STUDENT NAME _____

TAKS
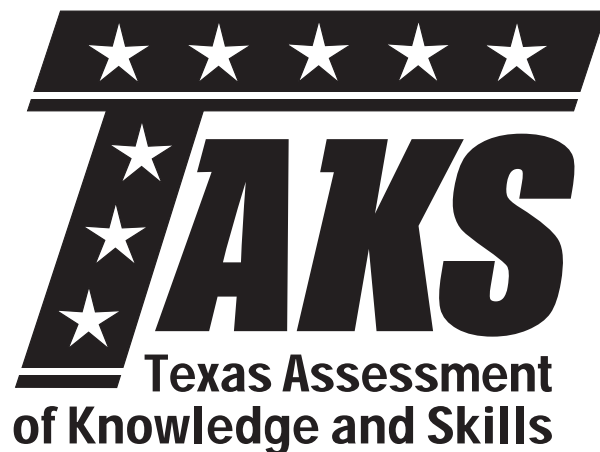## Texas Assessment
of Knowledge and Skills

EXIT LEVEL
ENGLISH LANGUAGE ARTS
MATHEMATICS
SCIENCE
SOCIAL STUDIES

Administered April 2006

READING
AND
WRITTEN
COMPOSITION

Read the two selections and the viewing and representing piece. Then answer the questions that follow.

My Father Sits in the Dark

by Jerome Weidman

My notes about what I am reading

1   My father has a peculiar habit. He is fond of sitting in the dark, alone. Sometimes I come home very late. The house is dark. I let myself in quietly because I do not want to disturb my mother. She is a light sleeper. I tiptoe into my room and undress in the dark. I go to the kitchen for a drink of water. My bare feet make no noise. I step into the room and almost trip over my father. He is sitting in a kitchen chair, in his pajamas, smoking his pipe.

2   "Hello, Pop," I say.

3   "Hello, son."

4   "Why don't you go to bed, Pa?"

5   "I will," he says.

6   But he remains there. Long after I am asleep I feel sure that he is still sitting there, smoking.

7   Many times I am reading in my room. I hear my mother get the house ready for the night. I hear my kid brother go to bed. I hear my sister come in. I hear her do things with jars and combs until she, too, is quiet. I know she has gone to sleep. In a little while I hear my mother say good night to my father. I continue to read. Soon I become thirsty. (I drink a lot of water.) I go to the kitchen for a drink. Again I almost stumble across my father. Many times it startles me. I forget about him. And there he is—smoking, sitting, thinking.

8   "Why don't you go to bed, Pop?"

9   "I will, son."

10   But he doesn't. He just sits there and smokes and thinks. It worries me. I can't understand it. What can he be thinking about? Once I asked him.

11   "What are you thinking about, Pa?"

12   "Nothing," he said.

13   Once I left him there and went to bed. I awoke several hours later. I was thirsty. I went to the kitchen. There he was. His pipe was out. But he sat there, staring into a corner of the kitchen. After a moment I became accustomed to the darkness. I took my drink. He still sat and stared.

GO ON

His eyes did not blink. I thought he was not even aware of me. I was afraid.

14   "Why don't you go to bed, Pop?"

15   "I will, son," he said. "Don't wait up for me."

16   "But," I said, "you've been sitting here for hours. What's wrong? What are you thinking about?"

17   "Nothing, son," he said. "Nothing. It's just restful. That's all."

18   The way he said it was convincing. He did not seem worried. His voice was even and pleasant. It always is. But I could not understand it. How could it be restful to sit alone in an uncomfortable chair far into the night, in darkness?

19   What can it be?

20   I review all the possibilities. It can't be money. I know that. We haven't much, but when he is worried about money he makes no secret of it. It can't be his health. He is not reticent about that either. It can't be the health of anyone in the family. We are a bit short on money, but we are long on health. (Knock wood, my mother would say.) What can it be? I am afraid I do not know. But that does not stop me from worrying.

21   Maybe he is thinking of his brothers in the old country. Or of his mother and two step-mothers. Or of his father. But they are all dead. And he would not brood about them like that. I say brood, but it is not really true. He does not brood. He does not even seem to be thinking. He looks too peaceful, too, well not contented, just too peaceful, to be brooding. Perhaps it is as he says. Perhaps it is restful. But it does not seem possible. It worries me.

22   If I only knew what he thinks about. If I only knew that he thinks at all. I might not be able to help him. He might not even need help. It may be as he says. It may be restful. But at least I would not worry about it.

23   Why does he just sit there, in the dark? Is his mind failing? No, it can't be. He is only fifty-three. And he is just as keen-witted as ever. In fact, he is the same in every respect. He still likes beet soup. He still reads the second section of the *Times* first. He still wears wing collars. He still believes that Debs[1] could have saved the country and that T.R.[2] was a tool of the moneyed interests. He is the

---

[1] Eugene Debs (1855–1926) was a U.S. socialist, political activist, and five-time presidential candidate.

[2] Theodore Roosevelt (1858–1919) was the 26th president of the United States, 1901–1909.

GO ON

same in every way. He does not even look older than he did five years ago. Everybody remarks about that. Well-preserved, they say. But he sits in the dark, alone, smoking, staring straight ahead of him, unblinking, into the small hours of the night.

24   If it is as he says, if it is restful, I will let it go at that. But suppose it is not. Suppose it is something I cannot fathom. Perhaps he needs help. Why doesn't he speak? Why doesn't he frown or laugh or cry? Why doesn't he do something? Why does he just sit there?

25   Finally I become angry. Maybe it is just my unsatisfied curiosity. Maybe I *am* a bit worried. Anyway, I become angry.

26   "Is something wrong, Pop?"

27   "Nothing, son. Nothing at all."

28   But this time I am determined not to be put off. I am angry.

29   "Then why do you sit here all alone, thinking, till late?"

30   "It's restful, son. I like it."

31   I am getting nowhere. Tomorrow he will be sitting there again. I will be puzzled. I will be worried. I will not stop now. I am angry.

32   "Well, what do you *think* about, Pa? Why do you just sit here? What's worrying you? What do you think about?"

33   "Nothing's worrying me, son. I'm all right. It's just restful. That's all. Go to bed, son."

34   My anger has left me. But the feeling of worry is still there. I must get an answer. It seems so silly. Why doesn't he tell me? I have a funny feeling that unless I get an answer I will go crazy. I am insistent.

35   "But what do you *think* about, Pa? What is it?"

36   "Nothing, son. Just things in general. Nothing special. Just things."

37   I can get no answer.

38   It is very late. The street is quiet and the house is dark. I climb the steps softly, skipping the ones that creak. I let myself in with my key and tiptoe into my room. I remove my clothes and remember that I am thirsty. In my bare feet I walk to the kitchen. Before I reach it I know he is there.

39   I can see the deeper darkness of his hunched shape. He is sitting in the same chair, his elbows on his knees, his cold pipe in his teeth, his unblinking eyes staring straight ahead. He does not seem to know I am there. He did not hear me come in. I stand quietly in the doorway and watch him.

40   Everything is quiet, but the night is full of little sounds. As I stand there motionless I begin to notice them. The ticking of the alarm clock on the icebox. The low hum of an automobile passing many blocks away. The swish of papers moved along the street by the breeze. A whispering rise and fall of sound, like low breathing. It is strangely pleasant.

41   The dryness in my throat reminds me. I step briskly into the kitchen.

42   "Hello, Pop," I say.

43   "Hello, son," he says. His voice is low and dreamlike. He does not change his position or shift his gaze.

44   I cannot find the faucet. The dim shadow of light that comes through the window from the street lamp only makes the room seem darker. I reach for the short chain in the center of the room. I snap on the light.

45   He straightens up with a jerk, as though he has been struck. "What's the matter, Pop?" I ask.

46   "Nothing," he says. "I don't like the light."

47   "What's the matter with the light?" I say. "What's wrong?"

48   "Nothing," he says. "I don't like the light."

49   I snap the light off. I drink my water slowly. I must take it easy, I say to myself. I must get to the bottom of this.

50   "Why don't you go to bed? Why do you sit here so late in the dark?"

