRECT.** In the paragraph, the narrator describes the dangers of walking on the mudflats by stating that he "knew the flats well enough to know [he] could get stuck just about anywhere," but he continues walking toward the sound. Despite knowing the dangers, he still "went toward what [he] thought [he'd] heard," and this shows that he is determined to find out what made the sound.
- 

46. The question asks how the setting affects the plot of the excerpt.
- E. **CORRECT.** In paragraph 4, the narrator says that it is an hour before sunrise. It is difficult to see because the mudflats are dark, so the narrator, while familiar with the terrain of the mudflats, is cautious.
  - F. Incorrect. While the terrain of the mudflats is challenging because of the "wet, flattened dunes" (paragraph 4), the narrator is familiar with the terrain and moves carefully. In addition, the excerpt shows that the narrator explores the mudflats for curiosity and enjoyment, not work.
  - G. Incorrect. In paragraph 1, the narrator watches the water "hesitating at its apex" and "patiently waiting for the gravitational gears to shift." This illustrates that the narrator is already familiar with the changes in his surroundings, that the tide is slow to move in, and that he can move carefully through the mudflats without the threat of rising water.
  - H. Incorrect. While the narrator is on the mudflats for the entire excerpt, the phrase "eyes relaxed" in paragraph 1 indicates that the narrator feels comfortable there. The narrator does not show fear until paragraph 6, when a growing fear about the unknown creature arises.

- 47.** The question asks which sentence from paragraph 5 supports the idea that the narrator is taking a risk.
- A.** Incorrect. In this sentence, the narrator is describing the exhale of a creature and his concern that the sound might be coming from a whale in danger. At no point does the narrator suggest that this is a dangerous situation.
  - B.** Incorrect. This sentence describes a “hulking silhouette” because the narrator is searching for a whale that might be stranded. This expression refers to the size of the whale and not to any danger the narrator might face.
  - C.** Incorrect. The narrator’s words “no more sounds” are used to illustrate his listening for what may be a whale. At this point, the narrator is still concerned about the possibility that a whale may be stranded, not the possibility of being in danger.
  - D. CORRECT.** The idea that the narrator could become stuck in the mud of the flats means that the surroundings pose some danger or difficulty.
- 

- 48.** The question asks how the narrator’s actions, as described in the sentence from paragraph 6, develop a central idea of the excerpt.
- E.** Incorrect. The sentence highlights the narrator’s concern about sea life and the creatures living within the flats. However, these ideas do not develop what is being described in the excerpt.
  - F. CORRECT.** The narrator “kept stepping toward the one sound,” indicating a sense of curiosity. However, the words “a growing part of me hoping I’d find nothing” suggest a rising fear or concern. Ultimately, the narrator’s curiosity outweighs his growing fear and is a central idea in the excerpt, as shown by the fact that the narrator does not run away when finally encountering the creature.
  - G.** Incorrect. While the narrator’s descriptions of the nudibranch and other sea life demonstrate a knowledge of these creatures, as well as a desire to discover more in the mudflats, the knowledge the narrator exhibits is not what is being illustrated in the excerpt.
  - H.** Incorrect. The excerpt does describe the narrator’s enjoyment at seeing a nudibranch in paragraph 2, and in paragraph 4, the narrator clearly states that there is an abundance of life in the seemingly barren mudflats, including “hearty clams, worms and tiny creatures that flourish in mud.” However, the sentence demonstrates the narrator’s curiosity in spite of fear, not an eagerness about or fascination with the mudflats.

**49.** The question asks what the sensory language in the sentences from paragraph 8 conveys about the narrator.

- A.** Incorrect. While the narrator does not leave the mudflats and is curious about what has been found, the main emotions described in paragraph 8 are fear and confusion as the narrator tries to comprehend the size of the animal.
  - B.** Incorrect. The language focuses on the narrator’s inability to organize what he sees into useful thoughts and conclusions, and while the narrator feels fear in paragraph 8—“I was afraid” and “I would have run”—the narrator refuses to leave the mudflats out of curiosity.
  - C. CORRECT.** The phrase “spangled my vision” illustrates that the narrator cannot fully recognize what has appeared on the mudflats. The sight is so amazing, the narrator is trying to “fuse” together “fragments” and “pieces” because seeing the creature has created so much emotion in the narrator that he feels confused.
  - D.** Incorrect. While the narrator is feeling some fear, as expressed in paragraph 8, the phrases actually indicate that the narrator’s amazement causes him to struggle to take in the view of the creature before him.
- 

**50.** The question asks how the author develops the narrator’s point of view when the narrator sees the creature.

- E.** Incorrect. The author’s description of how the narrator moves toward the creature has to do with the terrain and the narrator’s sense of awe. The narrator’s perspective is not represented through how he approaches the creature; it is presented later in the excerpt when the narrator is studying the creature.
- F.** Incorrect. In this excerpt, while the narrator does discuss other large animals (minke whale, paragraph 5; octopi, paragraph 7) that have appeared on the mudflats, these are examples to show the variety of animal life that can be discovered on the mudflats, not rivals of the creature discovered at the end of the excerpt.
- G. CORRECT.** In paragraph 7, the narrator describes the largest octopi in the world and then states that this creature is “more than an octopus.” The narrator then states that it is “impossible to hear anything over the blood in my ears,” and in paragraph 8, he describes the creature’s body in detail, as well as his growing fear and amazement as he begins to realize what the creature really is.
- H.** Incorrect. While the narrator observes that the creature’s eye is as large as a hubcap in paragraph 9, a comparison to an entire car is never made. This detail is for description but does not give the narrator’s point of view.



