Release of
November 2014
MCAS Retest Items

January 2015
Massachusetts Department of
Elementary and Secondary Education
Table of Contents

Commissioner’s Foreword

I. Document Purpose and Structure ................................................... 1

II. English Language Arts Retest .......................................................... 4
   A. Composition ........................................................................ 5
   B. Reading Comprehension ......................................................... 7

III. Mathematics Retest ................................................................. 41
Dear Colleagues:

The Massachusetts Department of Elementary and Secondary Education is committed to working in partnership with schools to support a system that will prepare all students to succeed as productive and contributing members of our democratic society and the global economy. To assist in achieving this goal, the Department regularly releases Massachusetts Comprehensive Assessment System (MCAS) test items to provide information about the kinds of knowledge and skills that students are expected to demonstrate. This publication contains all MCAS November retest items on which student scores are based for English Language Arts (ELA) and Mathematics.

The Department has banked thousands of MCAS items that are currently posted on the Department website. These items, which are available at www.doe.mass.edu/mcas/testitems.html, will continue to be a rich resource for schools.

This publication is available only on the Department website. The test items for both ELA and Mathematics can be printed from this site. I encourage educators to use the relevant sections of this document together with their test item analysis reports as guides for planning changes in curriculum and instruction that may be needed to support schools and districts in their efforts to improve student performance.

Thank you for your support as we work together to strengthen education for our students in Massachusetts.

Sincerely,

Mitchell D. Chester, Ed.D.
Commissioner of Elementary and Secondary Education
I. Document Purpose and Structure
Document Purpose and Structure

Purpose

The purpose of this document is to share with educators and the public the November 2014 MCAS English Language Arts and Mathematics retest items on which student results are based. Local educators will be able to use this information to identify strengths and weaknesses in their curriculum and to plan instruction to more effectively meet their students' individual needs.

This document is also intended to be used by school and district personnel as a companion document to test item analysis reports. The reports list, for the school accessing the report, the names of all enrolled students who took the November 2014 retest in that report's content area, as well as information about how each student answered each item contained in this document. The reports also label each item as multiple-choice, open-response, short-answer, or writing prompt and identify the item's MCAS reporting category. Item numbers in this document correlate directly to the item numbers in the test item analysis reports.

Structure

Chapters II and III of this document contain, respectively, information for the November 2014 English Language Arts and Mathematics retests. Each of these chapters has three main sections.

The first section provides information about the content being assessed, including the Web address for the relevant framework and the page numbers on which the learning standards can be found. In addition, there is a brief overview of the retest (number of test sessions, types of items, and reference materials allowed).

The second section contains the test items used to generate November 2014 MCAS student results for that chapter's content area. With the exception of the ELA Composition writing prompt, the test items in this document are shown in the same order and basic format in which they were presented in the test booklets. The Mathematics Reference Sheet used by students during MCAS Mathematics test sessions is inserted immediately following the last item in the Mathematics chapter.

Copyright information for all reading passages in this document is provided. Note that the Department has obtained permission to post all ELA passages that appear on its website. While the Department grants permission to use the posted test items for educational purposes, it cannot grant or transfer permission to use the passages that accompany the items. Such permission must be obtained directly from the holder of the copyright. For further information, contact Student Assessment Services at 781-338-3625.

The final section of each chapter is a table that cross-references each item with its MCAS reporting category and with the Framework standard it assesses. The table shows how the items on the test assess standards in both the 2011 frameworks and the previous frameworks. More information about the transition of MCAS to the standards in the 2011 frameworks is available at www.doe.mass.edu/mcas/transition. Correct answers to multiple-choice questions and Mathematics retest short-answer questions are also listed in the table.
Materials presented in this document are not formatted exactly as they appeared in student test booklets. For example, in order to present items most efficiently in this document, the following modifications have been made:

- Some fonts and/or font sizes may have been changed and/or reduced.
- Some graphics may have been reduced in size from their appearance in student test booklets; however, they maintain the same proportions in each case.
- All references to page numbers in answer booklets have been deleted from the directions that accompany test items.
- The four lined pages provided for students’ initial English Language Arts Composition retest drafts are omitted.
II. English Language Arts Retest

A. Composition
B. Reading Comprehension
English Language Arts Retest

Test Structure

The English Language Arts retest was presented in the following two parts:

- the ELA Composition retest, which used a writing prompt to assess learning standards from the Writing strand in the *Massachusetts Curriculum Framework for English Language Arts and Literacy* (March 2011)
- the ELA Reading Comprehension retest, which used multiple-choice and open-response questions (items) to assess learning standards from the Reading and Language strands in the *Massachusetts Curriculum Framework for English Language Arts and Literacy*

A. Composition

The 2014 ELA Composition retest was based on learning standards in the grades 6–12 Writing strand of the *Massachusetts Curriculum Framework for English Language Arts and Literacy* (March 2011). The learning standards for the grades 6–12 Writing strand appear on pages 53–59 of the Framework, which is available on the Department website at www.doe.mass.edu/frameworks/current.html.

Each grade 10 ELA writing prompt requires students to write a literary analysis (coded to standard 1 in the grades 6–12 Writing strand in the 2011 Framework). All grade 10 writing prompts assess standards 4 and 5 in the grades 6–12 Writing strand.

ELA Composition retest results are reported under the reporting categories Composition: Topic Development and Composition: Standard English Conventions.

Test Sessions and Content Overview

The ELA Composition retest included two separate test sessions, administered on the same day with a short break between sessions. During the first session, each student wrote an initial draft of a composition in response to the writing prompt on the next page. During the second session, each student revised his or her draft and submitted a final composition, which was scored in the areas of Topic Development and Standard English Conventions. The Scoring Guides for the MCAS English Language Arts Composition are available at www.doe.mass.edu/mcas/student/ela_comp_scoreguide.html.

Reference Materials

At least one English-language dictionary per classroom was provided for student use during ELA Composition retest sessions. The use of bilingual word-to-word dictionaries was allowed for current and former English language learner students only. No other reference materials were allowed during either ELA Composition retest session.
WRITING PROMPT

Often in works of literature, a relationship between two characters leads to problems.

From a work of literature you have read in or out of school, select two characters whose relationship leads to problems. In a well-developed composition, describe the characters’ relationship and how it leads to problems, and explain how their experience is important to the work as a whole.
B. Reading Comprehension

The English Language Arts Reading Comprehension retest was based on grades 6–12 learning standards in two content strands of the *Massachusetts Curriculum Framework for English Language Arts and Literacy* (March 2011) listed below. Page numbers for the learning standards appear in parentheses.

- Reading (*Framework*, pages 47–52)
- Language (*Framework*, pages 64–67)

The *Massachusetts Curriculum Framework for English Language Arts and Literacy* is available on the Department website at www.doe.mass.edu/frameworks/current.html.

ELA Reading Comprehension retest results are reported under two MCAS reporting categories, Reading and Language, which are identical to the two framework content strands listed above.

The table at the conclusion of this chapter indicates each item’s reporting category and both the 2011 grades 6–12 *Framework* standard and the 2001 *Framework* general standard it assesses. The correct answers for multiple-choice questions are also displayed in the table.

**Test Sessions and Content Overview**

The ELA Reading Comprehension retest included three separate test sessions. Sessions 1 and 2 were both administered on the same day, and Session 3 was administered on the following day. Each session included reading passages, followed by multiple-choice and open-response questions. Reading passages and test items are shown on the following pages as they appeared in test booklets.

**Reference Materials**

During all three ELA Reading Comprehension retest sessions, the use of bilingual word-to-word dictionaries was allowed for current and former English language learner students only. No other reference materials were allowed during any ELA Reading Comprehension retest session.
DIRECTIONS
This session contains two reading selections with twelve multiple-choice questions and two open-response questions. Mark your answers to these questions in the spaces provided in your Student Answer Booklet.

Read the article about the history of pancakes. Answer the questions that follow.

THE PANCAKE
by Amy Sutherland

1. Americans have their flapjacks, Hungarians their palascintas, the French their crepes and the Ethiopians their injera. Seems that a culture isn’t a culture without its very own pancake. True, the supple golden discs are more common in the Western world, but pancakes sizzle on far-flung griddles in Indonesia, Syria and China. The pervasive, persistent pancake is, simply put, pandemic.

2. Why is that? What’s so special about pancakes that they defy history and national borders? What propels them into the upper echelon of elemental foods along with puddings, soups and stews, the dishes that make all of humanity salivate? The pancake has even vaulted a rung higher on the culinary ladder as it looms large in our imagination, inspiring folktales, sayings, festivals, silly races and ritualized food fights. How can such a humble foodstuff hold such sway?

3. Its very humbleness for starters. Pancakes are one of the original fast foods. Pancake batter calls for cheap and easy-to-find ingredients—milk, flour, butter or oil, eggs, even just flour and water in some recipes. The batter can sit around, or overnight in the fridge. The cook needn’t have a Viking range,* just a griddle and a fire as any camper knows. American settlers even fried them on their hoe blades over crackling fires, inventing hoecakes. “They are really easy and really flexible and you don’t need an oven. They are a good answer to a necessity,” says Naomi Duguid, co-author with her husband of Home Baking: The Artful Mix of Flour and Traditions from around the World.

* Viking range — an expensive stove
4 Duguid grew up eating her grandmother’s pancakes, yolky yellow from free-range chicken eggs and topped with sugar and lemon juice. On one of her many trips to Southeast Asia she improvised the family recipe using coconut milk and frying the pancakes in a wok. She served them with palm sugar and lime. “Life is about flexibility, not about formulas, and that’s exactly where the pancake fits in,” Duguid says.

5 That is why the pancake lends itself to countless versions, so many cultural signatures. They can be wrappers or the main event, breakfast or dinner, street food or a luxury dessert. The Dutch pop theirs in the oven for a pancake-souffle hybrid. Indonesians wrap them around sugared coconut meat. Brits munch yeasted, holey cakes with preserves.

6 Pancakes are in fact such changelings they can be hard to define. Nearly every time you come up with a rule, a cake defies it. What about tortillas or chapattis? A vast grey area lies between pancakes and flatbreads. According to The Oxford Companion of Food a pancake is made from “a batter of flour, eggs and milk and fried in a shallow pan or cooked on a greased griddle.” John Mariani in his Dictionary of American Food boils them down to “flat cakes cooked on a griddle and browned on both sides.” Noted food historian Barbara Haber says they must be cooked on a hot surface, made of some kind of grain and don’t use yeast. Then, after mentioning a leavened Yemeni pancake, Haber says about the yeast, “I take it back.” Duguid says what you call a pancake depends on where you live. “I think it’s a culture bound thing.”