51   "It's nice," he says. "I can't get used to lights. We didn't have lights when I was a boy in Europe."

52   My heart skips a beat and I catch my breath happily. I begin to think I understand. I remember the stories of his boyhood in Austria. I see the wide-beamed *kretchma*,[3] with my grandfather behind the bar. It is late, the customers are gone, and he is dozing. I see the bed of glowing coals, the last of the roaring fire. The room is already dark, and growing darker. I see a small boy, crouched on a pile of

---

[3] *Kretchma* is the Yiddish word for inn or tavern.

GO ON

twigs at one side of the huge fireplace, his starry gaze fixed on the dull remains of the dead flames. The boy is my father.

53   I remember the pleasure of those few moments while I stood quietly in the doorway watching him.

54   "You mean there's nothing wrong? You just sit in the dark because you like it, Pop?" I find it hard to keep my voice from rising in a happy shout.

55   "Sure," he says. "I can't think with the light on."

56   I set my glass down and turn to go back to my room. "Good night, Pop," I say.

57   "Good night," he says.

58   Then I remember. I turn back. "What do you think about, Pop?" I ask.

59   His voice seems to come from far away. It is quiet and even again. "Nothing," he says softly. "Nothing special."

Going to America

by Nicholas Gage

In 1949, at the age of twelve, Nicholas Gage left Greece with his sisters to be united with their father in America. Their mother, Eleni Gatzoyiannis, had been killed by invading Communist guerrillas in their mountain village, but her four children had escaped. Prokopi Koulisis, an acquaintance from a neighboring village, helped watch the children on the eighteen-day journey to America. In this selection, Nicholas remembers his first thoughts and emotions as the ship leaves Greece—and eighteen days later when it arrives in America.

1   As the ship began to pull away, I watched the figure of my grandfather shrinking. Suddenly he began to wave the walking stick he always carried, carved from the branch of a cornel tree and polished to a dark sheen by his hands. Finally it was only the frantic waving of his stick that distinguished him from the other dots on the harborside.

2   . . . My fingers touched something cold and smooth, and I pulled it out of my pocket. It was the small black stone that I had picked up outside my house on the night of our escape, because my mother had ordered me to throw one behind me so that I would never return to the place that gave us so much suffering. I had kept that stone in my pocket for eight months, and now it was time to toss it into the sea.

3   My mother had often told us the story of how my father, an itinerant tinker of seventeen, when he boarded the ship for America, triumphantly tossed over the rail the fez[1] that the Turkish occupiers of northern Greece forced men to wear in those days as a symbol of their subjugation. When the fez disappeared into the waves, she said, my father felt like a free man for the first time in his life.

4   Now it was my turn to throw this stone from my village into the same sea, to ensure that I would never be pulled back to this land of war and famine, bombs, torture and executions. My mother had said that any one of her children who came back would receive her curse. Throwing the stone was the way to turn my back irrevocably on Greece and my face toward America, where my father waited.

The author, bottom left, and his sisters

5   But my mother's body was still in Greece, in the church only a few yards below our ruined house. They had called her the *Amerikana*[2] and all her life she had dreamed of America, but she would never leave our mountains. My sister was still somewhere behind those mountains, too, unless she was dead.

---

[1] A fez is a cone-shaped hat with a flat top, a tassel, and no brim, worn by men of Turkey and other Middle Eastern countries.

[2] *Amerikana* means "the American one," a nickname given to the author's mother because her husband had gone to America to work.

6   It was the only country I knew, and I loved the cruel beauty of the mountain peaks, the sound of the goats' bells in the thin air, the smell of wood smoke, and the annual transfiguration of the gray hillsides when the Judas trees and wildflowers burst into paschal colors in the spring. I wasn't sorry to be leaving Greece, but despite my mother's orders, I couldn't make myself throw that stone overboard and cut myself off from my native land forever. It was the only place I had ever felt I belonged, until the war killed my mother and washed my sisters and me away like the swells of the sea that frightened me so when I first saw its vastness.

7   I slipped the stone back into my pocket and turned to follow my sisters, who were descending the steel stairs into the bowels of the ship, crying out in dismay at the dizzying sway beneath their feet. . . .

***

8   On the eighteenth day of our journey, I got up before dawn to put on my scratchy woolen suit, then went up to the deck, much too excited to eat breakfast. As soon as the darkness lifted and the haze burned off I saw it—two strips of land reaching out to us, the arms of America pulling us to her bosom.

The author, bottom right, and his sisters just before boarding the ship to America

9   The deck quickly filled as the ship approached New York Harbor. My sisters gathered around me, silent at the rail, and I could feel Prokopi Koulisis's hands on my shoulders.

10   When I could make out details of the land, I felt an ache of disappointment. There were pockets of dingy gray snow in the hollows and a grim, metallic sky overhead. I couldn't help thinking that now, in Greece, oranges and lemons were ripening on the trees under a warm blue sky.

11   "The Statue!" someone cried, and there was a stampede to the other side of the ship toward the immense figure of the woman my father called Saint Freedom. She faced us, holding the torch that had welcomed millions of refugees from famine, war, poverty, and persecution, each one no doubt as frightened as I was now. Everyone started shouting and pointing, but when we drew close, the throng fell silent, as if in the presence of a miracle.

12   When we neared the dock, I turned toward the crowd of people waiting on land, trying to recognize the father I had never seen. I expected him to tower over

GO ON ▶

the rest like a colossus, so I paid no attention to a short, portly man in a stylish felt hat and gray chesterfield, standing in the very front of the crowd. But Prokopi Koulisis remembered my father from his visits to our village, and I felt strong arms lift me up off the deck, holding me high above the heads of the crowd like a trophy as Olga shouted, "*Patera!*"[3] The stocky man on the dock snatched his hat from his bald head and began waving it.

13
Twenty-five years later, when he was eighty-one years old, my father described the scene in his broken English into a tape recorder. "I was on the dock watching the boat," he began slowly. "Olga recognize me. And I wave to them. Prokopi Koulisis, he pick Nikola up and show him to me from the deck. First time I see my son. Oh, my tears! My heart broke that minute."

14
He paused, trying to collect himself while two small grandchildren played at his feet. "They start to come out," he went on doggedly. "I hugged him, his little arms. They was so cold. My own childrens!"

15
He turned toward the machine that was recording his words. "I think I have to stop now," he said apologetically, "because I'm going to cry."

16
His tearful words of remembrance, our cries of greeting across the water, the murmurs of wonder at the sight of the statue who lifts her lamp beside the golden door—all these sounds are part of the chorus of the millions who entered this harbor seeking a place where they would be safe and free. First they came from northern Europe to settle a raw new nation, then from southern Europe, at the end of the nineteenth century and the beginning of the twentieth, seeking sanctuary from pogroms[4] and famines, dictatorships, death camps and genocide. Entering this place, each uttered the same hymn of thanksgiving in his own tongue.

17
Today that chorus has grown faint in our ears, for the old European immigrants have passed away, taking their memories with them. Their children have forgotten what it means not to be American. The new arrivals, fleeing from Asia, Latin America, and the Middle East, are still trying to find homes and jobs, to learn the language and send their children to school. They have not yet found a voice to tell their tale.

18
[The] story of the children of Eleni Gatzoyiannis in America is the recollection of an immigrant who arrived at mid-century, old enough to be molded by the traditions left behind but young enough to belong in this new world. The particular calamities, heartaches, and triumphs in [our story] are unique to my sisters and me, but our odyssey is as old as the nation: the arduous journey across the bridge that separates an old familiar world from a new and frightening one, to find a place for ourselves on the other side.

From *A Place for Us* by Nicholas Gage. Reprinted by permission of the author. Photographs courtesy of Fotini Bottos.

[3] *Patera* means "father."