**Excerpt from “It’s Time to Stop Thinking That All Non-Native Species Are Evil”**

- 51.** The question asks which sentence from the excerpt supports the conclusion that Elton’s “militaristic ‘invasion’ metaphor” (paragraph 1) has influenced scientific understanding of non-native species.
- A. CORRECT.** This sentence shows that of the 2,000 ecologists Olden polled, many said they think it is right to “immediately eradicate” non-native species plants even if they are demonstrably harmless in their new environment. The response of these ecologists supports that Elton’s metaphor discussed in paragraph 1 has influenced scientific understanding.
  - B.** Incorrect. Rather than supporting the idea that the militaristic metaphor has influenced scientists, this sentence shows that conservationists, at any rate, are happy to let non-native species thrive wherever they can, given global warming.
  - C.** Incorrect. While this sentence does refer to efforts to eradicate a non-native species, the main point of it is that these efforts ended up harming a native species (the clapper rail shorebird).
  - D.** Incorrect. In contrast to supporting the idea that the militaristic invasion metaphor has influenced scientific understanding of non-native species, this sentence puts forth the bold idea of treating non-native species as something to be welcomed.
- 
- 52.** The question asks which detail provides the **most** relevant support for the claim that “climate change is making it harder even to decide who the invaders are” (paragraph 7).
- E. CORRECT.** The fact that many plants and animals have no choice but to seek out “climate conditions they can tolerate” (paragraph 8) makes it much harder to decide whether to call these species invaders.
  - F.** Incorrect. The fact that many domestic crops are non-native species has nothing to do with climate change affecting our discernment of which species are invaders.
  - G.** Incorrect. The description in paragraph 11 of native and non-native species interacting never suggests that climate change is a factor in these interactions and never suggests that climate change muddies our understanding of which species is native and which is non-native.
  - H.** Incorrect. While the example of Mark Davis so thoroughly changing his beliefs about non-native species is a powerful one, the role that climate change might have played in this reversal is never discussed.

- 53.** The question asks what the author’s use of cause and effect in paragraphs 10–11 **mainly** emphasizes.
- A.** Incorrect. The examples of cause and effect discussed in paragraphs 10–11, such as the spartina grass helping the clapper rail and the Japanese white-eye bird pollinating Hawaiian flowers, are all instances in which non-native species have helped their new environments.
  - B.** Incorrect. While paragraph 10 does mention that efforts to eradicate the non-native spartina grass hurt the native clapper rail shorebird, the main emphasis in both paragraphs 10–11 is on the fact that certain non-native species have helped native species.
  - C. CORRECT.** Paragraphs 10–11 focus on several examples of non-native species that have helped endangered native species flourish: non-native spartina grass providing “important habitat for the endangered California clapper rail” (paragraph 10), non-native tamarisk shrubs providing nesting places for the endangered southwestern willow flycatcher (paragraph 11), and the non-native Japanese white-eye bird pollinating Hawaiian flowers (paragraph 11).
  - D.** Incorrect. While paragraphs 10–11 describe several interactions between non-native and native species, they never discuss monitoring these interactions.
- 

- 54.** The question asks which sentence from the excerpt supports the idea that some species are able to adjust to change.
- E.** Incorrect. This sentence discusses native gardens, featuring native species, which presumably have no need to adjust to change.
  - F. CORRECT.** This sentence demonstrates that some species—in this case, Hawaiian flowers—have adapted well to change: the flowers thrive thanks to new pollinators.
  - G.** Incorrect. This sentence focuses on the importance of “preventing extinctions and preserving biodiversity” but does not address the fact that being able to adjust to change is one thing that helps achieve those goals.
  - H.** Incorrect. Far from demonstrating that some species can adjust to change, this sentence discusses species that were not adjusting to the loss of large tortoises and were therefore “on the decline.”