7 The true magic of pancakes lies in how such inexpensive simplicity produces such reliable deliciousness. Few things in life deliver so much from so little. That explains why they have survived various revolutions, from France’s haute cuisine to America’s low-carb fad. Every morning in Berkeley, California, you’ll find a mob chowing down amber stacks at Bette’s Oceanview Diner, spitting distance from the epicenter of new food in America, Alice Waters’s Chez Panisse. When Bette Kroening opened her diner in 1982, pancakes quickly took center stage and there they have remained though American food has reinvented itself once or twice since. The diner dishes 225, mostly buttermilk, cakes daily. “They have been good to me,” Kroening says.

8 Certainly, the pancake has history on its side. It is a direct descendant of the very early Neolithic flatbreads baked on hot stones. When the pancake split from early flatbreads remains a mystery, but the break was made by the time Romans swaggered across Europe and Africa. Apicius, the ancient Roman cookbook, includes a recipe served with pepper and honey. Pancakes survived the collapse of the Roman Empire. By the Middle Ages, they were known as frayse, and portable griddles, key to pancake making, were common. A 1430 English culinary manuscript mentions pancakes, and the oldest Dutch cookbook, 1514, includes several recipes. The Family Dictionary, or, Household Companion printed in London in 1710 instructs cooks wanting “cripf” pancakes to “make 12 or 20 of them in a little Frying-pan, no bigger than a Saucer, then boil them in lard, and they will look yellow as Gold, and eat very well.”
The English and Dutch settlers not only brought their various pancakes to our shores, but their undying devotion as well. In short order Americans claimed them as their own, flipping johnnycakes, flannel cakes and flat cars for the hearty breakfasts required to build a nation. Jefferson served them at Monticello. The writer James Fenimore Cooper spatulaed some for friends in Paris. The first ready mix was introduced at the New Era Exposition in St. Joseph, Missouri, in 1889. Then came pancake houses. The Dutch may have some 100, but IHOP alone, which opened in 1958, has 1,186 in the United States.

As pancakes have figured largely on the table so too have they in culture and tradition. In the past, Russians ate a meal of pancakes after praying for the dead. In France, dropping a pancake was considered bad luck—Napoleon supposedly blamed it for a disastrous Russian campaign. Norway, Germany and the United States have folktales of runaway pancakes, all of which get eaten in the end.

In many European countries, Shrove Tuesday, or Mardi Gras, was previously known as Pancake Day. Stacks of pancakes were consumed to use up the butter and eggs forbidden during Lent. In England, the tradition lives on with celebrations such as the Great Pancake Grease, during which a school cook at Westminster Abbey tosses a huge pancake to a pack of schoolboys. The boy who emerges from the melee with the largest piece gets a prize. In Olney, England, the religious holiday is known as Pancake Day Race. In most years since 1445, local, aproned housewives toting cast iron pans sprint 375 meters while flipping a cake three times. The first to arrive at the church, serve her pancake to the bell ringer and be kissed by him, wins. The 2005 winner, 68 seconds. A rival race is run the same day in Liberal, Kansas. In 2005, the U.S. race winner bested Olney’s by one second.

Pancakes are not laden with as much religious meaning in the United States, but they remain the food of choice at church breakfasts, or just about any kind of breakfast for that matter. Every year, locals in Springfield, Massachusetts, man the griddle for the World’s Largest Pancake Breakfast. In 2002 they served nearly 76,000 stacks. Pancakes are also fodder for many children’s books, such as Curious George Makes Pancakes. The breakfast staple also inspired one of America’s most familiar clichés, “flat as a pancake.” That phrase having been amply applied to Kansas, a team of scientists put it to the test in 2003. Their findings: Kansas is in fact flatter than a pancake.

“The Pancake” by Amy Sutherland, from Restaurant Business (November 2005). Copyright © 2005 by CSP. Reprinted by permission of MonkeyDish/CSP. Photograph copyright © iStockphoto/Paul Johnson.
1. What is the most likely purpose of the alliteration used at the end of paragraph 1?
   A. to contrast pancakes with other foods
   B. to introduce a playful tone in the article
   C. to reveal the beliefs of the author of the article
   D. to suggest that people disagree about pancakes

2. Read the sentence from paragraph 2 in the box below.
   The pancake has even vaulted a rung higher on the culinary ladder as it looms large in our imagination, inspiring folktales, sayings, festivals, silly races and ritualized food fights.

   Based on the sentence, what is the author’s main focus in the article?
   A. cultural trends
   B. documented facts
   C. fictional narratives
   D. scientific information

3. What is the main idea of paragraphs 4–6?
   A. Pancake recipes are infinitely varied.
   B. Pancakes can be eaten at any time of day.
   C. Pancake recipes can be hard to understand.
   D. Pancakes are usually eaten as a family meal.

4. Based on paragraph 7, what does the author say is the “true magic” of pancakes?
   A. They offer a lot of value for low cost.
   B. They are small yet they satisfy hunger.
   C. They are common but retain their appeal.
   D. They can be identified by one basic trait.
5. In paragraph 8, what do the examples show about the author’s research methods?
   A. The author relied on stories retold orally.
   B. The author gathered her own field observations.
   C. The author used anecdotes from her experiences.
   D. The author included data from published sources.

6. Based on paragraph 11, which would best describe the atmosphere during most pancake holidays?
   A. sacred
   B. cheerful
   C. peaceful
   D. educational

7. Read the sentence from paragraph 12 in the box below.
   
   The breakfast staple also inspired one of America’s most familiar clichés, “flat as a pancake.”

   Based on the sentence, what can readers infer about pancakes?
   A. People view them as ordinary.
   B. They motivate people to eat less.
   C. Their shape is widely recognized.
   D. People are tired of hearing about them.

8. Read the sentence from paragraph 2 in the box below.
   
   How can such a humble foodstuff hold such sway?

   Which of the following would best replace the phrase “hold such sway” in the sentence?
   A. offer good nutrition
   B. have so much influence
   C. maintain a uniform size
   D. come in so many flavors
What's so special about pancakes that they defy history and national borders?

Based on the article, explain how pancakes “defy history and national borders.” Support your answer with relevant and specific information from the article.
The narrator of the novel An Unfinished Season describes how his father, a former college hockey star, spends each evening after work skating around a pond near their backyard. Read the excerpt from the novel, set in a small town north of Chicago in the 1950s, and answer the questions that follow.

from An Unfinished Season
by Ward Just

1 The sixth green of the golf course was visible from our terrace. Between the terrace and the fairway was a shallow pond shaped like an eyelid and fringed with high-crowned sycamore trees, and among the trees swaybacked metal chairs. That was where my father went each evening when he returned home from work, duckwalking in his skates, his long stick over his shoulder, huge in pads and decades-old leather gloves, a worn green jersey (the number 33 still distinct on the back), and a black wool balaclava. He had installed arc lights in the trees so that the pond was brilliantly lit, the cage with its floppy net at one end. My father stood quietly a moment, breathing deeply, his breath pluming in the frigid air. Most nights the ice was covered by an inch or more of snow, which he cleared with a wide-bladed shovel, skating patiently from the edges of the eyelid to the center until the surface was clear. Then he opened the small duffel he carried and scattered half a dozen pucks on the ice, using a sidearm motion as if he were skipping stones over water. And then he would step gingerly onto the ice and begin to skate in earnest, long powerful strokes around the pond, tapping the stick on the ice to some mysterious rhythm. Then he would rotate and skate backward, his elbows close to his body, his knees churning. He looked as indestructible as a truck. After a few minutes of warm-up, he would execute a sweeping curve and take the puck up the ice, nudging it gently as if it were an eggshell, swiveling left and right, his head high, and at the last moment fire the puck into the net. He rarely took a slap shot. Slap shots hinted at desperation and he believed in patience and thorough preparation. Due diligence, he called it. It was easy to imagine the defensemen he eluded, confused opponents scrambling to check him or steal the puck. My father did not stop until all six pucks were in the net and at that time he took one, two, three victory laps, skating as fast as he could around the perimeter of the pond, his stick held high above his head, hearing the tick-tick-tick of the stick striking the bare branches of the sycamores. I imagine he was remembering his days at Dartmouth College, captain of the almost-undefeated hockey team in his senior year. He was fifty now, his hair thinning and his waistline spreading, nearsighted behind wire-rimmed glasses. On the ice, he looked twenty years younger. I watched all this from my desk in my second-floor bedroom, schoolbooks piled around me, my father's athletic skill a momentary distraction from European history, art appreciation, and Spanish. Everyone said we looked alike, but I didn't believe it. The photograph on my desk showed an outdoorsman, a few years older than I am now, burly in a Dartmouth letter sweater. I am taller than he is, and thin, an indoor man. When

---

1 balaclava — a hood that covers the head and neck
2 check — make body contact
they say I look like him, they mean our mannerisms are similar, the way we walk, our gestures, and our voices.

Afer an hour of this, the arc lights blinked twice, my mother's signal that she was preparing cocktails. Practice was over. Time to come in. Time to shower and say hello to the family. I knew she had been watching him from the French doors that opened onto the terrace from the den, trim in slacks and a sweater, an ascot at her throat; of course she was worried, and I imagined her hand moving in a tentative wave, though she knew he could not see her, so complete was his concentration. He always took two final laps, and when he removed the balaclava you noticed his damp hair and the sweat on his forehead, his face flushed, smiling broadly—and as he stood, his chest heaving in the bath of bright lights, you could almost hear the applause. When he took a last reluctant look around, I knew he was remembering himself as a boy on the same pond, those interminable winters when the icicles were as thick as your arm, vibrating from the howls of the wolves on the prairie. The prairie swept away in low undulating swells like a great inland ocean, the soil unimaginably rich, everything else inhospitable. The horizon line was out of reach. And then it seemed overnight Chicago's sprawl defeated the farmland. Roads replaced wagon tracks. The golf course arrived. My father stood on the ice, shimmying on his skates, looking at the fairway in the darkness, remembering that a barn once stood there stark against the empty sky and beyond it cornfields for miles and miles. In such a landscape a human being was diminished. You knew your place.

10 Read the sentences from the excerpt in the box below.

- I imagine he was remembering his days at Dartmouth College . . .
- . . . I knew he was remembering himself as a boy on the same pond . . .

Based on the sentences, what is the main reason the son is an effective narrator for the excerpt?
A. He understands his father well.
B. He has a strong sense of honesty.
C. He knows the history of the region.
D. He shares a love of literature with his father.