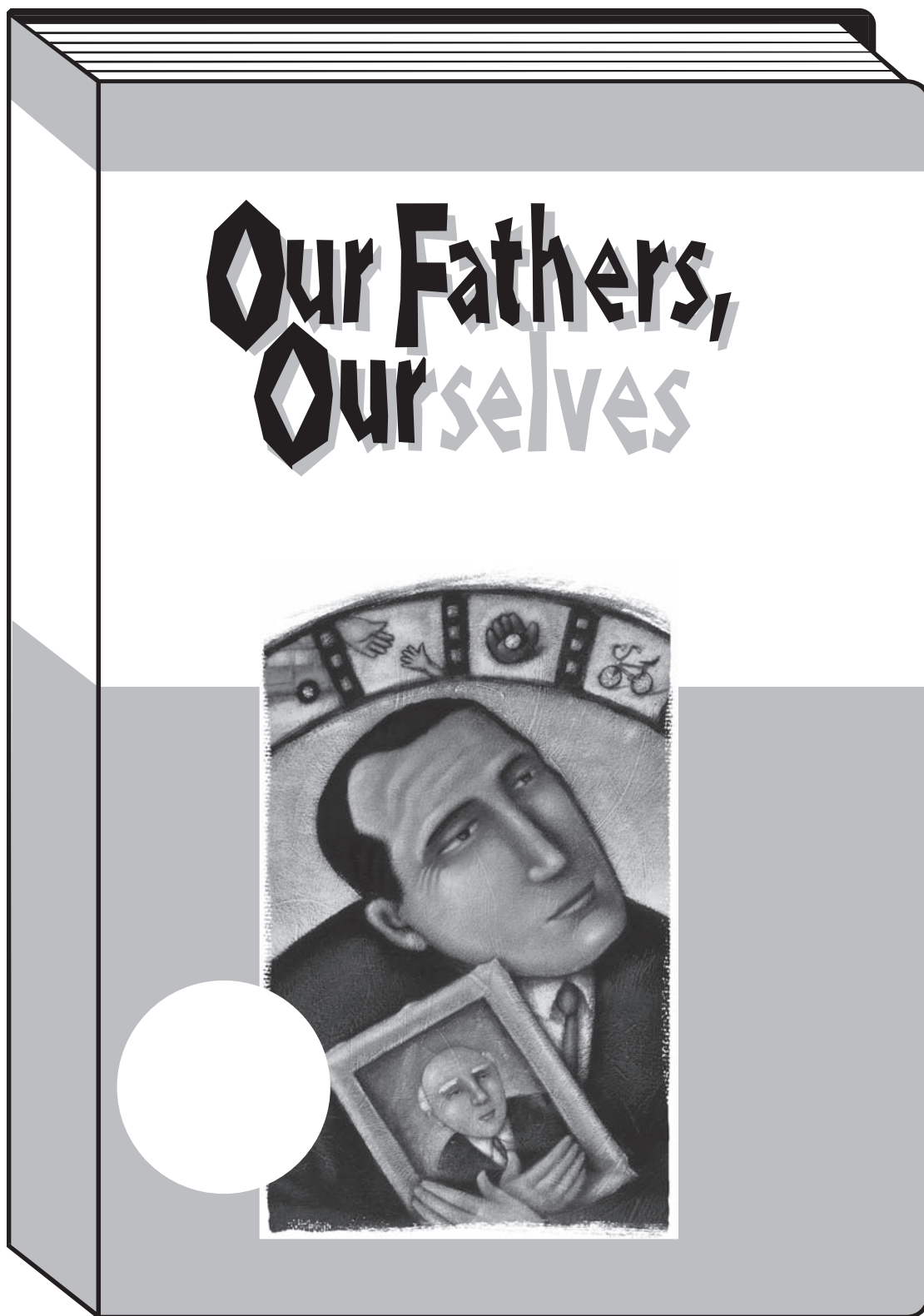[4] Pogroms are organized massacres of innocent or helpless people.

GO ON

Our Fathers, Ourselves

1 The father does not like the kitchen light because —

A he had no electricity when he was young

B his eyes are still adjusted to the dark

C he is ashamed of the way he looks to his son

D the noise it makes disturbs his thoughts

2 Read the following dictionary entry.

even \'ē-v n\ *adj* **1.** calm, undisturbed **2.** having no bumps **3.** equally matched or balanced **4.** fair and impartial

Which definition best matches the meaning of the word *even* as it is used in paragraph 18?

F Definition 1

G Definition 2

H Definition 3

J Definition 4

3 What is paragraph 40 mainly about?

A The narrator hears a clock, a car, and papers on the street.

B The narrator realizes the night is louder than he had thought.

C The narrator can hear the sound of his father breathing in the dark.

D The narrator has his first experience of the comforting sounds of the night.

4 Which of the following is a major conflict for the narrator?

F His father's behavior keeps him awake at night.

G He must stay quiet when he walks through the house.

H He feels that his father's behavior indicates that something is wrong.

J His fear of his father prevents him from understanding the older man.

GO ON

5 In paragraph 59, the father's voice "seems to come from far away" because —

A the narrator's father is lost in thought again

B the narrator is in another part of the house

C the narrator still doesn't understand his father

D the narrator's father is beginning to cry

6 Throughout the selection, the author's use of dialogue shows that —

F the son is persistent in trying to communicate with his father

G the son doesn't usually know what to say to his father

H the father still has an accent after so many years in America

J the father is afraid to tell his son the truth

7 "My Father Sits in the Dark" can best be described as a —

A news article

B tragedy

C short story

D biography

8 The father could be characterized as —

F tranquil and assured

G shy but grateful

H troubled and lonely

J intelligent but insecure

9 The descriptive language in paragraph 44 helps the reader understand —

    A the narrator's inability to sleep through the night

    B the challenge of learning from the past

    C the narrator's discomfort in the dark

    D the difficulty of turning on the light

10 In paragraph 13, why does the narrator become afraid?

    F He worries that his father is not well.

    G He thinks his father might not love him.

    H There is a stranger in the house.

    J The dark house makes strange noises.

11 In paragraph 58, the narrator says, "Then I remember," because he —

    A is visualizing his father's childhood in Austria

    B still wonders what his father actually thinks about

    C realizes that he is very similar to his father

    D has forgotten to say good night to his father

12 Nicholas's father stopped speaking into the tape recorder because —

   F the tape broke while he was talking

   G he was finished telling his story

   H his grandchildren were distracting him

   J he became too emotional to continue

13 In paragraph 1, which word helps the reader understand the meaning of the word *sheen*?

   A *carved*

   B *branch*

   C *waving*

   D *polished*

14 What is paragraph 6 mainly about?

   F Nicholas decided to disobey his mother.

   G Nicholas still felt connected to his homeland.

   H To Nicholas Greece was a beautiful country.

   J The vastness of the sea frightened Nicholas.

15 How did Prokopi Koulisis know the author's father?

   A He used to live near the author's village.

   B He helped raise the author.

   C They served together in the army.

   D They escaped together to America.

GO ON

16 Which of the following is the best summary of the selection?

F A young boy found a stone in his pocket as he emigrated from Greece to America. His mother had once told him to throw the stone away, but he kept it as a memory of the war in Greece. Years later the boy's father remembered when his family arrived in New York. The boy reflected on the meaning of immigration.

G After a horrible war a young boy and his sisters traveled by ship to be united with their father in America. Since Greece was so beautiful, however, the boy wasn't ready to accept that he would never return to his homeland. The trip took 18 days, and when the children arrived in New York, their father was overcome with emotion.

H A young boy thought of his family and homeland as the ship he was on left Greece for America. He and his sisters were under the care of a family friend who had lived in a neighboring village in Greece. Everyone on the ship was thrilled when the Statue of Liberty came into view.

J A young boy traveled from Greece to America with instructions from his mother never to return. The boy, however, remained strongly connected to his homeland despite the suffering caused by the war there. Years later his father's tearful memories cause him to reflect on what true freedom has meant to millions of immigrants.

17 In paragraph 16, the description "lifts her lamp beside the golden door" suggests that the statue —

A reflects sunlight brightly across the harbor

B functions as a lighthouse to guide ships into the harbor

C offers the promise of food and shelter

D symbolizes freedom and escape from darkness

18 Which of the following best symbolizes the author's primary conflict?

F *As the ship began to pull away, I watched the figure of my grandfather shrinking.*

G *I couldn't make myself throw that stone overboard. . . .*

H *My fingers touched something cold and smooth, and I pulled it out of my pocket.*

J *When we neared the dock, I turned toward the crowd of people waiting on land. . . .*

GO ON

19 Why does the author choose the words "cruel beauty" to describe the mountains in paragraph 6?

    A The mountains were so beautiful that Nicholas often had to look away.