55. The question asks how the details in the section “A Good Thing, Not the Only Thing” convey a central idea of the excerpt.
- A. Incorrect. While paragraph 15 does discuss introducing non-native Aldabra tortoises to replace native tortoises that no longer exist, the real point of this section is to show that non-native species can sometimes help support native species that still exist but are struggling. In this case, the Aldabra tortoises are now moving seeds around for the fruiting plants on the islands where the tortoises have been introduced.
  - B. **CORRECT.** This section discusses situations in which non-native species should be kept (as in the example of the Aldabra tortoises in paragraph 15) but also asserts that “most of the time . . . conserving species still means focusing on supporting them in their historical habitats, planting natives and removing non-natives” (paragraph 16). This section makes the point that the issue of non-natives needs to be considered on a case-by-case basis.
  - C. Incorrect. This section does not claim that non-native species always or even usually enhance biodiversity; rather, it states that “in some cases we can best serve biodiversity by leaving the non-natives alone or even—brace yourself, now—introducing them on purpose” (paragraph 14), later adding that “most of the time . . . conserving species still means focusing on supporting them in their historical habitats, planting natives and removing non-natives” (paragraph 16).
  - D. Incorrect. While the section happens to give a good example of a habitat that supports both native and non-native species (the islands of Mauritius), it never suggests that being able to do so is a defining characteristic of healthy habitats.
- 
56. This question asks how climate change has **mainly** affected efforts to manage invasive species.
- E. Incorrect. While ecologists are now arguing for some non-native species to be left alone (paragraph 13), they are arguing specifically on behalf of “well-behaved” non-native species (paragraph 12), not non-native species in general.
  - F. Incorrect. While paragraph 10 describes how removing a non-native species negatively affected a native species, the excerpt never discusses the idea that attempts to eliminate non-native species might have damaged the environment.
  - G. Incorrect. While the excerpt refers to climate change causing plants and animals to move to more tolerable environments (paragraph 8), it does not specifically discuss ways to ensure that the arrival of these non-native species does not harm native species.
  - H. **CORRECT.** As paragraph 8 says, “plants and animals are already moving toward the poles” because of climate change, and ecologists recognize that those species need to do so to adapt “to the warmer future we’re creating.”

- 57.** The question asks how the chart provides additional support for a central idea of the excerpt.
- A.** Incorrect. The chart indicates that the public tends to become aware of non-native species once eradication is “unlikely or impossible,” not strictly impossible. Furthermore, this idea is not a central idea of the excerpt.
  - B. CORRECT.** The chart strongly suggests that once “rapid increase in populations” of non-native species has occurred, eradication will be “unlikely or impossible.”
  - C.** Incorrect. While the chart does show that non-native species can eventually be impossible to eradicate, it never addresses the issue of how the non-native species might be destructive to their new environments.
  - D.** Incorrect. The chart shows how non-native species become harder and harder to remove as their population grows but does not explain how any conservation groups have approached their removal.

## Form A

# Sample Test - Mathematics Explanations of Correct Answers

**58. (-0.4)**

Subtracting a negative number is the same as adding a positive number.

Rewrite the expression to simplify:

$$-3.8 + 2.3 - (-1.1)$$

$$-3.8 + 2.3 + 1.1$$

$$-3.8 + 3.4$$

$$-0.4$$

**59. (150)** Angle M and angle R are supplementary, so the sum of the angles is  $180^\circ$ .

Let  $m$  equal the measure of angle M, and let  $r$  equal the measure of angle R.

$$r + m = 180$$

The measure of angle R is 5 times the measure of angle M.

$$r = 5m$$

$$5m + m = 180$$

$$6m = 180$$

$$m = \frac{180}{6} = 30$$

$$r = 5m = 5(30) = 150$$

Therefore, the measure of angle R is  $150^\circ$ .

60. (2.5) Set up a proportion to solve:

$$\frac{\frac{3}{16} \text{ apple}}{\frac{3}{40} \text{ cranberry}} = \frac{x \text{ apple}}{1 \text{ cranberry}}$$
$$\frac{3}{16} \times \frac{40}{3} = x$$
$$\frac{40}{16} = x$$
$$2.5 = x$$

61. (5.5) The lawn grows  $2\frac{1}{8}$  inches every 2 weeks. Find the total number of inches it grows in 8 weeks.

$$8 \div 2 = 4$$

$$4 \times 2\frac{1}{8}$$

$$4 \times 2.125 = 8.5$$

The lawn was 4 inches tall at the beginning of the season.

$$8.5 + 4 = 12.5$$

Mr. Chen mows his lawn every 2 weeks and cuts off the top  $1\frac{3}{4}$  inches. Find the total number of inches that are cut off in 8 weeks.

$$8 \div 2 = 4$$

$$4 \times 1\frac{3}{4}$$

$$4 \times 1.75 = 7$$

The height after 8 weeks is the total number of inches grown minus the total number of inches cut off.

$$12.5 - 7 = 5.5$$

- 62. (1)** Since 110 families were surveyed, the median will have 55 values less than or equal to it, and 55 values greater than or equal to it.

If the values in the table were listed in order, they would look like this:

$$\overbrace{0, \dots, 0}^{45}, \overbrace{1, \dots, 1}^{32}, \overbrace{2, \dots, 2}^{19}, \overbrace{3, \dots, 3}^8, \overbrace{4, \dots, 4}^6$$

The first row of the table indicates that 45 families had 0 children.

The second row of the table indicates that 32 families had 1 child.

So 77 families had either 0 children or 1 child, and 45 families had 0 children.

Since 55 is between 45 and 77, the median must be a value in the second row of the table.

So the median is 1.