11 What is the most likely reason the author uses long sentences when describing the father’s skating?
A. to suggest that the father has a lot on his mind
B. to emphasize the anxiety of the father’s family
C. to emphasize the fluidity of the father’s movements
D. to suggest that the father has been outside for a while

12 Read the sentence from paragraph 2 in the box below.

. . . you noticed his damp hair and the sweat on his forehead, his face flushed, smiling broadly—and as he stood, his chest heaving in the bath of bright lights, you could almost hear the applause.

In the sentence, what does the description of the father reveal about him?
A. He is determined to improve his fitness.
B. He is transported to the glory of his youth.
C. He is being dramatic in order to amuse his son.
D. He is contemplating a new direction in his life.

13 Read the last two sentences of the excerpt in the box below.

In such a landscape a human being was diminished. You knew your place.

How does the ending differ from the rest of the excerpt?
A. It identifies the son’s attributes.
B. It emphasizes the appeal of the city.
C. It downplays the father’s prominence.
D. It minimizes the importance of education.
Question 14 is an open-response question.

- Read the question carefully.
- Explain your answer.
- Add supporting details.
- Double-check your work.

Write your answer to question 14 in the space provided in your Student Answer Booklet.

14 Based on the excerpt, describe the narrator’s attitude toward his father. Support your answer with relevant and specific information from the excerpt.
DIRECTIONS
This session contains two reading selections with twelve multiple-choice questions and one open-response question. Mark your answers to these questions in the spaces provided in your Student Answer Booklet.

In The Tiger’s Wife, a teenage girl lives with her grandparents in a country that is recovering from war. In this excerpt, Natalia describes an experience she shares with her grandfather. Read the excerpt and answer the questions that follow.

from The Tiger’s Wife
by Téa Obreht

1. It was the summer I turned sixteen. Some patient—I didn’t know who—had been battling pneumonia, and my grandfather’s visits to him had increased from once to three times a week. I had dozed off struggling through a crossword puzzle, fully intending to wait up for him, and I came around some hours later to find my grandfather standing in the doorway, flicking the table lamp on and off. When he saw me sit up, he stopped, and for a few moments I sat in total darkness.

2. “Natalia,” I heard him say, and I realized he was motioning for me to get off the sofa. I could see him now. He was still wearing his hat and raincoat, and exhaustion turned my relief at seeing him into impatience.


4. He motioned toward the door, and then he said, “Quietly. Come on.” He had my raincoat over his arm, my sneakers in his right hand. Evidently, there was no time to change. “What’s going on?” I said, forcing my foot into an already laced sneaker. “What’s the matter?”

5. “You’ll see,” he said, holding the coat out for me. “Hurry up, come on.”

6. I thought: that’s it, it’s finally happened—he’s killed somebody.

7. The elevator would have made too much noise, so we took the stairs. Outside the rain had stopped, but water was still running in the gutters, coming down the street from the market and carrying with it the smell of cabbage and dead flowers. The café across the street had closed early, the patio chained off, wet chairs stacked on the tabletops. An enormous white cat was sitting under the pharmacy awning, blinking at us with distaste as we passed under the lamppost at the end of the block. By this time, I had given up on my coat buttons.

8. “Where are we going?” I said. “What’s happened?”

9. But my grandfather didn’t answer. He just kept moving down the street, so fast I came after him almost at a run. I thought, if I start crying, he’ll make me go back, and stayed on his heels. Past the baker, the bank, the out-of-business toy shop where I had bought stickers for my never-completed Ewoks album; past the stand that sold fried dough, the sugared smell of it wedged permanently in the air; past the stationery shop, the newsstand on the next corner. Three blocks down, I realized how quiet it
was. We had passed two cafés, both closed, and a late-night grill that was normally packed, but was occupied tonight by only one waiter, who sat spinning coins across an eight-person table.

“What the hell is going on?” I asked my grandfather.

I wondered what my mother would do if she woke up to find us both gone. We were nearing the end of our street where it opened out onto the Boulevard, and I assumed the silence of our walk would be shattered by the bustle along the tramway. But when we got there, nothing, not even a single passing car. All the way from one end of the Boulevard to the other, every window was dark, and a hazy yellow moon was climbing along the curve of the old basilica on the hill. As it rose, it seemed to be gathering the silence up around it like a net. Not a sound: no police sirens, no rats in the dumpsters that lined the street. Not even my grandfather’s shoes as he stopped, looked up and down the street, and then turned left to follow the Boulevard east across the Square of the Konjanik.

“It’s not far now,” he said, and I caught up with him long enough to see the side of his face. He was smiling.

“Not far to where?” I said, out of breath, angry. “Where are you taking me?” I drew myself up and stopped. “I’m not going any further until you tell me what the hell this is.”

He turned to look at me, indignant. “Lower your voice, you fool, before you set something off,” he hissed. “Can’t you feel it?” Suddenly his arms went over his head in a wide arc. “Isn’t it lovely? Not one in the world awake but us.” And off he went again. I stood still for a few moments, watching him go, a tall, thin, noiseless shadow. Then the realization of it rushed over me: he didn’t need me with him, he wanted me there. Without realizing it, I had been invited back.

We passed the empty windows of shops that had gone out of business; lightless buildings where roosting pigeons hunched along the fire escapes; a beggar sleeping so soundly that I would have thought him dead if I hadn’t realized that the moment had closed around us, stilling everything.

When I finally caught up with my grandfather, I said: “Look, I don’t know what we’re doing, but I’d like to be in on it.”

Then suddenly he stopped in the darkness ahead of me and my chin cracked his elbow. The force of the collision knocked me back, but then he reached for me and held my shoulder while I steadied myself. My jaw clicked when I put my hand against it.

My grandfather stood on the curb, pointing into the distance of the empty street. “There,” he said, “look.” His hand was shaking with excitement.

“I don’t see anything,” I told him.

“Yes you do,” he said. “You do, Natalia. Look.”

I peered out into the street, where the long blades of the rails lay slick and shining. There was a tree on the other curb, a lamppost with a dying bulb, an eviscerated dumpster lying on its side in the road. I was opening my mouth to say what? And then I saw it.
Half a block from where we were standing, an enormous shadow was moving along the street, going very slowly up the Boulevard of the Revolution. At first I thought it was a bus, but its shape was too organic, too lumpy, and it was going far too slowly for that, making almost no noise. It was swaying, too, swaying up the street with an even momentum, a ballasted rolling motion that was drawing it away from us like a tide, and every time it rocked forward something about it made a soft dragging sound on the rails. As we watched, the thing sucked in air and then let out a deep groan.

“God,” I said. “That’s an elephant.”

My grandfather said nothing, but when I looked up at him he was smiling. His glasses had fogged up during the walk, but he wasn’t taking them off to wipe them.

“Come on,” he said, and took my hand. We moved fast along the sidewalk until we drew parallel, and then passed it, stopped a hundred meters down so we could watch it coming toward us.

From there, the elephant—the sound and smell of it; the ears folded back against the domed, bouldered head with big-lidded eyes; the arched roll of the spine, falling away into the hips; dry folds of skin shaking around the shoulders and knees as it shifted its weight—seemed to take up the whole street. It dragged its curled trunk like a fist along the ground. Several feet in front of it, holding a bag of something that must have been enormously tempting, a short young man was walking slowly backward, drawing it forward with whispers.

“I saw them up at the train station as I was coming home,” my grandfather said. “He must be bringing it to the zoo.”

The young man had seen us, and as he inched back along the tramway he nodded and smiled, pulled down on his cap. Every so often, he would take something out of the bag and hold it out to the elephant, and the elephant would lift its trunk from the ground, grip the offering, and loll it back between the yellow sabers of its tusks.

Later on, we would read about how some soldiers had found him near death at the site of an abandoned circus; about how, despite everything, despite closure and bankruptcy, the zoo director had said bring him in, bring him in and eventually the kids will see him. For months the newspapers would run a picture of him, standing stark-ribbed in his new pen at the zoo, an advert of times to come, a pledge of the zoo’s future, the undeniable end of the war.

My grandfather and I stopped at the bus station, and the elephant passed, slow, graceful, enchanted by the food in the young man’s hand. The moon threw a tangle of light into the long, soft hairs sticking up out of his trunk and under his chin. The mouth was open, and the tongue lay in it like a wet arm.

“No one will ever believe this,” I said.

“My grandfather said: “What?”

“None of my friends will ever believe it.”

“My grandfather looked at me like he’d never seen me before, like he couldn’t believe I was his. Even in our estrangement, he had never quite looked at me that way, and afterward he never did again.
“You must be joking,” he said. “Look around. Think for a moment. It’s the middle of the night, not a soul anywhere. In this city, at this time. Not a dog in the gutter. Empty. Except for this elephant—and you’re going to tell your idiot friends about it? Why? Do you think they’ll understand it? Do you think it will matter to them?”

He left me behind and walked on after the elephant. I stood with my hands in my pockets. I felt my voice had fallen through and through me, and I couldn’t summon it back to tell him or myself anything at all. The elephant was moving forward along the Boulevard. I followed it. A block down, my grandfather had stopped beside a broken bench, was waiting for the elephant. I caught up with him first, and the two of us stood side by side, in silence, my face burning, his breath barely audible. The young man did not look at us again.

Eventually, my grandfather said: “You must understand, this is one of those moments."

“What moments?”

“One of those moments you keep to yourself,” he said.

“What do you mean?” I said. “Why?”

“We’re in a war,” he said. “The story of this war—dates, names, who started it, why—that belongs to everyone. Not just the people involved in it, but the people who write newspapers, politicians thousands of miles away, people who’ve never even been here or heard of it before. But something like this—this is yours. It belongs only to you. And me. Only to us.” He put his hands behind his back and ambled along slowly, kicking the polished tips of his shoes up as he walked, exaggerating his movements so they would slow him down. No thought of turning around, of going home. Down the Boulevard for as long as the elephant and his boy would tolerate us.
15 In paragraphs 1–8, what is the main way the author leads the reader into the excerpt?
   A. by describing a violent scene  
   B. by creating a sense of urgency  
   C. by highlighting an unusual setting  
   D. by providing insight into a character

16 What is the main effect of the description in paragraph 15?
   A. It shows the narrator is frustrated.  
   B. It reveals people are watching.  
   C. It suggests the narrator is lost.  
   D. It makes time seem frozen.

17 Read the sentences from paragraph 26 in the box below.

   From there, the elephant—the sound and smell of it; the ears folded back against the domed, boulderied head with big-lidded eyes; the arched roll of the spine, falling away into the hips; dry folds of skin shaking around the shoulders and knees as it shifted its weight—seemed to take up the whole street. It dragged its curled trunk like a fist along the ground.