    B The landscape was unexpectedly ugly and boring.

    C Nicholas's memory of his home was inaccurate.

    D Nicholas's family suffered hardship in the magnificent setting.

20 What can the reader conclude from the description in paragraph 1?

    F An important separation was happening.

    G The grandfather was in danger.

    H The author had poor eyesight.

    J An exciting adventure awaited the author.

21 In paragraph 12, why did Nicholas expect his father to "tower over" the people on the dock in New York?

    A Most of the crowd was made up of young people.

    B He had seen photographs of his father back home.

    C He had imagined his father as larger than life.

    D His sisters had described their father to him.

22 Why did Nicholas's mother threaten her children with a curse?

    F They refused to help her.

    G They couldn't stay out of trouble.

    H She was jealous of their father.

    J She feared for their safety.

23 In paragraph 10, what can the reader tell from the author's use of comparison?

    A Nicholas realized that he had made a mistake.

    B Nicholas suddenly felt homesick for Greece.

    C Greece was only a dim memory for Nicholas.

    D America was more dangerous than Nicholas expected.

24 How are the structures of both selections similar?

    F Both selections are narrated in the present tense.

    G The narrators tell their stories from childhood to adulthood.

    H Both selections span the fathers' entire lifetimes.

    J The father's perspective is given near the end of each selection.

25 What can the reader conclude about both fathers from their behavior?

    A They have a hard time understanding themselves.

    B Each has a past identical to that of many immigrants.

    C They probably can't know their sons as well as they want to.

    D They remain deeply affected by the past.

GO ON

26 Along the top of the illustration on the book jacket is a series of smaller drawings of a car, two hands, a ball and glove, and a bicycle. These drawings symbolize —

F school days

G childhood memories

H vacation spots

J television shows

27 *Understanding Others* is —

A a previous book by Dr. Carl H. Washington

B the title of the current book

C a theme of the book

D the book's subtitle

28 Why does the designer of the book jacket include quotations from a professor and a newspaper?

F To explain to potential buyers who the author of the book is

G To persuade potential buyers that the book is worth reading

H To prove to potential buyers that the book is a national best-seller

J To show potential buyers that the book is on sale

GO ON

Answer the following questions in the space provided on the answer document.

29 What does darkness symbolize in "My Father Sits in the Dark"? Explain your answer and support it with evidence from the selection.

30 In "Going to America," what is one way Nicholas is affected by moving to America? Support your answer with evidence from the selection.

31 What do the narrators learn about their fathers in "My Father Sits in the Dark" and "Going to America"? Explain your answer and support it with evidence from **both** selections.

BE SURE YOU HAVE WRITTEN YOUR ANSWERS
ON THE ANSWER DOCUMENT.

GO ON

WRITTEN COMPOSITION

> Write an essay explaining how a person can feel connected to a special place.

The information in the box below will help you remember what you should think about when you write your composition.

REMEMBER—YOU SHOULD

- ❑ write about the assigned topic

- ❑ make your writing thoughtful and interesting

- ❑ make sure that each sentence you write contributes to your composition as a whole

- ❑ make sure that your ideas are clear and easy for the reader to follow

- ❑ write about your ideas in depth so that the reader is able to develop a good understanding of what you are saying

- ❑ proofread your writing to correct errors in spelling, capitalization, punctuation, grammar, and sentence structure

USE THIS PREWRITING PAGE TO
PLAN YOUR COMPOSITION.

MAKE SURE THAT YOU WRITE YOUR COMPOSITION ON
THE TWO LINED PAGES IN THE ANSWER DOCUMENT.

USE THIS PREWRITING PAGE TO
PLAN YOUR COMPOSITION.

MAKE SURE THAT YOU WRITE YOUR COMPOSITION ON
THE TWO LINED PAGES IN THE ANSWER DOCUMENT.

USE THIS PREWRITING PAGE TO
PLAN YOUR COMPOSITION.

MAKE SURE THAT YOU WRITE YOUR COMPOSITION ON
THE TWO LINED PAGES IN THE ANSWER DOCUMENT.

Revising and Editing Sample

DIRECTIONS
Read the introduction and the passage that follows. Then read each question and fill in the correct answer on page 2 of your answer document.

Lydia has written this report for her U.S. history class. As part of a peer conference, you have been asked to read the report and think about what suggestions you would make. When you finish reading the report, answer the questions that follow.

The American Red Cross

(1) The American Red Cross is an organization that aids people all around the world. (2) It started as a result of the efforts of a dedicated woman. (3) That woman was named Clara Barton. (4) It was during the Civil War that Barton began the work that lead to the establishment of the American Red Cross.

(5) She assisted on the battlefield by nursing injured soldiers and helping transport supplies. (6) Eventually the Government of the United States selected her to serve as superintendent of nurses for the army.

S-1 What is the most effective way to combine sentences 2 and 3?

A It started as a result of the efforts of a dedicated woman, that woman was named Clara Barton.

B It started as a result of the efforts of a woman who was dedicated and named Clara Barton.

C It started as a result of the efforts of a dedicated woman named Clara Barton.

D It started as a result of the efforts of a dedicated woman she was named Clara Barton.

S-2 What change, if any, should be made in sentence 4?

F Change *was* to **is**

G Insert a comma after *Civil War*

H Change *lead* to **led**

J Make no change

S-3 What change, if any, should be made in sentence 6?

A Change *Government* to **government**

B Change *selected* to **sellected**

C Change *her* to **herself**

D Make no change

REVISING
AND
EDITING

DO NOT GO ON TO THE REVISING AND EDITING SECTION.
WHEN YOU FINISH THE READING AND WRITTEN
COMPOSITION SECTION, RAISE YOUR HAND AND WAIT
FOR A TEST ADMINISTRATOR TO ASSIST YOU.

STOP

In response to a history assignment, Elizabeth wrote this paper about a person she greatly admires. She would like you to read her paper. As you read, think about the corrections and improvements she should make. Then answer the questions that follow.

Oskar Schindler

(1) It would have been frightening to live in Poland in the early 1940s.

(2) The Nazis, under the dictatorship of Adolf Hitler, had taken over the country and absorbed it into the German Third Reich. (3) Jewish people were being driven from their homes, and they were being taken to labor camps, and they were being forced into death camps. (4) Many non-Jewish people, afraid to get involved, looked the other way as these horrors fell upon their neighbors. (5) But some took a risk and stood up for what they believed was right. (6) Oskar Schindler was one of these people. (7) He saved the lifes of more than 1,300 Jews during World War II.

(8) Schindler was born into a wealthy family that lost its fortune in the depression of the 1930s. (9) Schindler was looking for a new opportunity. (10) He joined the Nazi Party. (11) During this time it would have been hard to imagine that he would ever become anyone's hero. (12) He was described as a womanizer and a heavy drinker. (13) However, he met many important people while he was in the Nazi Party.

(14) When the Nazis invaded Poland, Schindler gains control of a factory near a Jewish ghetto in Kraków. (15) He began hiring Jews to work in the

factory, primarily because they offered the cheapest source of labor. (16) As time passed, he began to see his factory workers as real people—mothers, fathers, children, and friends.

(17) Schindler decided to risk everything to save those he had the power to protect. (18) He had many connections and was a master at bribing the proper people. (19) When a ghetto near his factory was evacuated and all its Jewish occupants were assigned to a work camp, Schindler arranged for his employees who lived in the ghetto to be moved to a nearby sub-camp. (20) Conditions at this sub-camp were much better, and food and medicine could be smuggled in. (21) Schindler hisself spent every night in his office, ready to intervene if the gestapo, a Nazi police agency, came to take away one of the *Schindlerjuden*, or "Schindler's Jews." (22) Eventually the sub-camp near his factory was shut down, and all its workers were assigned to Auschwitz, an infamous death camp. (23) Again Schindler came through, and the Jews on his employee list was delivered from that horrible fate.