- 63. (A)** First, set up a proportion to determine  $x$ , the number of goats Mr. King has.

$$\frac{\text{King}}{\text{Jones}} = \frac{x}{550}$$

$$\frac{x}{550} = \frac{100\%}{100\% + 10\%}$$

Then solve the proportion for  $x$ .

$$\frac{x}{550} = \frac{100\%}{100\% + 10\%}$$

$$550(100\%) = x(100\% + 10\%)$$

$$550(100\%) = x(110\%)$$

$$550(1) = x(1.10)$$

$$550 = 1.10x$$

$$550 \div 1.10 = (1.10 \div 1.10)x$$

$$500 = x$$

Finally, determine the difference between the number of goats Mr. Jones has, 550, and the number of goats Mr. King has, 500.

$$550 - 500 = 50$$

Mr. Jones has 50 more goats than Mr. King.

64. (G) Use properties of equations to determine the missing expression:

$$\frac{2y}{x} - \frac{y}{2x} = \frac{\square}{2x}$$

$$\frac{2}{2} \cdot \frac{2y}{x} - \frac{y}{2x} = \frac{\square}{2x}$$

$$\frac{4y}{2x} - \frac{y}{2x} = \frac{\square}{2x}$$

$$\frac{4y - y}{2x} = \frac{\square}{2x}$$

$$\frac{3y}{2x} = \frac{\square}{2x}$$

The missing expression is  $3y$ .

65. (B) The area of square PQRS is 4 square centimeters. So

$$s^2 = 4$$

$$\sqrt{s^2} = \sqrt{4}$$

$$s = 2 \text{ cm}$$

Sides PS and RS are each a radius of the circle. So the radius of the circle is 2 cm.

The shaded region is  $\frac{1}{4}$  of the circle. The area of a circle is  $A = \pi r^2$ . So the area of the shaded region, in square centimeters, is

$$\frac{1}{4}A = \frac{1}{4}\pi r^2 =$$

$$\frac{1}{4}\pi(2^2) =$$

$$\frac{1}{4}\pi(4) = \pi$$

66. (H) Consider the case where  $m = 1$ .

$$n - m = 66$$

$$n - 1 = 66$$

$$n - 1 + 1 = 66 + 1$$

$$n = 67$$

The list of integers from 1 to 67 contains 67 numbers.



67. (A)

$$\frac{\left(\frac{39(x-3)}{3}\right) + 39}{13}$$

Divide the first 39 by 3.

$$\frac{13(x-3) + 39}{13}$$

Distribute 13 through  $(x-3)$ .

$$\frac{13x - 39 + 39}{13}$$

In the numerator, the terms  $-39$  and  $39$  cancel out.

$$\frac{13x}{13}$$

Finally, divide the numerator and denominator by 13 to get  $x$ .

68. (G) Jar 1 starts with  $\frac{1}{2}$  cup of water. If  $\frac{1}{4}$  of its water is poured into Jar 2, then the amount of water added to Jar 2 is  $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$  cup.

Jar 2 starts with  $\frac{1}{2}$  cup of water. If  $\frac{1}{8}$  cup of water is added to it, then the amount of water now in Jar 2

$$\text{is } \frac{1}{2} + \frac{1}{8} = \frac{4}{8} + \frac{1}{8} = \frac{5}{8} \text{ cup.}$$

69. (D)  $0.01 = \frac{1}{100}$ , which is between  $\frac{1}{101}$  and  $\frac{1}{99}$ .

Therefore,  $n + 2 = 101$  and  $n = 99$ .

70. (H) 72% of the people polled answered yes, so 28% of the people did not answer yes.

Therefore, 56 people is 28% of the total,  $x$ .

$$\frac{56}{x} = \frac{28}{100}$$

$$\frac{56}{x} = \frac{7}{25}$$

$$56(25) = 7x$$

$$\frac{56(25)}{7} = x$$

$$8(25) = x$$

$$200 = x$$

- 71. (A)** The scale is 1 inch = 20 feet, and the length in the scale drawing is 2 inches, so the actual length is 40 feet.

$$960 \div 40 = 24$$

The actual width is 24 feet.

Let  $x$  equal the width of the scale drawing, in inches.

$$\frac{1 \text{ in.}}{20 \text{ ft}} = \frac{x \text{ in.}}{24 \text{ ft}}$$
$$x = \frac{24}{20} = 1\frac{1}{5}$$

- 72. (H)** There are five odd numbers in the range 1 through 9: 1, 3, 5, 7, and 9.

So the proportion of odd numbers in the range 1 through 9 is  $\frac{5}{9}$ .

The expected number of odd values in the sequence from the computer program is

$$300 \cdot \frac{5}{9} = 166.\overline{66}.$$

So the best prediction for the number of odd numbers in the sequence is 167.

- 73. (D)** Let  $m$  equal the miles driven during Dalia's rental. The total cost,  $c$ , can be expressed as an equation.

$$c = 40 + m$$

Dalia spent a total of \$60, which included a 20% off coupon. Find the cost before the coupon by dividing the final cost (\$60) by the percentage paid (80%):

$$\frac{60}{80\%} = \frac{60}{0.80} = 75$$

Use \$75 as the total cost to find  $m$ .

$$\begin{aligned} 40 + m &= 75 \\ m &= 35 \end{aligned}$$

Dalia drove 35 miles.