What is the most likely reason the author includes a detailed description of the elephant?
   A. to show its failing health  
   B. to emphasize its clumsy actions  
   C. to reveal its threatening demeanor  
   D. to suggest its overwhelming presence
18. Based on paragraph 29, the elephant comes to be a symbol of
   A. hope.
   B. cruelty.
   C. innocence.
   D. oppression.

19. In paragraph 36, Natalia’s comment “I felt my voice had fallen through and through me” suggests that she is
   A. satisfied.
   B. pessimistic.
   C. sympathetic.
   D. embarrassed.

20. Based on paragraph 41, what is the *most likely* reason the grandfather slows down as he walks?
   A. He is tired after a long day.
   B. He wants to prolong the moment.
   C. He is annoyed with his granddaughter.
   D. He wants to allow his granddaughter to catch up.
21 Read the descriptions from the excerpt in the box below.

- ... carrying with it the smell of cabbage and dead flowers.
- ... every window was dark, and a hazy yellow moon was climbing along the curve of the old basilica ...
- ... lightless buildings where roosting pigeons hunched along the fire escapes ...

In the excerpt, the descriptions are used mainly to
A. establish mood.
B. advance the plot.
C. explain the theme.
D. reveal point of view.

22 In paragraph 36, which of the following is the Latin root of the word audible?
A. audax, meaning “bold”
B. audire, meaning “to hear”
C. audere, meaning “to dare”
D. augere, meaning “increase”
Question 23 is an open-response question.

- Read the question carefully.
- Explain your answer.
- Add supporting details.
- Double-check your work.

Write your answer to question 23 in the space provided in your Student Answer Booklet.

23 Based on the excerpt, describe the relationship between Natalia and her grandfather. Support your answer with relevant and specific information from the excerpt.
Amateur Fighter

for my father

What’s left is the tiny gold glove
hanging from his key chain. But,
before that, he had come to boxing,
as a boy, out of necessity—one more reason
5 to stay away from home, go late
to that cold house and dinner alone

in the dim kitchen. Perhaps he learned
just to box a stepfather, then turned
that anger into a prize at the Halifax gym.

Later, in New Orleans, there were the books
he couldn’t stop reading. A scholar, his eyes
weakening. Fighting, then, a way to live
dangerously. He’d leave his front tooth out
for pictures so that I might understand
15 living meant suffering, loss. Really living
meant taking risks, so he swallowed
a cockroach in a bar on a dare, dreamt
of being a bullfighter. And at the gym

on Tchoupitoulas Street, he trained
20 his fists to pound into a bag
the fury contained in his gentle hands.

The red headgear, hiding his face,
could make me think he was someone else,
25 that my father was somewhere else, not here
holding his body up to pain.

— Natasha Trethewey

The Boxing Lesson

“Keep it light, boys. Keep it light,”
my father would shout from the sidelines,
meaning light on our feet, dancing and circling,
never coming in direct at your opponent,
like that time my youngest brother
walked right into my straight-armed left
and knocked himself flat.

It was as if his sons were figures
in a myth whose feet might take root
the instant we stopped moving,
a suit of chainmail* bark creeping up
over our thighs and trunks, freezing
us in place so we’d end up reeling
punchdrunk before the fists of any breeze.

If, as he taught us to, I look for movement
out of the corner of my eye
(“The punch you don’t see coming
is the one you’ve got to watch for”),
I can glimpse him out there in the blue arena,
dancing and circling, always moving,
as he boxes Death himself,
snapping back the hooded head
with a crisp one-two.

— Richard Broderick

* chainmail — heavy, weighted armor

24 In “Amateur Fighter,” what was the father’s initial reason for learning to box?
A. He demonstrated unusual strength as a boy.
B. He was hoping to gain fame as a daring athlete.
C. He was trying to escape from unhappy circumstances.
D. He wanted an activity that was more exciting than school.

25 Read the lines from “Amateur Fighter” in the box below.

- the fury contained in his gentle hands.
- The red headgear, hiding his face, / could make me think he was someone else.

The contrasts in the lines suggest
A. the father’s desire to forget his past.
B. the father’s problems as he grows older.
C. the different sides of the father’s personality.
D. the confusion caused by the father’s movements.

26 Read lines 17 and 18 from “The Boxing Lesson” in the box below.

(“The punch you don’t see coming is the one you’ve got to watch for”),

What advice is contained in the lines?
A. Be willing to change.
B. Be prepared for surprises.
C. Be wary of dishonest people.
D. Be suspicious about easy tasks.

27 What do lines 19–23 of “The Boxing Lesson” most reveal about the speaker?
A. He thinks his father has grown frail.
B. He continues to look up to his father.
C. He questions the bravery of his father.
D. He wishes his father were more peaceful.
William Magear Tweed, or Boss Tweed, as he was known, was one of the most famous political criminals in U.S. history. The following article describes his rise to power and how he was prosecuted in New York City in 1873. Read the article and answer the questions that follow.

**Boss Tweed Trials: 1873**

*by Stephen G. Christianson*

**Defendant:** William Magear Tweed  
**Crimes Charged:** 55 criminal offenses relating to embezzlement of public funds  
**Chief Defense Lawyers:** David Dudley Field, John Graham, and Elihu Root  
**Chief Prosecutors:** Wheeler H. Peckham, Benjamin K. Phelps, and Lyman Tremain  
**Judge:** Noah Davis  
**Place:** New York, New York  
**Dates of Trials:** January 7–November 19, 1873  
**Verdict:** Guilty  
**Sentence:** 1 year in prison and a $250 fine

**SIGNIFICANCE**

After decades of committing blatant embezzlement of New York City municipal funds with the connivance of Tammany Hall and public officials, Boss Tweed’s power was broken. Tweed’s fall from power marked the beginning of a new demand by the public and by the press for efficient and honest urban administration.

1 Descended from hard-working Scottish immigrants, William Magear Tweed was born in 1823 in New York City. He was a brawling bully from his early youth, heavyset and strong, and as a boy he enjoyed beating the other children in his neighborhood. As an adult he weighed nearly 300 pounds. Tweed bullied and fought his way to a position of leadership among New York’s criminal elements, notably the “Forty Thieves” gang. In the 1851 elections Tweed used threats and intimidation of the voters in his precinct to force his way onto New York City’s Board of Aldermen.

2 Tweed was an alderman for two years, and he used the position as a stepping stone for his political career. He served on the Board of Education, and even finagled his election to the U.S. House of Representatives. In 1857, Tweed was elected to New York City’s Board of Supervisors, which ran the city’s municipal government and controlled its finances. The position was ideal for the greedy Tweed, who promptly installed his cronies as “assistants” and raised the level of city corruption to new heights.

---

1 connivance — secret cooperation  
2 Tammany Hall — an organization that played a major role in New York City and State politics from the 1790s to the 1960s  
3 finagled — achieved by trickery or deceit
Tweed and his gang were called the Tweed Ring, and they stole enormous sums from the city treasury by falsifying municipal accounts and by creating false or grossly exaggerated expense records. Anyone who opposed them was beaten or killed. In the 1860s, Tweed extended his power to include control over the city’s courts. Tweed had George G. Barnard appointed chief judge, although Barnard had practically no legal experience and his only qualification for the post was his allegiance to Tweed. Other judges were on Tweed’s payroll as well, including the father of future Supreme Court Justice Benjamin Cardozo.

Tweed’s control of the city was buttressed by the support of the Tammany Hall political organization. To control the elections, Tammany Hall sold citizenship documents to practically any immigrant who promised to vote for the Tweed slate. Since New York was teeming with millions of new immigrants, most of whom had fled poverty and were desperate to stay in America, Tweed and Tammany Hall not only were able to control the elections but made hundreds of thousands of dollars as well.

Reformers Fight Back

By the early 1870s, reform politicians determined to end urban corruption had risen to power. New York State Governor Samuel Tilden and state Attorney General Charles Fairchild went after Tweed. They were supported by influential elements of the New York City press, led by political commentator and cartoonist Thomas Nast of the New York Times. Nast had grown up in Tweed’s neighborhood, and as a child lived with the fear of Tweed’s random beatings. Nast’s personal vendetta against Tweed took the form of scathing cartoons depicting Tweed as a fat and corrupt Tammany boss. Other papers, such as Harper’s Weekly, joined the Times in exposing Tweed’s abuse of power and in calling for his prosecution.

Nast’s Times and the other papers successfully stirred New Yorkers out of their apathy toward Tweed. On September 4, 1871, an enormous crowd went to hear various influential reformers speak out against Tweed. Bolstered by the crowd’s enthusiasm for their cause,
the reformers, led by Tilden and Fairchild, sought an injunction against Tweed and his Ring preventing them from using any more public funds. Probably because Tilden promised him protection, Judge Barnard turned against Tweed and granted the injunction on September 7.

Once Tweed was prevented from plundering the city treasury, his organization began to fall apart. On October 27, 1871, Tilden had Tweed arrested and charged with 55 criminal offenses relating to embezzlement of public funds. Because each alleged offense involved several counts, or multiple incidents, Tweed was actually prosecuted for several hundred crimes. Tweed’s lawyers were David Dudley Field, John Graham and Elihu Root. The chief prosecutors were Wheeler H. Peckham, Benjamin K. Phelps and Lyman Tremain. On January 7, 1873, the trial began before Judge Noah Davis.

The proceedings began badly for the prosecution when their poor choice of witnesses caused a mistrial. Tweed bragged that no jury could ever convict him and took a vacation in California. Tweed’s second trial began November 5, 1873. This time, the prosecution conducted its case more carefully, and after only a minimal amount of evidence was presented the jury found Tweed guilty on November 19, 1873.

**Tweed Fights Verdict**

Of the several hundred counts contained within the 55 charges against Tweed, the jury found him guilty of 102 crimes. Each crime was punishable by a year in prison and a nominal $250 fine, and so the prosecutors sought a conviction totaling 102 years and a fine of $25,500. On Tweed’s behalf, Graham pleaded for mercy:

> Your honor, we are taught, from the time we enter this world, to ask for mercy; and those prayers which we put up in our own behalf must teach us to render deeds of mercy to . . .

Graham, either genuinely upset or putting on a superb act, could not continue and broke down in tears. Prosecutor Tremain retorted:

> I cannot but feel, and I am sure my associates feel with me, indeed, all must feel, how terrible is the position of this man, who has been so high and who has fallen so low. He is now drinking the bitter waters of humiliation. The spell is broken.