(24) In May 1945 the Russians liberated Poland, and the Jews in that country were finally free from the terrors of the Nazi Party. (25) The desendants of those saved by Oskar Schindler honor and remember him even today. (26) His story proves that one person can take a stand and a difference made.

32 What is the most effective way to revise sentence 3?

F Jewish people were being driven from their homes, they were being taken to labor camps and forced into death camps.

G Jewish people were being driven from their homes. Taken to labor camps and forced into death camps.

H Jewish people were being driven from their homes, taken to labor camps, and forced into death camps.

J Jewish people, they were being driven from their homes and taken to labor camps and forced into death camps.

33 What change, if any, should be made in sentence 7?

A Change *lifes* to **lives**

B Change *than* to **then**

C Insert a comma after *Jews*

D Make no change

34 What is the most effective way to combine sentences 9 and 10?

F Besides looking for a new opportunity, Schindler joined the Nazi Party.

G Schindler was looking for a new opportunity, he joined the Nazi Party.

H Schindler joined the Nazi Party, which was looking for a new opportunity.

J Looking for a new opportunity, Schindler joined the Nazi Party.

35 Elizabeth wants to add this sentence to the second paragraph (sentences 8–13).

These relationships became essential to him in the years that followed.

Where is the best place to insert this sentence?

A At the beginning of the paragraph

B After sentence 11

C After sentence 12

D After sentence 13

36 What change, if any, is needed in sentence 14?

F Delete the comma

G Change *gains* to **gained**

H Insert **it was** after *factory*

J Make no change

37 Which sentence could follow and support sentence 16?

A In time they became mothers, fathers, children, and friends to him.

B Schindler's factory supplied the German front with enamel goods and munitions.

C He started to understand the impact of the Nazis' brutality.

D Germany declared war on the United States in December 1941.

38 What change, if any, should be made in sentence 21?

    F Change *hisself* to **himself**

    G Change *intervene* to **interveene**

    H Delete the second comma

    J Make no change

39 What change, if any, should be made in sentence 23?

    A Change *through* to **threw**

    B Change *was delivered* to **were delivered**

    C Change *horrible* to **horribly**

    D Make no change

40 What change, if any, should be made in sentence 25?

    F Change *desendants* to **descendants**

    G Change *honor* to **honors**

    H Change *him* to **them**

    J Make no change

41 What is the most effective way to revise sentence 26?

    A His story proves that one person can take a stand, a difference can be made.

    B His story proving that one person can take a stand and make a difference.

    C His story proves that one person can take a stand. And make a difference.

    D His story proves that one person can take a stand and make a difference.

After a firsthand experience with an unusual species of fish, Christopher wrote this paper. He would like you to review his paper and think about the corrections and improvements he should make. When you finish reading, answer the questions that follow.

Photo courtesy of © Royalty-Free/CORBIS.

The One That *Didn't* Get Away

(1) With a fishing pole in my hand, I prowled the banks of Goose Creek one August morning. (2) I was after catfish, the major residents of the neighborhood stream. (3) Suddenly I spied a shadow in the water. (4) I was sure it was the world's biggest catfish!

(5) Shortly after I cast my line, the fish took the bait with a hard strike. (6) It was obvious that I had not caught an ordinary creek fish! (7) I filled my plastic gear box with creek water and toted the red-bellied fish home alive. (8) I gasped as I reeled it in. (9) While my new friend relaxed in the bathtub, I did some research.

GO ON

(10) First I checked my reference books and the Internet. (11) Then I called Reuben's Reef, a pet store that specializes in exotic fish. (12) I soon realized I had a red piranha, a fish normally found in South America. (13) I learned that many states have outlawed the sale of piranhas because experts worry that people will tire of it and release the fish into local waterways. (14) This is a problem because piranhas in the wild will eat many other kinds of fish, threatening native species.

(15) After checking my piranha's razor-sharp teeth, and after I read about its meat-eating habits, I named it Jaws. (16) My mother hesitantly agreed to let me keep my unusual pet, at least until I could find a suitable home for it. (17) I assured her that the piranha's rap for being bloodthirsty was undeserved. (18) Jaws would not leap from the bathtub and attack us. (19) Piranhas are usually quite shy. (20) Those kept as pets spend most of their time hiding behind aquarium plants. (21) All the same, I treated Jaws with cautious and respect. (22) I knew that an accidental bite from my piranha's teeth would be very painful!

(23) When Jaws refused and turned down the worms I offered, I decided that I needed to find him a new home fast! (24) Luckily, Reuben's Reef offered me 40 dollars in exchange for my exotic pal.

(25) "You saved that animal's life," Reuben told me. (26) "He wouldn't have survived long in that cold creek." (27) Then Reuben showed me the 25-gallon

aquarium where Jaws would be on display. (28) "Piranhas are high-maintenance fish," Reuben said, "but this ones worth it because he's a beauty." (29) Together we admirred the piranha's flat glossy-black sides and bright belly.

(30) Jaws seemed happy in his new home. (31) My mom was ecstatically to have her bathtub back. (32) And when my story was featured in the newspaper, I became an instant celebrity. (33) A day of fishing had turned into a pretty exciting adventure.

---

42 What is the most effective way to improve the organization of the second paragraph (sentences 5–9)?

  F Move sentence 5 to the end of the paragraph

  G Delete sentence 6

  H Switch sentences 8 and 9

  J Move sentence 8 so that it follows sentence 5

43 What change, if any, should be made in sentence 13?

  A Change *have outlawed* to **has outlawed**

  B Change *worry* to **worrying**

  C Change *it* to **them**

  D Make no change

44 What revision, if any, is needed in sentence 15?

  F After checking my piranha's razor-sharp teeth and reading about its meat-eating habits, I named it Jaws.

  G After checking my piranha's razor-sharp teeth, and I read about its meat-eating habits. I named it Jaws.

  H After checking my piranha's razor-sharp teeth, I read about its meat-eating habits, I named it Jaws.

  J No revision is needed.

45 What change should be made in sentence 17?

  A Change *rap* to **reputation**

  B Insert **it** after *bloodthirsty*

  C Change *was* to **were**

  D Change *undeserved* to **underserved**

46 Which transition could best be added to the beginning of sentence 19?

    F   Eventually,

    G   Consequently,

    H   For instance,

    J   In fact,

47 What change, if any, should be made in sentence 21?

    A   Change *I* to **they**

    B   Change *treated* to **treat**

    C   Change *cautious* to **caution**

    D   Make no change

48 What change, if any, should be made in sentence 23?

    F   Delete *and turned down*

    G   Change *decided* to **decide**

    H   Change *him* to **them**

    J   Make no change

49 What change, if any, should be made in sentence 28?

    A   Change the comma after *fish* to a period

    B   Delete the quotation marks before *but*

    C   Change *ones* to **one's**

    D   Make no change

50 What change, if any, should be made in sentence 29?

    F   Change *we* to **they**

    G   Change *admirred* to **admired**

    H   Insert a comma after *sides*

    J   Make no change

51 What change, if any, should be made in sentence 31?

    A   Insert **she** after *mom*

    B   Change *ecstatically* to **ecstatic**

    C   Insert a comma after *bathtub*

    D   Make no change

BE SURE YOU HAVE RECORDED ALL OF YOUR ANSWERS
ON THE ANSWER DOCUMENT.