- 74. (H)** Start with a proportion to determine the total number of red candies in the bag:

$$\begin{aligned} \frac{2}{5} &= \frac{r}{25} \\ \frac{2}{5}(25) &= r \\ 10 &= r \end{aligned}$$

There are currently 10 red candies out of 25 candies in the bag. After 5 red candies are removed, there would be 5 red candies left in the bag and 20 total candies.

The probability of randomly drawing a red candy would then be  $\frac{5}{20} = \frac{1}{4}$ .

- 75. (C)** First, write an equation based on the rule described in the item. Let  $x$  be the previous number in the sequence and  $y$  be the number in the sequence. The ninth number in the sequence is 63.

$$2x + 1 = y$$

Determine the 10th number in the sequence,  $y$ , by making  $x = 63$  and solving:

$$\begin{aligned} 2(63) + 1 &= y \\ 126 + 1 &= y \\ 127 &= y \end{aligned}$$

Determine the 8th number in the sequence,  $x$ , by making  $y = 63$  and solving:

$$2x + 1 = 63$$

Subtract one from both sides of the equation.

$$\begin{aligned} 2x + (1 - 1) &= 63 - 1 \\ 2x &= 62 \\ \frac{2x}{2} &= \frac{62}{2} \\ x &= 31 \end{aligned}$$

Determine the 7th number in the sequence,  $x$ , by making  $y = 31$  and solving:

$$\begin{aligned} 2x + 1 &= 31 \\ 2x + (1 - 1) &= 31 - 1 \\ 2x &= 30 \\ \frac{2x}{2} &= \frac{30}{2} \\ x &= 15 \end{aligned}$$

Subtract the 7th number in the sequence from the 10th number:

$$127 - 15 = 112$$

The difference is 112.

- 76. (G)** The highest and lowest scores are discarded: 8.2 and 9.0.

To find the mean, add the remaining scores and then divide that sum by the total number of remaining scores.

$$\begin{aligned}8.9 + 8.5 + 8.4 + 8.6 + 8.8 &= \\43.2 & \\43.2 \div 5 &= 8.64\end{aligned}$$

- 77. (A)** The original piece of wood is  $4\frac{1}{2}$  feet long.

The shorter piece is  $x$  feet long, and it must be less than half the length of the original piece of wood.

Since half of  $4\frac{1}{2}$  is  $2\frac{1}{4}$ , it follows that  $x < 2\frac{1}{4}$ .

The shorter piece of wood cannot be 0 feet long, so it follows that  $0 < x$ .

This gives the compound inequality

$$0 < x < 2\frac{1}{4}.$$

- 78. (F)** The area of the shaded region, in square units, is the area of the triangle created by the shaded and unshaded regions minus the area of the triangle created by the unshaded region.

The area of the triangle created by the shaded and unshaded regions is 200 square units.

$$\frac{1}{2}bh = \frac{1}{2}(20)(20) = \frac{1}{2}(400) = 200$$

The area of the triangle created by the unshaded region is 75 square units.

$$\frac{1}{2}bh = \frac{1}{2}(10)(15) = \frac{1}{2}(150) = 75$$

Subtract to find the area of the shaded region.

$$200 - 75 = 125$$

- 79. (A)** The highest temperature was 86° F.

$$F = \frac{9}{5}C + 32$$

$$86 = \frac{9}{5}C + 32$$

Subtract 32 from both sides of the equation:

$$86 - 32 = \frac{9}{5}C = 32$$

$$54 = \frac{9}{5}C$$

Multiply both sides of the equation by  $\frac{5}{9}$ :

$$54\left(\frac{5}{9}\right) = \left(\frac{5}{9}\right)\left(\frac{9}{5}C\right)$$

$$30 = C$$

The lowest temperature was 68° F.

$$F = \frac{9}{5}C + 32$$

$$68 = \frac{9}{5}C + 32$$

$$68 - 32 = \frac{9}{5}C$$

$$36 = \frac{9}{5}C$$

$$\left(\frac{5}{9}\right)(36) = C$$

$$20 = C$$

The difference, in degrees Celsius, is 30 minus 20.

$$30 - 20 = 10$$

- 80. (F)** If  $x$  is odd, then the two even numbers closest to  $x$  are  $(x - 1)$  and  $(x + 1)$ . Find the sum of these two expressions:

$$(x - 1) + (x + 1) = 2x$$

- 81. (B)** The question asks for the amount of the public debt per person, so divide the total public debt by the number of people.

$$\frac{3,6000,000,000,000}{250,000,000} =$$

$$\frac{3,600,000,000,000}{250,000,000} =$$

$$\frac{360,000}{25} = 14,400$$

The amount of the public debt per person was about \$14,400.

- 82. (E)** These facts are given:

- $N$  is the midpoint of  $\overline{MQ}$ .
- $\overline{MN}$  has a length of  $x$  centimeters.
- $\overline{MP}$  has a length of  $y$  centimeters.

Use the first two facts to determine that  $\overline{MQ}$  has a length of  $2x$  centimeters. So  $(2x - y)$  can be represented by  $MQ - MP$ , which is  $\overline{PQ}$ .

- 83. (B)** To find the area of a parallelogram, multiply the length of a side by the altitude for that side.