Tremain turned to Judge Davis, and reminded him of the notoriety of the case:

> The law has placed in your hands the responsibility of the matter. The case is one of international interest and attracts the attention of the whole world. We now leave to you the question of what shall be meted out to the prisoner as an impartial and just penalty.
Judge Davis sentenced Tweed to 12 years in prison and a $12,750 fine. Tweed’s attorneys appealed the verdict to the New York Court of Appeals, which ruled that despite the multiple offenses Tweed could not be sentenced for more than the punishment applicable to just one crime. Therefore, Tweed served just one year in prison, paid his $250 fine, and on January 15, 1875, was released from prison.

However, Tilden had anticipated Tweed’s release. Tilden had Tweed arrested again, this time to recover the millions Tweed stole from the treasury. Unable to make the $3,000,000 bail, Tweed sat in prison awaiting his next trial. Although greatly diminished, Tweed’s influence was still strong enough to enable him to circumvent most of the restrictions of his confinement. The prison warden allowed him to take carriage drives throughout the city, and dine at Tweed’s own home if he wished. On December 4, 1875, Tweed took advantage of the warden’s laxity and never returned from one of his afternoon drives.

Tweed stayed in various hideouts in Staten Island and New Jersey until he was able to obtain a boat to take him to Florida. From Florida he fled to Cuba and from there on to Spain, which was then a notorious haven for refugees. The Spanish authorities, however, would not tolerate Tweed’s presence, and arrested him when he arrived in Vigo, Spain. Spain turned Tweed over to the United States and the naval vessel U.S.S. Franklin brought Tweed back to New York.

Tweed returned to prison, having now committed the additional offense of attempted escape. He confessed to the charges against him, and what was left of the Tweed Ring was either arrested or, if they returned their share of the stolen money, allowed to fade into obscurity. Of the tens of millions of dollars embezzled over the decades, however, the city recovered only a fraction. The rest had been frittered away in high living by Tweed and his cronies, spent in maintaining the Tammany Hall organization, or lost to the gangs and criminals affiliated with the Ring.

In 1871, when Tweed was still firmly in power and the public and press had just begun to challenge him, a reporter confronted Tweed and asked him about the charges against him. Tweed answered arrogantly, “Well, what are you going to do about it?” Thanks to the efforts of a new breed of reform politicians, supported by the demands of the public and the press for efficient and honest urban administration, Tweed found out just what could be done about it. Tweed’s power was forever broken, and he died in prison on April 12, 1878.
28. In paragraph 1, what is the most likely reason the author included information about Tweed’s childhood?
   A. to show Tweed’s early respect for authority
   B. to provide insight into Tweed’s later behavior
   C. to demonstrate how Tweed changed as he matured
   D. to explain that Tweed needed to be surrounded by friends

29. Paragraphs 1 and 2 list the many positions Tweed held in government. What does the article suggest was the reason for his increased power and responsibility?
   A. his positive reputation among his colleagues
   B. his ability to manipulate the political system
   C. the city’s lack of candidates for political office
   D. the voters’ dissatisfaction with previous leaders

30. Based on the article, what was the main reason immigrants supported Tweed’s political ambitions?
   A. He promised immigrants greater participation in making decisions.
   B. He listened to immigrants when other people refused to.
   C. He allowed immigrants to become citizens illegally.
   D. He was an immigrant and understood their needs.

31. According to the article, who first led the fight against corruption in New York City?
   A. residents who were increasingly dissatisfied
   B. officials who served at high levels of government
   C. journalists who were challenged by the government
   D. candidates who were defeated by dishonest opponents
32. Based on the article, what was one interesting aspect of Thomas Nast's work to expose Tweed?
   A. When Nast was younger, he had helped Tweed.
   B. Nast was an artist, but his message was serious.
   C. When Nast was a child, he had been afraid of Tweed.
   D. Nast was a federal employee, but he opposed the system.

33. Based on the article, which of the following best shows that Tweed retained some support even after being convicted?
   A. Crowds came to rallies for him.
   B. Judges failed to keep him in prison.
   C. People volunteered to put up bail for him.
   D. Editorial cartoons about him were less common.

34. What is a main idea of the article?
   A. Treat people with dignity and they will treat you in the same way.
   B. People cannot change the character they developed as youths.
   C. Leaders must not forget the people who elected them.
   D. Justice can prevail when people act with courage.

35. Based on paragraph 8, what is a mistrial?
   A. a trial of a notable person
   B. a trial notable for its length
   C. a trial run according to special rules
   D. a trial terminated because of an error
Question 36 is an open-response question.

- Read the question carefully.
- Explain your answer.
- Add supporting details.
- Double-check your work.

Write your answer to question 36 in the space provided in your Student Answer Booklet.

36 Based on the article, explain why Boss Tweed has become one of the most famous criminals in U.S. history. Support your answer with relevant and specific details from the article.
In the stories of Camelot, Queen Guinevere had a love affair with Lancelot, a knight of the Round Table. Guinevere's husband, King Arthur, sentenced her to death as a result. Read the excerpt and answer the questions that follow.

**Wherein Guinevere is brought to trial**

*from The Death of King Arthur*

*retold by Peter Ackroyd*

---

1. Sir Mordred had escaped, severely wounded, from Lancelot; weak from the loss of blood, he was still able to mount his horse and make his way to the king. He explained what had happened to his sovereign, and described how all the other knights had been killed.

2. “God have mercy on us!” cried the king. ‘How can this be? Do you say that you found him in the queen’s chamber?’

3. ‘Yes, sir, in God’s name it is the truth. He was not armed but, having dispatched Sir Colgreveance, he donned that trusty knight’s armour. Then he fell upon us.’

4. The king was disturbed by this news. ‘Sir Lancelot is a mighty warrior. He has no rival. I bitterly regret that he has now turned against me, for in becoming my foe he will surely break up the fellowship of the Round Table. He has so many noble kinsmen that our unity will be gone for ever. There is something else. To save my honour, I must also consign my wife to the flames.’ Arthur bowed his head in sorrow.

5. A short time later, the proclamation was made about the trial of the queen. The verdict itself was not in doubt. She was led to the Stone ofJudgement, in the field of the fifty footsteps, where the evidence was pronounced against her. She stood in silence, with her head bowed, before the great lords of the court.

6. Just as the trial ended, Sir Gawain stood up and addressed the king. ‘My lord Arthur,’ he said, ‘I would advise you not to be too hasty in pronouncing death upon Queen Guinevere. Can you not declare a delay in judgement? There are many reasons for urging this. One of them is simple. It may be that, when Lancelot was found in the lady’s chamber, he was there with no malicious intent. You know from your own experience that the Lady Guinevere has many reasons for showing gratitude to Sir Lancelot. He has saved her life on several occasions, and has done battle for her when no other knight was willing to do so. It may well be that she sent for him out of the goodness of her heart, in the wish to reward him for all his generous deeds. If she sent for him secretly, that was because she knows that there are many scandalmongers and gossips at the court who would love to sow mischief. She may have made the wrong decision, but things we do for the best often turn out to be for the worst. That is a law of life. I am sure, sir, that Queen Guinevere is a true and faithful wife. As for Sir Lancelot, I know that he will challenge to the duel any knight who dares to impugn the modesty of the queen or the honour of his own conduct.’
‘That may well be true. Lancelot trusts so much in his own strength that he fears no man. But I refuse to take your advice, Sir Gawain. The law is the law. The queen must go to the stake and, if I catch Lancelot, I will condemn him also to a shameful death.’

‘God forbid, sir king, that I should live to see such a thing!’

‘Why do you say that? You have no reason to love him. He has just slaughtered your brother, Sir Agravain, and he almost killed Mordred. Has he not also murdered two of your sons, Sir Florens and Sir Lovell?’

‘I know that. I bitterly regret the death of my two sons. But I warned them all—brothers and sons alike—about the outcome of any struggle with Lancelot. They refused my advice. So I will not meddle with him or try to take revenge upon him. They put themselves in the path of perils. They are the cause of their own deaths.’

King Arthur listened to him gravely. ‘Prepare yourself, Sir Gawain. Put on your finest armour and then, with your brothers Gaheris and Gareth, attend upon the queen. Bring her to the place of judgement and consign her to the fire.’

‘No, my most noble king. I cannot do it. I will never escort my lady, the queen, to a miserable and dishonourable death. I could not endure to see her tied to the stake, and I will play no part in her death.’

‘Then see to it that your brothers take your place.’

‘My lord, they know well enough what shame will fall upon them. But they are too young and inexperienced to refuse you.’

Gaheris and Gareth stepped forward from the company of knights, and addressed the king. ‘Sir, you may command us to be there,’ Gareth said. ‘That is your right. But we will attend against our wishes. Will you not excuse us?’ The king shook his head.

‘Very well,’ Gaheris said. ‘But we will not wear armour or bear arms. We will give the queen the kiss of peace.’

‘In the name of God, then, prepare yourselves.’ The king was very stern. ‘She shall be brought to judgement very soon.’

Gawain cried out in sorrow. ‘Alas that I should live to see this unhappy day!’ He turned away, weeping, and rushed out of the hall.

Very shortly after, Queen Guinevere was commanded to put on a plain smock, and was escorted from the castle to the place of execution. She made full confession of her sins to the priest in attendance, even as the assembled lords and ladies grieved for her.

Sir Lancelot had placed one of his men among the courtiers to give him good warning of the event. As soon as this man saw the queen being led forward, he leaped on to his horse and rode to the wood in order to inform Lancelot. The knights broke from their cover and, with Lancelot in the front rank, they galloped across the field towards the queen. The assault was a fierce one, and Lancelot himself killed a score of worthy knights. By ill fortune he also killed Gawain’s two young brothers,
Gareth and Gaheris, who were in fact unarmed. In the alarm and heat of battle, he had failed to recognize them. The French books tell us that he dealt them mighty blows about their heads, so that they fell to the ground with their brains spilling out. Yet Lancelot never saw them. They were found lying in a pile of corpses.

When Lancelot had killed or put to flight all of his opponents, he rode up to Guinevere. He gave her a gown and girdle, to put over her plain smock; he asked her to sit behind him on his horse and, when she was safely seated, he told her to be of good cheer. All would be well. As they rode off together, she praised God for her deliverance from death. And, of course, she also thanked her rescuer.

They made their way to Lancelot's castle, Joyous Garde, where he entertained her in knightly fashion. Many great lords, and other knights of his affinity, assembled there to pledge their allegiance to the queen. When it was clear that King Arthur and Sir Lancelot had become enemies, there were some who welcomed the news. There were others, however, who prophesied more woe and warfare. They were right.
37 Based on paragraph 4, what is most unexpected about King Arthur's reaction?
A. His wife's disloyalty is not his first concern.
B. His knight's actions are not a surprise to him.
C. He wishes he had known of the problem earlier.
D. He feels his court must become involved in the problem.