STOP
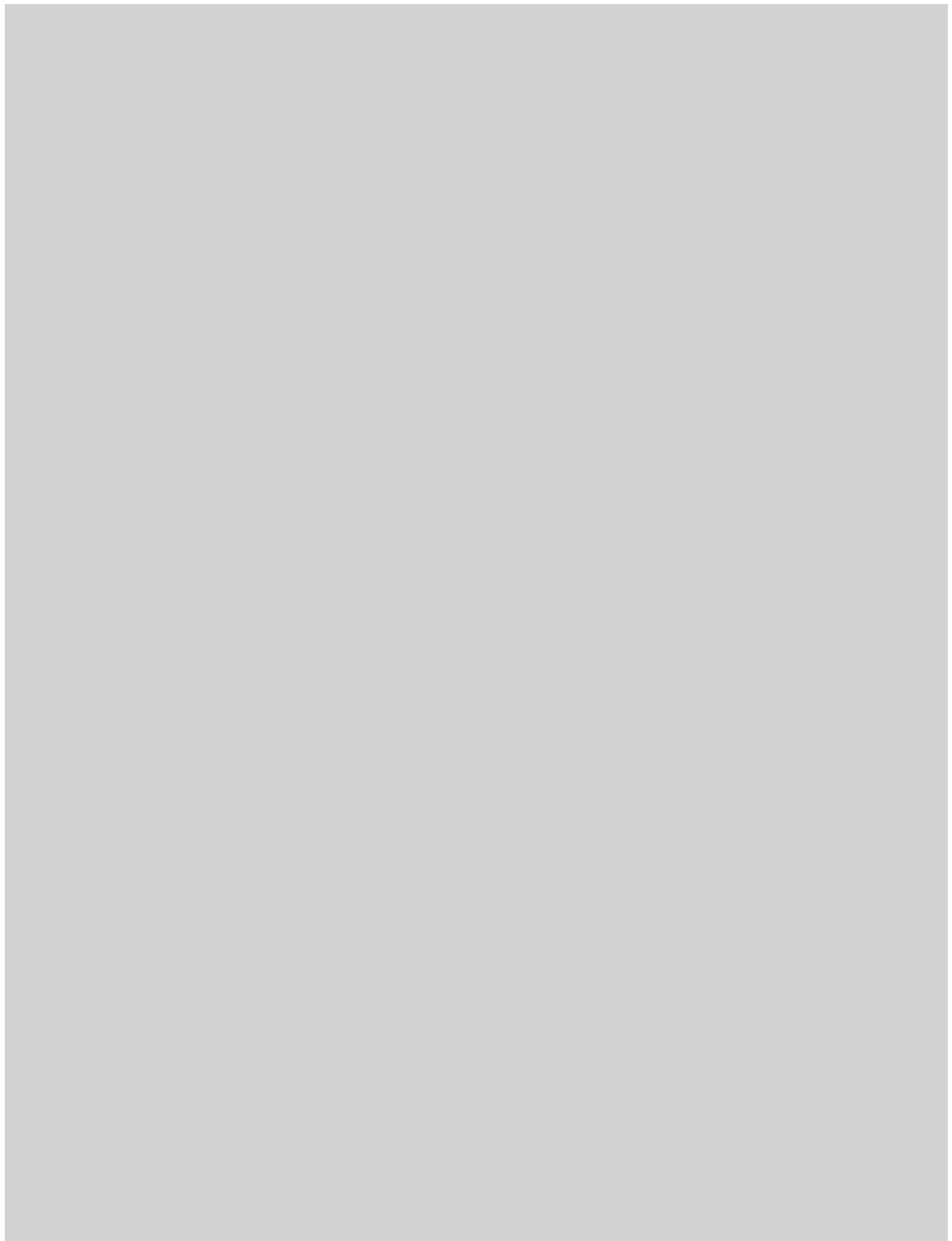
MATHEMATICS

Mathematics Chart

LENGTH

Metric	**Customary**
1 kilometer = 1000 meters	1 mile = 1760 yards
1 meter = 100 centimeters	1 mile = 5280 feet
1 centimeter = 10 millimeters	1 yard = 3 feet
	1 foot = 12 inches

CAPACITY AND VOLUME

Metric	**Customary**
1 liter = 1000 milliliters	1 gallon = 4 quarts
	1 gallon = 128 ounces
	1 quart = 2 pints
	1 pint = 2 cups
	1 cup = 8 ounces

MASS AND WEIGHT

Metric	**Customary**
1 kilogram = 1000 grams	1 ton = 2000 pounds
1 gram = 1000 milligrams	1 pound = 16 ounces

TIME

1 year = 365 days

1 year = 12 months

1 year = 52 weeks

1 week = 7 days

1 day = 24 hours

1 hour = 60 minutes

1 minute = 60 seconds

Metric and customary rulers can be found on the separate Mathematics Chart.

Mathematics Chart

Perimeter	rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
Circumference	circle	$C = 2\pi r$ or $C = \pi d$
Area	rectangle	$A = lw$ or $A = bh$
	triangle	$A = \ \ bh$ or $A =$
	trapezoid	$A = \ \ (b_1 + b_2)h$ or $A =$
	circle	$A = \pi r^2$
Surface Area	cube	$S = 6s^2$
	cylinder (lateral)	$S = 2\pi rh$
	cylinder (total)	$S = 2\pi rh + 2\pi r^2$ or $S = 2\pi r(h + r)$
	cone (lateral)	$S = \pi rl$
	cone (total)	$S = \pi rl + \pi r^2$ or $S = \pi r(l + r)$
	sphere	$S = 4\pi r^2$
Volume	prism or cylinder	$V =$

Read each question. Then fill in the correct answer on your answer document. If a correct answer is <u>not</u> <u>here</u>, mark the letter for "Not here."

SAMPLE A

Find the slope of the line $2y = 8x - 3$.

A $\quad -\dfrac{3}{2}$

B $\quad 4$

C $\quad 8$

D $\quad$ Not here

SAMPLE B

Janice uses a rectangular box to store her art supplies. The dimensions of the rectangular box are 22.5 inches by 14 inches by 11.5 inches. What is the volume of this box in cubic inches?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

STOP

1 The student council at Jefferson High School sold a total of 220 brownies and cookies during its fund-raiser. Each brownie sold for $0.75, and each cookie sold for $0.50. The student council made $136.50 from the sales of brownies and cookies. Which system of linear equations can be used to find b, the number of brownies sold, and c, the number of cookies sold?

A $b + c = 220$
$0.50b + 0.75c = 136.50$

B $b + c = 136.50$
$0.75b + 0.50c = 220$

C $b + c = 136.50$
$0.50b + 0.75c = 220$

D $b + c = 220$
$0.75b + 0.50c = 136.50$

2 $\triangle WXY$ is isosceles.
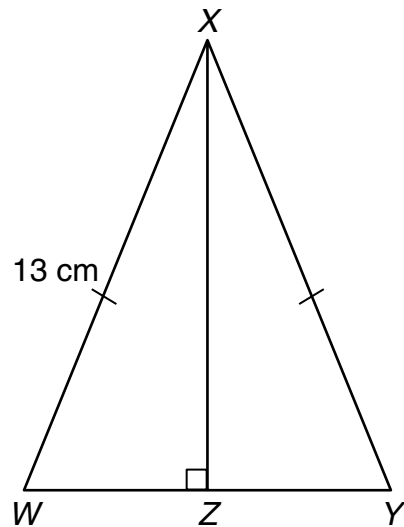
$\overline{WY}$ is 10 centimeters long. Find the length of $\overline{XZ}$.

F 5 cm

G 10 cm

H 12 cm

J 13 cm

3 Mr. Kelly's company manufactures a cylindrical soup can that has a diameter of 6 inches and a volume of 226 cubic inches. If the diameter stays the same and the height is doubled, what will happen to the can's volume?

A It will remain the same.

B It will double.

C It will triple.

D It will quadruple.