One property of parallelograms is that opposite sides are the same length.

So the bottom side of the parallelogram is 30 feet long and has an altitude of 20 feet.

Therefore, the area of the parallelogram, in square feet, is

$$A = bh = 30 \times 20 = 600.$$

- 84. (H)** Let  $t$  represent the number of loaves of bread produced on Tuesday.

First, determine the number of loaves of bread produced on Tuesday,  $t$ , using the number of loaves produced on Wednesday,  $t + 100$ , the number produced on Thursday,  $t - 50$ , and the total number produced on these three days, 230:

$$\begin{aligned}t + t + 100 + t - 50 &= 230 \\t + t + t + 100 - 50 &= 230 \\3t + 50 &= 230 \\3t + (50 - 50) &= 230 - 50 \\3t &= 180 \\(3 \div 3)t &= 180 \div 3 \\t &= 60\end{aligned}$$

Next, determine the number of loaves of bread produced on Wednesday,  $t + 100$ , when  $t = 60$ :

$$t + 100 = 60 + 100 = 160$$

The number of loaves of bread produced on Wednesday is 160.

- 85. (C)** First, find the total number of students who took the quiz.

$$9 + 7 + 4 + 5 + 3 = 28$$

Multiply each quiz score by the number of students who received that score. Add those products together to find the total number of points scored.

$$\begin{aligned}(60 \times 9) + (70 \times 7) + (80 \times 4) + \\(90 \times 5) + (100 \times 3) &= 2,100\end{aligned}$$

To find the mean quiz score, divide the total number of points by the number of students who took the quiz.

$$2,100 \div 28 = 75$$



- 86. (E)** Use the properties of equations to solve the inequality for  $x$ .

$$x + 4 \geq 3$$

Subtract 4 from both sides of the inequality.

$$x + 4 - 4 \geq 3 - 4$$

$$x \geq -1$$

The graph of  $x \geq -1$  will have a point at  $-1$  and will include all values that are greater than, or to the right of,  $-1$ . The greater than or equal sign is used, which indicates that the solution includes  $-1$ . So the point at  $-1$  will be solid. Option E is the correct answer.

- 87. (A)** The reciprocal of  $\frac{1}{4}$  is added to the reciprocal of 3.

$$\frac{4}{1} + \frac{1}{3} = \frac{12}{3} + \frac{1}{3} = \frac{13}{3}$$

The reciprocal of this sum is  $\frac{3}{13}$ .

- 88. (E)** Nura's poster is square, so all the side lengths are 13 inches. The area, in square inches, is

$$A = s^2 = 13^2 = 169$$

Latrice's poster is square, so all the side lengths are 15 inches.

$$A = 15^2 = 225$$

Subtract to determine the difference between the areas.

$$225 - 169 = 56$$

The difference, in square inches, is 56.

- 89. (B)** The unit rate for cups of oats per cup of water can be found by dividing the number of cups of oats by the number of cups of water:

$$\frac{\frac{2}{3}}{3\frac{1}{4}}$$

The denominator can be rewritten as  $\frac{13}{4}$ .

The quotient  $\frac{\frac{2}{3}}{\frac{13}{4}}$  can be rewritten as:

$$\frac{2}{3} \times \frac{4}{13} = \frac{8}{39}$$

Therefore, the unit rate for cups of oats per cup of water is  $\frac{8}{39}$ .

---

**90. (H)**  $\left(\frac{3}{5} - \frac{1}{2}\right)x = \frac{1}{4} + \frac{2}{3}$

Rewrite with equivalent fractions that have like denominators.

$$\left(\frac{3 \times 2}{5 \times 2} - \frac{1 \times 5}{2 \times 5}\right)x = \frac{1 \times 3}{4 \times 3} + \frac{2 \times 4}{3 \times 4}$$

$$\left(\frac{6}{10} - \frac{5}{10}\right)x = \frac{3}{12} + \frac{8}{12}$$

$$\left(\frac{1}{10}\right)x = \frac{11}{12}$$

Multiply both sides of the equation by 10.

$$10\left(\frac{1}{10}\right)x = 10\left(\frac{11}{12}\right)$$

$$x = \frac{110}{12} = \frac{55}{6}$$

**91. (A)** The increase in sales tax percentage is

$$7.5\% - 7.0\% = 0.5\%$$

0.5% of \$200 is

$$(0.5\%)(200) = (0.005)(200) = 1$$

**92. (F)**

$$|(-8) - 12 + (-17) - (-31)| - |24|$$

Simplify negatives inside the first absolute value brackets.

$$|-8 - 12 - 17 + 31| - |24|$$

Simplify the first absolute value.

$$|-6| - |24|$$

Calculate the absolute values.

$$6 - 24$$

Perform the final subtraction.

$$6 - 24 = -18$$

**93. (B)** First, use the information given in the table and properties of equations to determine the value of  $k$ :

$$8k + 30 + 30 - 2k + k + 5 = 100$$

$$8k - 2k + k + 30 + 30 + 5 = 100$$

$$7k + 65 = 100$$

$$7k + (65 - 65) = 100 - 65$$

$$7k = 35$$

$$k = 5$$

Then, determine the percentage of cell phones sold that were blue by finding the value of the expression  $30 - 2k$  (given in the table), when  $k = 5$ :

$$30 - 2k = 30 - 2(5) =$$

$$30 - 10 = 20$$

The percentage of cell phones sold that were blue is 20%.