38 According to paragraph 5, what is true about Guinevere's trial?
A. It is held in private.
B. It is a shock to the court.
C. Its outcome is already known.
D. Its proceedings are marked by violence.

39 Based on paragraphs 15 and 16, what does Gaheris and Gareth's refusal to “wear armour or bear arms” signify?
A. their confidence in their safety
B. their attempt to help their enemies
C. their disapproval of the king's verdict
D. their support of the king's efforts to maintain peace

40 Based on the excerpt, which of the following most strongly guides King Arthur's decisions?
A. his training
B. his subjects
C. his marriage
D. his principles
### Reading Comprehension Retest

#### November 2014 Released Items:

**Reporting Categories, Standards, and Correct Answers**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>Reading</td>
<td>4</td>
<td>B</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>Reading</td>
<td>6</td>
<td>A</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>Reading</td>
<td>3</td>
<td>A</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>Reading</td>
<td>6</td>
<td>A</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>Reading</td>
<td>8</td>
<td>D</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
<td>Reading</td>
<td>1</td>
<td>B</td>
<td>13</td>
</tr>
<tr>
<td>7</td>
<td>12</td>
<td>Reading</td>
<td>1</td>
<td>C</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>Language</td>
<td>5</td>
<td>B</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>13</td>
<td>Reading</td>
<td>2</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>10</td>
<td>16</td>
<td>Reading</td>
<td>3</td>
<td>A</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>16</td>
<td>Reading</td>
<td>5</td>
<td>C</td>
<td>15</td>
</tr>
<tr>
<td>12</td>
<td>16</td>
<td>Reading</td>
<td>3</td>
<td>B</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>16</td>
<td>Reading</td>
<td>5</td>
<td>C</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>17</td>
<td>Reading</td>
<td>3</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>22</td>
<td>Reading</td>
<td>5</td>
<td>B</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>22</td>
<td>Reading</td>
<td>4</td>
<td>D</td>
<td>15</td>
</tr>
<tr>
<td>17</td>
<td>22</td>
<td>Reading</td>
<td>4</td>
<td>D</td>
<td>15</td>
</tr>
<tr>
<td>18</td>
<td>23</td>
<td>Reading</td>
<td>2</td>
<td>A</td>
<td>12</td>
</tr>
<tr>
<td>19</td>
<td>23</td>
<td>Reading</td>
<td>4</td>
<td>D</td>
<td>12</td>
</tr>
<tr>
<td>20</td>
<td>23</td>
<td>Reading</td>
<td>2</td>
<td>B</td>
<td>12</td>
</tr>
<tr>
<td>21</td>
<td>24</td>
<td>Reading</td>
<td>4</td>
<td>A</td>
<td>15</td>
</tr>
<tr>
<td>22</td>
<td>24</td>
<td>Language</td>
<td>4</td>
<td>B</td>
<td>5</td>
</tr>
<tr>
<td>23</td>
<td>25</td>
<td>Reading</td>
<td>3</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>24</td>
<td>28</td>
<td>Reading</td>
<td>1</td>
<td>C</td>
<td>14</td>
</tr>
<tr>
<td>25</td>
<td>28</td>
<td>Reading</td>
<td>4</td>
<td>C</td>
<td>15</td>
</tr>
<tr>
<td>26</td>
<td>28</td>
<td>Reading</td>
<td>2</td>
<td>B</td>
<td>14</td>
</tr>
<tr>
<td>27</td>
<td>28</td>
<td>Reading</td>
<td>3</td>
<td>B</td>
<td>14</td>
</tr>
<tr>
<td>28</td>
<td>33</td>
<td>Reading</td>
<td>6</td>
<td>B</td>
<td>13</td>
</tr>
<tr>
<td>29</td>
<td>33</td>
<td>Reading</td>
<td>2</td>
<td>B</td>
<td>13</td>
</tr>
<tr>
<td>30</td>
<td>33</td>
<td>Reading</td>
<td>1</td>
<td>C</td>
<td>13</td>
</tr>
<tr>
<td>31</td>
<td>33</td>
<td>Reading</td>
<td>1</td>
<td>B</td>
<td>13</td>
</tr>
<tr>
<td>32</td>
<td>34</td>
<td>Reading</td>
<td>3</td>
<td>C</td>
<td>13</td>
</tr>
<tr>
<td>33</td>
<td>34</td>
<td>Reading</td>
<td>1</td>
<td>B</td>
<td>13</td>
</tr>
<tr>
<td>34</td>
<td>34</td>
<td>Reading</td>
<td>2</td>
<td>D</td>
<td>11</td>
</tr>
<tr>
<td>35</td>
<td>34</td>
<td>Language</td>
<td>4</td>
<td>D</td>
<td>4</td>
</tr>
<tr>
<td>36</td>
<td>35</td>
<td>Reading</td>
<td>2</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>37</td>
<td>39</td>
<td>Reading</td>
<td>3</td>
<td>A</td>
<td>16</td>
</tr>
<tr>
<td>38</td>
<td>39</td>
<td>Reading</td>
<td>1</td>
<td>C</td>
<td>16</td>
</tr>
<tr>
<td>39</td>
<td>39</td>
<td>Reading</td>
<td>2</td>
<td>C</td>
<td>16</td>
</tr>
<tr>
<td>40</td>
<td>39</td>
<td>Reading</td>
<td>3</td>
<td>D</td>
<td>16</td>
</tr>
</tbody>
</table>


2. Answers are provided here for multiple-choice items only.

3. The Department is providing the standard from the previous (2001) curriculum framework for ELA for reference purposes.
III. Mathematics Retest
Mathematics Retest

The Mathematics retest was based on standards in the 2011 *Massachusetts Curriculum Framework for Mathematics* that match content in the grades 9–10 standards from the 2000 *Massachusetts Mathematics Curriculum Framework*. The standards in the 2011 Framework on the retest are organized under the five major conceptual categories listed below.

- Number and Quantity
- Algebra
- Functions
- Geometry
- Statistics and Probability

The *Massachusetts Curriculum Framework for Mathematics* is available on the Department website at www.doe.mass.edu/frameworks/current.html. More information and a list of standards assessable on the Mathematics retest are available at www.doe.mass.edu/mcas/transition/2013-14g10math.html.

Mathematics retest results are reported under four MCAS reporting categories, which are based on the five Framework conceptual categories listed above.

The table at the conclusion of this chapter indicates each item’s reporting category, the 2011 Framework standard it assesses, and the 2000 Framework standard it assesses. The correct answers for multiple-choice and short-answer items are also displayed in the table.

Test Sessions

The Mathematics retest included two separate test sessions, which were administered on consecutive days. Each session included multiple-choice and open-response items. Session 1 also included short-answer items.

Reference Materials and Tools

Each student taking the Mathematics retest was provided with a grade 10 Mathematics Reference Sheet. A copy of the reference sheet follows the final question in this chapter.

During Session 2, each student had sole access to a calculator with at least four functions and a square root key. Calculator use was not allowed during Session 1.

During both Mathematics retest sessions, the use of bilingual word-to-word dictionaries was allowed for current and former English language learner students only. No other reference tools or materials were allowed.
DIRECTIONS
This session contains fourteen multiple-choice questions, four short-answer questions, and three open-response questions. Mark your answers to these questions in the spaces provided in your Student Answer Booklet.

1 Which of the following is equivalent to the expression below?
\[ (\sqrt{3})^2 \]
A. \( \sqrt{3} \cdot 2 \)
B. \( \sqrt{3} \cdot 2 \)
C. \( \sqrt{3} \cdot 3 \)
D. \( \sqrt{3} \cdot \sqrt{3} \)

2 The equation below can be used to find \( s \), Sandra's monthly salary.
\[ 200 + 0.05s = 320 \]
What is \( s \), Sandra's monthly salary?
A. $1,400
B. $2,400
C. $6,400
D. $10,400

3 A box of cereal and its dimensions are shown in the diagram below.

Based on the diagram, what is the volume of the box of cereal?
A. 23 in.\(^3\)
B. 24 in.\(^3\)
C. 288 in.\(^3\)
D. 312 in.\(^3\)
The line plot below shows the weight, to the nearest pound, of each watermelon sold at a farm stand.

Based on the line plot, what is the median weight, in pounds, of the watermelons sold?

A. 14  
B. 15  
C. 16  
D. 17
5. What value of \( p \) makes the equation below true?
\[
\frac{5}{3} + p = 0
\]
A. \( \frac{3}{5} \)
B. \( \frac{5}{3} \)
C. \( -\frac{3}{5} \)
D. \( -\frac{5}{3} \)

6. What is the value of the expression below?
\[
240 \div (4 - 6)^3 \cdot 5
\]
A. \(-200\)
B. \(-150\)
C. \(-8\)
D. \(-6\)

7. The area of a cell tower’s range is represented by circle \( R \) on the coordinate grid below.

Each unit on the grid represents 3 miles.
What is the area, in square miles, of the cell tower’s range?
A. \( 25\pi \)
B. \( 75\pi \)
C. \( 100\pi \)
D. \( 225\pi \)
A triangle and its dimensions are shown below.

\[ \sqrt{44} \text{ cm} \quad \sqrt{20} \text{ cm} \quad \sqrt{64} \text{ cm} \]

Which of the following is closest to the perimeter of the triangle?

A. 11 cm  
B. 16 cm  
C. 19 cm  
D. 21 cm

A video clip from a website was downloaded an average of 4,865 times per day for 3 weeks.

Which of the following is closest to the total number of times the video clip was downloaded during the 3 weeks?

A. 15,000  
B. 75,000  
C. 100,000  
D. 150,000

What are the solutions of the equation below?

\[ n^2 + 7n + 6 = -6 \]

A. \( n = -3; \ n = -4 \)  
B. \( n = 3; \ n = 4 \)  
C. \( n = -7; \ n = -12 \)  
D. \( n = 7; \ n = 12 \)

A figure and expressions that represent some of its dimensions, in units, are shown in the diagram below.

Which of the following expressions represents the area, in square units, of the figure?

A. \( 36x + 22 \)  
B. \( 34x + 18 \)  
C. \( 24x + 18 \)  
D. \( 22x + 14 \)
12 The line plot below shows the number of canned goods collected by each member of a club for a food drive.

Which of the following is the correct shape of a box-and-whisker plot that shows the data in the line plot?

A. 

B. 

C. 

D. 

13 Liz played a video game 5 times. Her scores are shown below.

18,958 15,125 20,874 11,039 12,316

Which of the following is closest to Liz’s average score for the 5 games?