4 Which graph best represents the line that has a slope of $-\dfrac{5}{6}$ and contains the point $(4, -3)$?

F
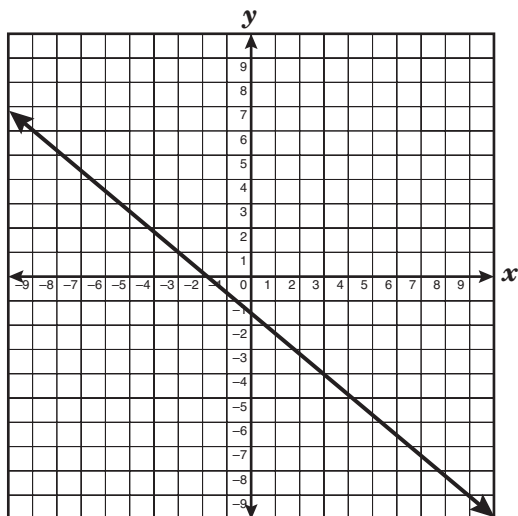
H
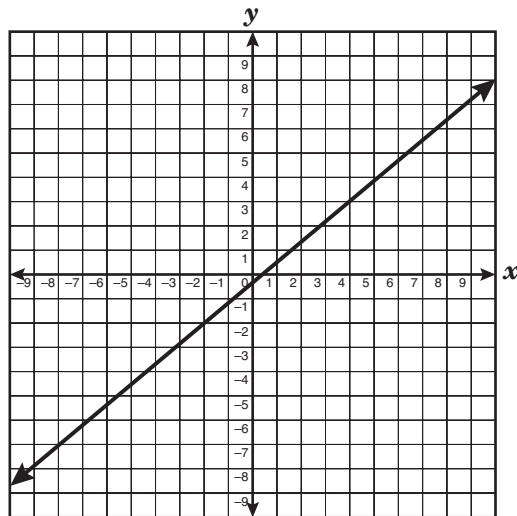
G
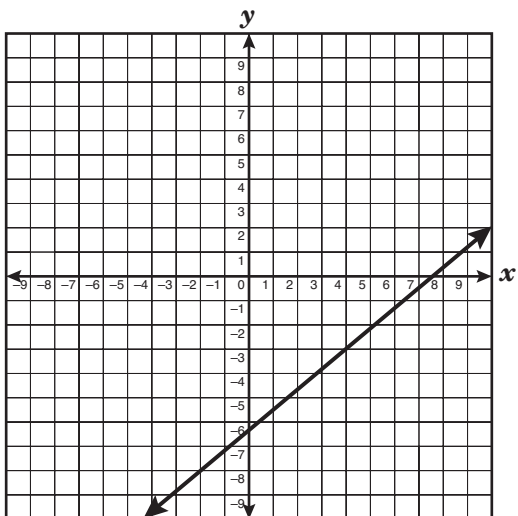
J
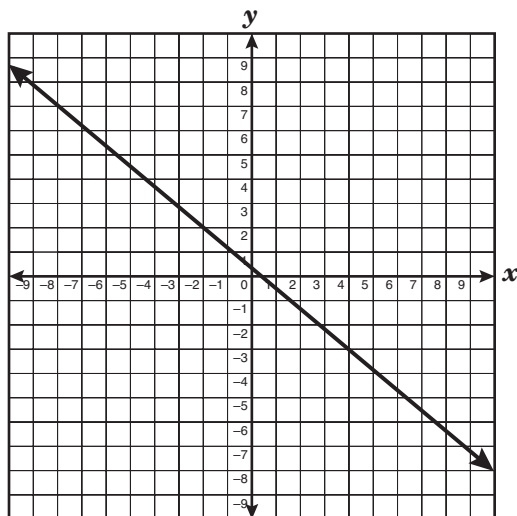
5 Amanda, Bonnie, Cindy, and Linda competed in a biathlon consisting of running and swimming events. The table below shows the number of seconds each of them took to complete the parts of the competition.

Name	Running (seconds)	Swimming (seconds)
Amanda	700	540
Bonnie	730	400
Cindy	720	460
Linda	750	330

The top rankings are awarded to the individuals with the fastest combined times. Based on the information given in the table, which event probably determined the outcome of the competition?

A Running, because the times vary more

B Swimming, because the times vary more

C Running, because the times are consistent

D Swimming, because the times are consistent

6 Simplify the polynomial below.

$$-3x(7x-4) + 6x - (13 - 24x^2)$$

F $3x^2 + 18x - 13$

G $-24x^2 - 15x - 17$

H $-24x^2 + 10x - 17$

J $3x^2 + 18x + 13$

7 The graph of a function of the form $y = ax^2 + c$ is shown below.
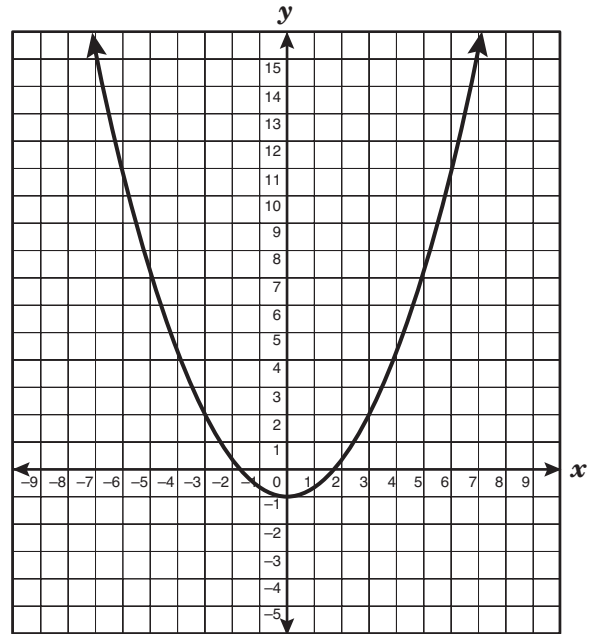
If the graph is translated only up or down to include the ordered pair (6, 7), which of the following equations best represents the resulting graph?

A $y = -\frac{1}{3}x^2 + 3$

B $y = \frac{1}{3}x^2 + 1$

C $y = -\frac{1}{3}x^2 - 10$
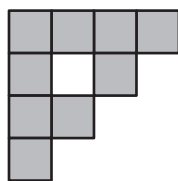
D $y = \frac{1}{3}x^2 - 5$

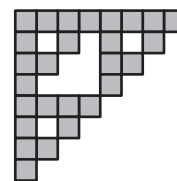**8** The first 4 stages of a certain fractal are shown below.
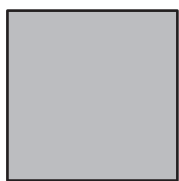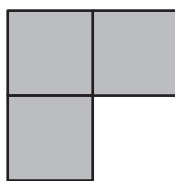
Stage 1   Stage 2   Stage 3   Stage 4

In each stage after the first, each square is divided into 4 squares, and then the bottom right square is removed. If the pattern continues, how many shaded square units will Stage 5 contain?
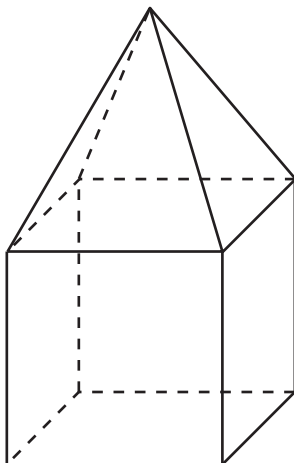
F 243

G 54

H 81

J 27

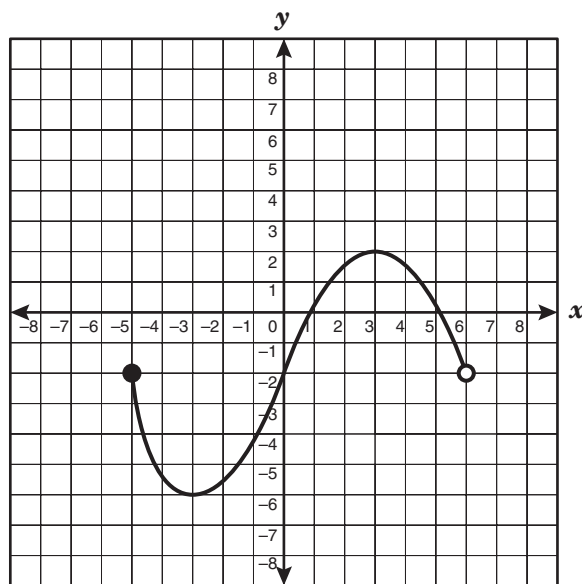**9** Which of the following relationships could not be used to determine the length of $\overline{DR}$, as shown below?

A $DF + FQ + QR = DR$

B $DQ + QR = DR$

C $DQ + FR = DR$

D $DF + FR = DR$

GO ON

10 How many faces, edges, and vertices does the solid shown below have?

    F   4 faces, 10 edges, and 7 vertices

    G 9 faces, 10 edges, and 8 vertices

    H 10 faces, 16 edges, and 9 vertices

    J   9 faces, 16 edges, and 9 vertices

11 A salesclerk earns $250 per week plus a commission of $\frac{1}{5}$ of her total sales. If her sales total x dollars, which equation can be used to determine her total weekly earnings?