- 94. (E)** First, find the distance between X and Z by adding the distance between X and Y to the distance between Y and Z.

$$1 + 2 = 3$$

Since the distance between X and Z is 3, the midpoint between X and Z is  $1\frac{1}{2}$ .

The midpoint between X and Z is  $1\frac{1}{2}$ , and the distance between X and Y is 1. The distance between Y and the midpoint of X and Z is  $1\frac{1}{2} - 1 = \frac{1}{2}$ .

- 95. (B)** Subtract to determine the amount of the increase.

$$1.35 - 1.25 = 0.10$$

Divide the increase by the original price.

$$0.10 \div 1.25 = 0.08$$

Multiply the quotient by 100 to express the decimal answer as a percent.

$$0.08 \times 100 = 8$$

- 96. (G)** Surface area is found by calculating the area of each side, including the base, and adding them all together.

The base of the pyramid measures 10 inches on each side, so the area of the base is

$$10 \times 10 = 100$$

Each triangular face has a base of 10 inches and a height of 12 inches, so the area of each face is

$$\frac{1}{2} \times 10 \times 12 = 60$$

There are 4 triangular faces (because the square base has 4 edges, each of which will have a triangular face). So the total surface area of the pyramid is the sum of the areas of 4 triangles and 1 square.

$$(4 \times 60) + 100 = 240 + 100$$

So the total surface area is 340 square feet.

- 
- 97. (B)** Use the percent increase expression to find the answer:

$$\frac{\text{new price} - \text{original price}}{\text{original price}} = \frac{6.75 - 6.25}{6.25} = \frac{0.50}{6.25} = 0.08 = 8\%$$

---

- 98. (G)** If the mean number of points for the first four games is 7, the total number of points earned in those games is 28.

$$4 \times 7 = 28$$

If the mean number of points for all five games is 8, the total number of points earned is 40.

$$5 \times 8 = 40$$

To find the number of points in the fifth game, find the difference between 40 and 28.

$$40 - 28 = 12$$

- 99. (B)** First, find the amount, in dollars, that Lian paid for each orange. There are 4 bags with 8 oranges each.

$$4 \times 8 = 32$$

Divide the total cost by the total number of oranges to get the cost per orange:

$$11.52 \div 32 = 0.36$$

Multiply to find the cost of 42 oranges:

$$0.36 \times 42 = 15.12$$

---

- 100. (H)**

$$\frac{3.6}{0.018} \times \left( \frac{1,000}{1,000} \right) = \frac{3,600}{18} = 200$$

**101. (C)** If 5 gallons of water is added to the tank per minute for 45 minutes, then  $5 \times 45 = 225$  gallons is added to the tank.

The tank started with 75 gallons of water in it. After the 45 minutes, it contains  $75 + 225 = 300$  gallons, assuming no loss of water.

The tank has a capacity of 500 gallons, and  $\frac{300}{500} = 0.6$ .

Rewrite decimal 0.6 as a percentage:

$$0.6 = \frac{6}{10} = \frac{60}{100} = 60\%.$$

**102. (H)** Each strap requires  $1\frac{1}{4}$  yards of ribbon, and ribbon costs \$5.00 a yard.

$1\frac{1}{4} \times 5 = \frac{5}{4} \times \frac{5}{1} = \frac{25}{4} = 6.25$ , so the ribbon for each strap costs \$6.25.

Misha wants to make 2 straps.

$6.25 \times 2 = 12.50$ , so the cost of the ribbon for 2 straps is \$12.50.

**103. (B)** The graph represents a proportional relationship, which means the  $y$ -intercept of the graph is  $(0, 0)$ .

This means that the point  $(1, \frac{5}{4})$  represents the unit rate for this situation.

In this situation,  $x$  represents the number of questions answered correctly, and  $y$  represents the number of points received.

Therefore, for each question answered correctly, the student receives  $\frac{5}{4}$ , or  $1\frac{1}{4}$ , points.

**104. (E)** In the survey, 45 out of 200 adults reported reading the online version of the *Waskegon Bulletin*, and there are 25,000 adults living in Waskegon. Set up a proportion to find the number of adults who read the online version.

$$\begin{aligned} \frac{45}{200} &= \frac{x}{25,000} \\ x &= \frac{(45)(25,000)}{200} = \\ &(45)(125) = 5,625 \end{aligned}$$

Rounded to the nearest 100, this number is 5,600.

- 105. (C)** There is a proportional relationship between the number of miles traveled,  $y$ , and the number of days hiked,  $x$ .

$$\frac{y}{x} = \frac{17}{3}$$
$$y = \frac{17}{3}x$$

So the equation  $y = \frac{17}{3}x$  describes the relationship.

- 106. (E)** The distance from Carolyn's house to the grocery store is  $3 + 2\frac{1}{2} = 5\frac{1}{2}$  miles.