A. 12,600
B. 15,600
C. 18,600
D. 20,600

14 Which of the following is equivalent to the expression below?

\[ m^2 + 10m - 24 \]

A. \((m - 6)(m + 4)\)
B. \((m + 6)(m - 4)\)
C. \((m - 12)(m + 2)\)
D. \((m + 12)(m - 2)\)
Questions 15 and 16 are short-answer questions. Write your answers to these questions in the boxes provided in your Student Answer Booklet. Do not write your answers in this test booklet. You may do your figuring in the test booklet.

15 In the diagram below, $\triangle JKL \equiv \triangle ONM$.

![Diagram of two triangles with marked angles](image)

Based on the angle measures in the diagram, what is the measure, in degrees, of $\angle N$?

16 Mr. Sayre purchased one can of peanuts and some apples.

- One can of peanuts cost $4.
- The apples cost $2 per pound.
- There was no tax on Mr. Sayre's purchase.

Mr. Sayre spent $13. How many pounds of apples did he purchase?
Question 17 is an open-response question.

- BE SURE TO ANSWER AND LABEL ALL PARTS OF THE QUESTION.
- Show all your work (diagrams, tables, or computations) in your Student Answer Booklet.
- If you do the work in your head, explain in writing how you did the work.

Write your answer to question 17 in the space provided in your Student Answer Booklet.

17 Dominique wrote the first five terms of a number pattern, as shown below.
   4, 9, 14, 19, 24, . . .

The pattern continues.

a. What is the next term in Dominique’s pattern? Show or explain how you got your answer.

b. Write an expression that can be used to find the $n$th term in Dominique’s pattern.

Parker wrote the first five terms of a different number pattern, as shown below.
   8, 16, 32, 64, 128, . . .

The pattern continues.

c. What is the eighth term in Parker’s pattern? Show or explain how you got your answer.

d. Write an expression that can be used to find the $n$th term in Parker’s pattern.
Questions 18 and 19 are short-answer questions. Write your answers to these questions in the boxes provided in your Student Answer Booklet. Do not write your answers in this test booklet. You may do your figuring in the test booklet.

18. What positive integer is closest to the value of $\sqrt{150}$?

19. A student surveyed some friends about the number of text messages they had sent on Monday. The results of the survey are shown in the histogram below.

How many students sent fewer than 15 text messages on Monday?
Questions 20 and 21 are open-response questions.

- BE SURE TO ANSWER AND LABEL ALL PARTS OF EACH QUESTION.
- Show all your work (diagrams, tables, or computations) in your Student Answer Booklet.
- If you do the work in your head, explain in writing how you did the work.

Write your answer to question 20 in the space provided in your Student Answer Booklet.

20 A teacher gave Audrey and Lukas the following directions for converting a temperature from degrees Fahrenheit to degrees Celsius:

- First, subtract 32 degrees from the Fahrenheit temperature.
- Next, multiply the difference by 5.
- Then, divide the product by 9.

The teacher asked Audrey and Lukas to each write an expression that represents the temperature in degrees Celsius when the temperature in degrees Fahrenheit is 59°. Auditor’s expression is shown below.

\[
\frac{5(59 - 32)}{9}
\]

a. What is the value of Audrey’s expression? Show or explain how you got your answer.

Lukas’s expression is shown below.

\[
59 - 32 \cdot 5 \div 9
\]

b. Did Lukas write a correct expression based on the teacher’s directions? Explain your reasoning.

The directions in the box below can be used to convert a temperature from degrees Celsius to degrees Fahrenheit.

Find the product of 1.8 and the Celsius temperature, then add 32.

c. Based on the directions in the box, write an expression that represents the temperature in degrees Fahrenheit when the temperature in degrees Celsius is 30°.

d. What is the value of the expression you wrote in part (c)? Show or explain how you got your answer.
Write your answer to question 21 in the space provided in your Student Answer Booklet.

21 The table below shows the number of shots attempted by a basketball player in ten games and the number of points scored as a result of the attempted shots.

<table>
<thead>
<tr>
<th>Shots Attempted (x)</th>
<th>4</th>
<th>7</th>
<th>12</th>
<th>5</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>6</th>
<th>9</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points Scored (y)</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

On the grid in your Student Answer Booklet, copy the title, the axes, and the labels exactly as shown below.

![Grid with axes and scales]

a. On the grid you copied into your Student Answer Booklet, make a scatterplot using the data in the table.

b. Draw a line of best fit for the data on the scatterplot you made in part (a).

c. Use the line of best fit you drew in part (b) to predict the number of points scored when the player attempts 8 shots in a basketball game. Show or explain how you got your answer.

d. Write an equation that represents the line of best fit you drew on the scatterplot. Show or explain how you got your answer.
The first five terms in a pattern are shown below.

3, 7, 15, 31, 63, ...

Which of the following expressions is equivalent to the next term in the pattern?

A. \(63 \cdot 2 + 1\)
B. \(63 \cdot 2 - 1\)
C. \(63 \cdot 3 + 2\)
D. \(63 \cdot 3 - 2\)

A garden is decorated with a glass sphere. The sphere has a diameter of 24 centimeters. Which of the following is closest to the volume, in cubic centimeters, of the sphere?

A. 151
B. 302
C. 7,238
D. 57,906

A triangle is shown on the coordinate plane below.

What is the area of the triangle?

A. 12 square units
B. 24 square units
C. 36 square units
D. 48 square units
25. On Tuesday, Liane read the first 20 pages of a book at the library. Then she took the book home and read it at a rate of 6 pages in 10 minutes. Liane read at this rate for 45 minutes. What is the total number of pages of the book Liane read on Tuesday?
   A. 36  
   B. 47  
   C. 55  
   D. 60  

26. Point P is located at (4, 8) on a coordinate plane. Point P will be reflected over the x-axis. What will be the coordinates of the image of point P?
   A. (−8, 4)  
   B. (−4, 8)  
   C. (4, −8)  
   D. (8, 4)  

27. The line graph below displays the average U.S. farm size, in acres, during a 12-year period. 

   During which years did the average U.S. farm size decrease at a constant rate?
   A. years 1–3  
   B. years 3–5  
   C. years 5–6  
   D. years 6–9
28. Gavin will draw a line of best fit for the data on the scatterplot below.

Which pair of coordinate points should lie on the line of best fit?

A. (0, 0) and (1, 2)
B. (0, 0) and (2, 1)
C. (2, 3) and (−1, −3)
D. (3, 3) and (−3, −3)

29. At a craft shop, paint is sold in jars in the shape of right circular cylinders. A jar of black paint has half the radius and double the height of a jar of yellow paint.

Which of the following statements correctly compares the volumes of the jars of paint?

A. The jar of yellow paint has 2 times the volume of the jar of black paint.
B. The jar of yellow paint has 4 times the volume of the jar of black paint.
C. The jar of yellow paint has 8 times the volume of the jar of black paint.
D. The jar of yellow paint has the same volume as the jar of black paint.

30. Which of the following is the additive inverse of \((x - y)\)?

A. \(-x + y\)
B. \(-x - y\)
C. \(x + y\)
D. \(x - y\)
31. For a geography project, a student wants to show whether the average daily temperatures in January for several U.S. cities are related to the cities’ distances from the equator. Which of the following would best display the student’s data?

A. histogram  
B. scatterplot  
C. double bar graph  
D. box-and-whisker plot

32. Which of the following could not describe a two-dimensional figure that results from slicing a cube?

A. triangle  
B. rectangle  
C. rhombus  
D. octagon

33. Parallelogram PQRS is shown on the coordinate grid below.

What is the slope of diagonal PR?

A. \( \frac{2}{9} \)  
B. \( \frac{9}{2} \)  
C. \( -\frac{2}{9} \)  
D. \( -\frac{9}{2} \)
A kite and some of its measurements are shown in the diagram below.

Based on the diagram, what is the area, in square inches, of the kite?

A. 42  
B. 63  
C. 126  
D. 252

A student plotted data to create a scatterplot, as shown below.

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

A. $-\frac{3}{2}$  
B. $-\frac{2}{3}$  
C. $\frac{4}{7}$  
D. $\frac{7}{4}$
Question 36 is an open-response question.

- BE SURE TO ANSWER AND LABEL ALL PARTS OF THE QUESTION.
- Show all your work (diagrams, tables, or computations) in your Student Answer Booklet.
- If you do the work in your head, explain in writing how you did the work.

Write your answer to question 36 in the space provided in your Student Answer Booklet.

36 Ricardo is renting tables and chairs for a party.
   
   • There will be a total of 200 guests at the party.
   • There will be 8 chairs at each table.
   • Each guest at the party will be assigned a chair at a table.

   a. What is the total number of tables Ricardo must rent for the party? Show or explain how you got your answer.

   The cost of renting a table is $9. The cost of renting a chair is $2.

   b. What is the total cost, in dollars, for Ricardo to rent the number of tables and chairs needed for the party? Show or explain how you got your answer.

   c. Write an expression that can be used to determine the total cost, in dollars, for Ricardo to rent $t$ tables with 8 chairs per table.

   Ricardo also rents tables and chairs for other parties.

   d. Based on your expression from part (c), what is the total cost, in dollars, for Ricardo to rent 60 tables with 8 chairs per table? Show or explain how you got your answer.
Mark your answers to multiple-choice questions 37 through 40 in the spaces provided in your Student Answer Booklet. Do not write your answers in this test booklet. You may do your figuring in the test booklet.

37. A rectangular television screen and some of its measurements are shown below.

![Television screen diagram]

What is \( w \), the width of the television screen, to the nearest inch?

A. 19  
B. 34  
C. 45  
D. 61

38. A geometric sequence with a missing term is shown below.

\[
\frac{2}{25}, \frac{2}{5}, ?, 10, 50, \ldots
\]

What is the missing term in the sequence?

A. \( \frac{1}{5} \)  
B. \( \frac{1}{2} \)  
C. 2  
D. 5

39. The price of a piece of land in a development project varies directly with the size of the piece of land. The price of 5 acres of land in the development project is $60,000.

What is the price of 6 acres of land in the development project?

A. $50,000  
B. $66,000  
C. $70,000  
D. $72,000
The box-and-whisker plot below shows the distribution of the number of representatives from each state in the U.S. House of Representatives in the year 2000.

Number of Representatives from Each State

Arizona had 8 representatives in the year 2000. In which of the following intervals is the data for Arizona represented?

A. between the minimum and the first quartile
B. between the first quartile and the median
C. between the median and the third quartile
D. between the third quartile and the maximum
Questions 41 and 42 are open-response questions.