Carolyn walked  $1\frac{2}{3}$  miles back, so she still had  $5\frac{1}{2} - 1\frac{2}{3}$  miles left to walk home.

$$5\frac{1}{2} - 1\frac{2}{3} = \frac{11}{2} - \frac{5}{3}$$
$$\frac{33}{6} - \frac{10}{6} = \frac{23}{6} = 3\frac{5}{6}$$

So Carolyn had  $3\frac{5}{6}$  miles left to walk home.

- 107. (C)** Set up a proportion to solve.

$$\frac{1\frac{1}{4} \text{ in.}}{\frac{1}{3} \text{ yr}} = \frac{x \text{ in.}}{1 \text{ yr}}$$

$$1\frac{1}{4} = \frac{1}{3}x$$

$$\frac{5}{4} = \frac{1}{3}x$$

$$\left(\frac{3}{1}\right)\left(\frac{5}{4}\right) = x$$

$$\frac{15}{4} = x$$

$$3\frac{3}{4} = x$$

- 108. (F)**

$$3(0.01) - 3(0.1) =$$
$$0.03 - 0.3 = -0.27$$



- 109. (B)** Rewrite the mixed numbers so that they all have equivalent denominators.

$$10\frac{1}{2} + \left(-5\frac{1}{3}\right) - \left(-2\frac{3}{4}\right)$$
$$10\frac{6}{12} + \left(-5\frac{4}{12}\right) - \left(-2\frac{9}{12}\right)$$

Subtracting a negative is the same as adding.

$$10\frac{6}{12} - 5\frac{4}{12} + 2\frac{9}{12}$$

Group the whole numbers together and the fractions together.

$$10\frac{6}{12} - 5\frac{4}{12} + 2\frac{9}{12}$$
$$(10 - 5 + 2) + \left(\frac{6}{12} - \frac{4}{12} + \frac{9}{12}\right)$$
$$7\frac{11}{12}$$

- 110. (G)** Find 5% of 350.

$$(5\%)(350) = (0.05)(350) = 17.5$$
$$350 + 17.5 = 367.50$$

- 111. (B)** The probability of the event is 0.05, which equals 5%, which is less than 50%.

Option A:

An event that is likely has a probability over 50%.

Option B:

An event that is unlikely has a probability less than 50% but greater than 0%.

Option C:

An event that is impossible has a 0% probability.

Option D:

An event that is neither likely nor unlikely has a 50% probability.

- 112. (G)** Divide the number of cups of blue paint by the number of cups of red paint to find the constant of proportionality.

$$\frac{1.5}{1} = \frac{6}{4} = 1.5$$

Multiply to find the value of  $y$ .

$$11 \times 1.5 = 16.5$$

**113. (C)** To find the midpoint of a segment, subtract the value on the right from the value on the left and then divide by 2. Then add the result to the value on the left of the segment.

Find the midpoint of  $\overline{PQ}$ :

$$\begin{aligned}1 - (-3) &= 4 \\4 \div 2 &= 2 \\2 + (-3) &= -1\end{aligned}$$

Find the midpoint of  $\overline{QR}$ :

$$\begin{aligned}7 - 1 &= 6 \\6 \div 2 &= 3 \\3 + 1 &= 4\end{aligned}$$

The distance between  $-1$  and  $4$  on the number line is 5 units.

**114. (F)** There is a proportional relationship between the cost and the number of cups of ice cream.

Divide the cost by the number of cups of ice cream to find the constant of proportionality.

$$\begin{aligned}48 \text{ dollars} \div 16 \text{ cups} \\&= 3 \text{ dollars per cup} \\12 \text{ dollars} \div 4 \text{ cups} \\&= 3 \text{ dollars per cup}\end{aligned}$$

The constant is the cost per cup, 3 dollars.

# Form A

## Sample Test – Answer Key

You can read explanations for each answer online here. If you are in Grade 9, you can find examples of additional types of math content you might see on your test here.

### Answer Key for Sample Form A

1. B	14. F	27. C	40. F	53. C	66. H	79. A	92. F	105. C
2. E	15. C	28. H	41. A	54. F	67. A	80. F	93. B	106. E
3. B	16. G	29. C	42. G	55. B	68. G	81. B	94. E	107. C
4. H	17. A	30. H	43. B	56. H	69. D	82. E	95. B	108. F
5. B	18. E	31. D	44. H	57. B	70. H	83. B	96. G	109. B
6. F	19. D	32. E	45. D	58. -0.4	71. A	84. H	97. B	110. G
7. B	20. H	33. B	46. E	59. 150	72. H	85. C	98. G	111. B
8. G	21. D	34. E	47. D	60. 2.5	73. D	86. E	99. B	112. G
9. D	22. G	35. B	48. F	61. 5.5	74. H	87. A	100. H	113. C
10. G	23. D	36. E	49. C	62. 1	75. C	88. E	101. C	114. F
11. D	24. F	37. D	50. G	63. A	76. G	89. B	102. H	
12. E	25. A	38. H	51. A	64. G	77. A	90. H	103. B	
13. D	26. H	39. A	52. E	65. B	78. F	91. A	104. E	