- **BE SURE TO ANSWER AND LABEL ALL PARTS OF EACH QUESTION.**
- Show all your work (diagrams, tables, or computations) in your Student Answer Booklet.
- If you do the work in your head, explain in writing how you did the work.

**Write your answer to question 41 in the space provided in your Student Answer Booklet.**

41 A deck in the shape of a trapezoid is made of two materials: tile and wood. The deck and some of its measurements are shown in the diagram below.

The tile section of the deck is in the shape of a quarter-circle that has a radius of 20 feet.

a. What is the perimeter, in feet, of the entire deck? Show or explain how you got your answer.

b. What is the length, in feet, of the curved border of the tile section? Show or explain how you got your answer.

c. What is the area, in square feet, of the tile section? Show or explain how you got your answer.

d. What is the area, in square feet, of the wood section? Show or explain how you got your answer.
Sanjiv and Nancy are taking the same evening class at a university. The diagram below represents a street map showing the locations of their houses, the university, and Sanjiv’s office.

In the morning, Sanjiv drives from his house to his office.

a. Based on the measurements in the diagram, what is the distance, in miles, from Sanjiv’s house to his office? Show or explain how you got your answer.

In the evening, Sanjiv drives from his office to the university.

b. Based on the measurements in the diagram, what is the distance, to the nearest tenth of a mile, from Sanjiv’s office to the university? Show or explain how you got your answer.

After class at the university, Sanjiv and Nancy each drive home along the shortest route shown in the diagram.

c. Based on the measurements in the diagram, what is the difference, to the nearest tenth of a mile, between the distance Sanjiv drives home and the distance Nancy drives home? Show or explain how you got your answer.
AREA FORMULAS

square .................... A = s^2
rectangle .................. A = bh
parallelogram .......... A = bh
triangle ................... A = \frac{1}{2}bh
trapezoid .................. A = \frac{1}{2}h(b_1 + b_2)
circle ...................... A = \pi r^2

VOLUME FORMULAS

cube ........................................ V = s^3  
(s = length of an edge)
right rectangular prism .......... V = lwh  
OR  
V = Bh  
(B = area of a base)
sphere ...................................... V = \frac{4}{3} \pi r^3 
right circular cylinder .......... V = \pi r^2h 
right circular cone ............... V = \frac{1}{3} \pi r^2h 
right square pyramid ............ V = \frac{1}{3} s^2h 

LATERAL SURFACE AREA FORMULAS

right rectangular prism ........ LA = 2(hw) + 2(lh)
right circular cylinder .......... LA = 2\pi rh
right circular cone .............. LA = \pi r\ell  
(\ell = slant height)
right square pyramid ............ LA = 2s\ell  
(\ell = slant height)

TOTAL SURFACE AREA FORMULAS

cube .................................... SA = 6s^2
right rectangular prism ....... SA = 2(lw) + 2(hw) + 2(lh)
sphere .................................. SA = 4\pi r^2
right circular cylinder ........ SA = 2\pi r^2 + 2\pi rh
right circular cone ............ SA = \pi r^2 + \pi\ell  
(\ell = slant height)
right square pyramid .......... SA = s^2 + 2s\ell  
(\ell = slant height)

CIRCLE FORMULAS

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

SPECIAL RIGHT TRIANGLES

\[ x = \frac{x}{\sqrt{2}} \]
\[ x \]
\[ 45^\circ \]
\[ 45^\circ \]
\[ x \]
\[ 60^\circ \]
\[ 2y \]
\[ \frac{2y}{\sqrt{3}} \]
\[ y \]
\[ 30^\circ \]
\[ y \]
## Mathematics Retest
### November 2014 Released Items:
### Reporting Categories, Standards, and Correct Answers

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>43</td>
<td>Number and Quantity</td>
<td>N-RN.2</td>
<td>D</td>
<td>10.N.1</td>
</tr>
<tr>
<td>2</td>
<td>43</td>
<td>Algebra and Functions</td>
<td>A-REI.3</td>
<td>B</td>
<td>10.P.6</td>
</tr>
<tr>
<td>4</td>
<td>44</td>
<td>Statistics and Probability</td>
<td>S-ID.1</td>
<td>C</td>
<td>10.D.1</td>
</tr>
<tr>
<td>5</td>
<td>45</td>
<td>Number and Quantity</td>
<td>7.NS.3</td>
<td>D</td>
<td>10.N.1</td>
</tr>
<tr>
<td>6</td>
<td>45</td>
<td>Number and Quantity</td>
<td>7.EE.3</td>
<td>B</td>
<td>10.N.2</td>
</tr>
<tr>
<td>7</td>
<td>45</td>
<td>Geometry</td>
<td>7.G.4</td>
<td>D</td>
<td>10.M.1</td>
</tr>
<tr>
<td>8</td>
<td>46</td>
<td>Number and Quantity</td>
<td>8.NS.2</td>
<td>C</td>
<td>10.N.3</td>
</tr>
<tr>
<td>9</td>
<td>46</td>
<td>Number and Quantity</td>
<td>7.EE.3</td>
<td>C</td>
<td>10.N.4</td>
</tr>
<tr>
<td>10</td>
<td>46</td>
<td>Algebra and Functions</td>
<td>A-REI.4</td>
<td>A</td>
<td>10.P.3</td>
</tr>
<tr>
<td>11</td>
<td>46</td>
<td>Algebra and Functions</td>
<td>A-APR.1</td>
<td>D</td>
<td>10.P.4</td>
</tr>
<tr>
<td>12</td>
<td>47</td>
<td>Statistics and Probability</td>
<td>S-ID.1</td>
<td>A</td>
<td>10.D.1</td>
</tr>
<tr>
<td>13</td>
<td>47</td>
<td>Number and Quantity</td>
<td>7.EE.3</td>
<td>B</td>
<td>10.N.2</td>
</tr>
<tr>
<td>14</td>
<td>47</td>
<td>Algebra and Functions</td>
<td>A-SSE.2</td>
<td>D</td>
<td>10.P.4</td>
</tr>
<tr>
<td>15</td>
<td>48</td>
<td>Geometry</td>
<td>G-SRT.5</td>
<td>64°</td>
<td>10.G.4</td>
</tr>
<tr>
<td>16</td>
<td>48</td>
<td>Algebra and Functions</td>
<td>A-CED.1</td>
<td>4.5 pounds</td>
<td>10.P.7</td>
</tr>
<tr>
<td>17</td>
<td>49</td>
<td>Algebra and Functions</td>
<td>F-BF.2</td>
<td></td>
<td>10.P.1</td>
</tr>
<tr>
<td>18</td>
<td>50</td>
<td>Number and Quantity</td>
<td>8.NS.2</td>
<td>12</td>
<td>10.N.3</td>
</tr>
<tr>
<td>19</td>
<td>50</td>
<td>Statistics and Probability</td>
<td>S-ID.1</td>
<td>13</td>
<td>10.D.1</td>
</tr>
<tr>
<td>20</td>
<td>51</td>
<td>Number and Quantity</td>
<td>7.EE.3</td>
<td></td>
<td>10.N.2</td>
</tr>
<tr>
<td>21</td>
<td>52</td>
<td>Statistics and Probability</td>
<td>S-ID.6</td>
<td></td>
<td>10.D.2</td>
</tr>
<tr>
<td>22</td>
<td>53</td>
<td>Algebra and Functions</td>
<td>F-BF.1</td>
<td>A</td>
<td>10.P.1</td>
</tr>
<tr>
<td>23</td>
<td>53</td>
<td>Geometry</td>
<td>G-GMD.3</td>
<td>C</td>
<td>10.M.2</td>
</tr>
<tr>
<td>24</td>
<td>53</td>
<td>Geometry</td>
<td>G-GPE.7</td>
<td>B</td>
<td>10.G.7</td>
</tr>
<tr>
<td>25</td>
<td>54</td>
<td>Algebra and Functions</td>
<td>A-CED.1</td>
<td>B</td>
<td>10.P.7</td>
</tr>
<tr>
<td>26</td>
<td>54</td>
<td>Geometry</td>
<td>G-CO.2</td>
<td>C</td>
<td>10.G.9</td>
</tr>
<tr>
<td>27</td>
<td>54</td>
<td>Statistics and Probability</td>
<td>S-ID.7</td>
<td>B</td>
<td>10.D.1</td>
</tr>
<tr>
<td>29</td>
<td>55</td>
<td>Geometry</td>
<td>G-GMD.3</td>
<td>A</td>
<td>10.M.3</td>
</tr>
<tr>
<td>30</td>
<td>55</td>
<td>Number and Quantity</td>
<td>7.NS.3</td>
<td>A</td>
<td>10.N.1</td>
</tr>
<tr>
<td>31</td>
<td>56</td>
<td>Statistics and Probability</td>
<td>S-ID.6</td>
<td>B</td>
<td>10.D.1</td>
</tr>
<tr>
<td>33</td>
<td>56</td>
<td>Algebra and Functions</td>
<td>8.F.4</td>
<td>D</td>
<td>10.P.2</td>
</tr>
<tr>
<td>34</td>
<td>57</td>
<td>Geometry</td>
<td>7.G.6</td>
<td>C</td>
<td>10.M.1</td>
</tr>
<tr>
<td>36</td>
<td>58</td>
<td>Algebra and Functions</td>
<td>A-CED.1</td>
<td></td>
<td>10.P.7</td>
</tr>
<tr>
<td>37</td>
<td>59</td>
<td>Geometry</td>
<td>G-SRT.8</td>
<td>B</td>
<td>10.G.5</td>
</tr>
<tr>
<td>38</td>
<td>59</td>
<td>Algebra and Functions</td>
<td>F-BF.2</td>
<td>C</td>
<td>10.P.1</td>
</tr>
<tr>
<td>39</td>
<td>59</td>
<td>Algebra and Functions</td>
<td>A-CED.1</td>
<td>D</td>
<td>10.P.7</td>
</tr>
<tr>
<td>40</td>
<td>60</td>
<td>Statistics and Probability</td>
<td>S-ID.1</td>
<td>C</td>
<td>10.D.1</td>
</tr>
<tr>
<td>41</td>
<td>61</td>
<td>Geometry</td>
<td>7.G.4</td>
<td></td>
<td>10.M.1</td>
</tr>
<tr>
<td>42</td>
<td>62</td>
<td>Geometry</td>
<td>G-SRT.6</td>
<td></td>
<td>10.G.6</td>
</tr>
</tbody>
</table>


2. Answers are provided here for multiple-choice items and short-answer items only. Each open-response item has its own set of scoring guidelines, which allow for valid alternate interpretations and responses.

3. The Department is providing the standard from the previous (2000) curriculum framework for Mathematics for reference purposes.