    A $y = 250(x + \frac{1}{5})$

    B $y = 250x + \frac{1}{5}x$

    C $y = 250x + \frac{1}{5}$

    D $y = 250 + \frac{1}{5}x$

12 Mr. Maxwell asked his students to identify the domain represented by the function graphed below.

Which of the following student responses is correct?

    F $-5 \le x < 6$

    G $-6 \le x \le 2$

    H $-5 \le x < -2$

    J Not here

13 An ice-cream vendor made a table showing the relationship between the daily high temperature and the number of ice-cream cones sold per day. What is the dependent quantity in this relationship?

    A The daily high temperature

    B The number of ice-cream cones sold per day

    C All of the data in the table

    D Cannot be determined

GO ON

14 The diagram below shows the top view of a structure built with identical cubes, as well as the number of cubes in each column of the structure.
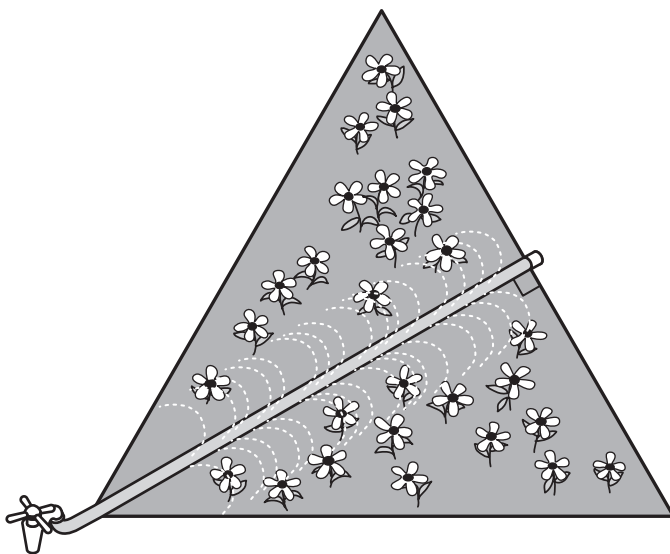
2	3	4
2	2	
4	2	1

Front

Which 3-dimensional view best represents the same structure?

F

Front   Right

H

Front   Right

G

Front   Right

J

Front   Right

GO ON
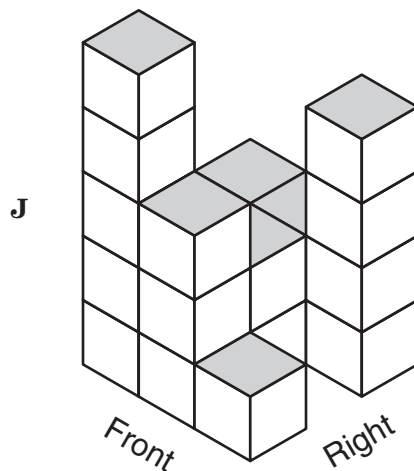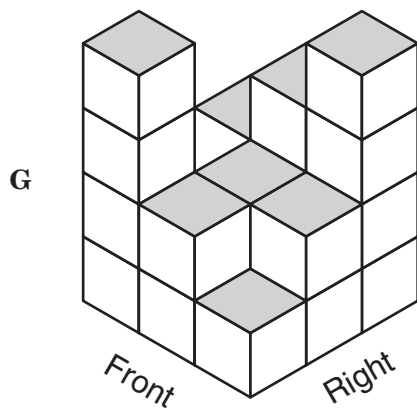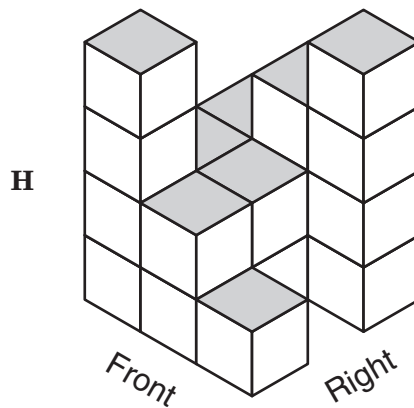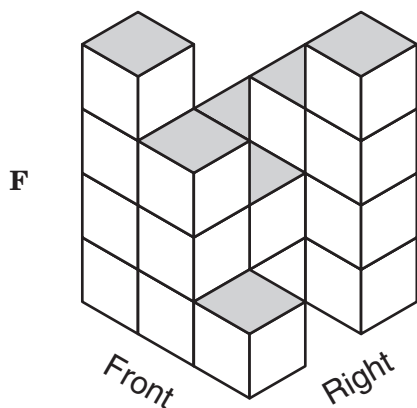
15 Mr. Schultz has a garden shaped like an equilateral triangle that measures 11 feet on each side. He has placed a watering hose that extends from the faucet located at a vertex to the opposite side, as shown below.

Which is closest to the length of the hose in the garden?

A 7.8 ft

B 9.5 ft

C 6.4 ft

D 5.5 ft

---

16 What is the simplified form of $\dfrac{(-6a^3b^5)(2a^2b^3)}{-18a^4b^8c^3}$?

F $-\dfrac{2a^2b}{3c^3}$

G $\dfrac{2a}{3c^3}$

H $\dfrac{2a^2b}{3bc^3}$

J $-\dfrac{2ab}{3c^3}$

GO ON

19   Look at the cube shown below.

Which equation best represents the area of the shaded rectangle located diagonally in the cube?
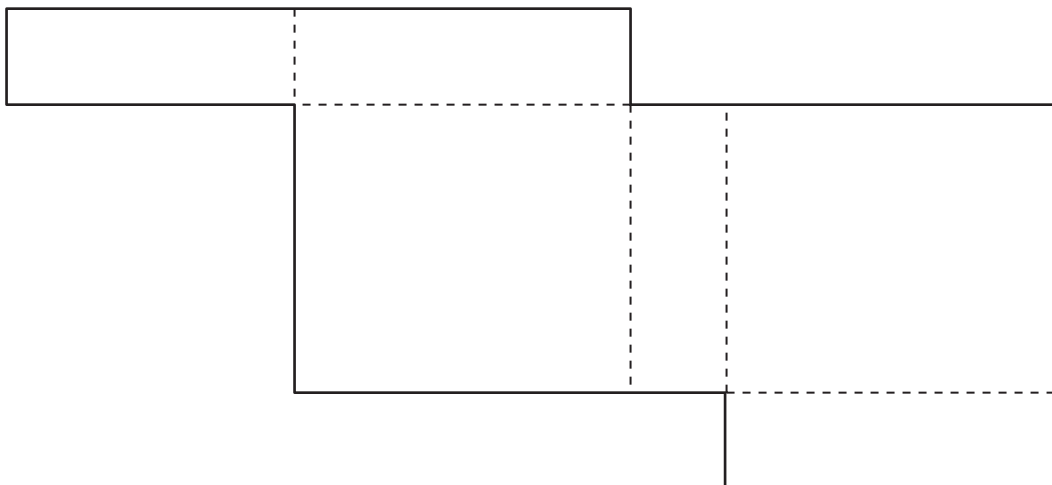
A $A = s^2\sqrt{3}$

B $A = \dfrac{s^3}{2}$

C $A = s^3\sqrt{2}$

D $A = s^2\sqrt{2}$

20 Jackie made a rectangular prism to hold her earrings. The net of the rectangular prism is shown below. Use the ruler on the Mathematics Chart to measure the dimensions of the rectangular prism to the nearest $\frac{1}{4}$ inch.


Which is closest to the volume of this rectangular prism?

F 4 in.³

G 1.3 in.³

H 8.5 in.³

J 13.5 in.³

21 The equation $F = \frac{9}{5}C + 32$ represents the relationship between F, the temperature in degrees Fahrenheit, and C, the temperature in degrees Celsius. If the temperature is 104°F, what is the temperature in degrees Celsius?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

GO ON

22 A diagram of a power/volume control knob on a stereo is shown below.

Power/Volume
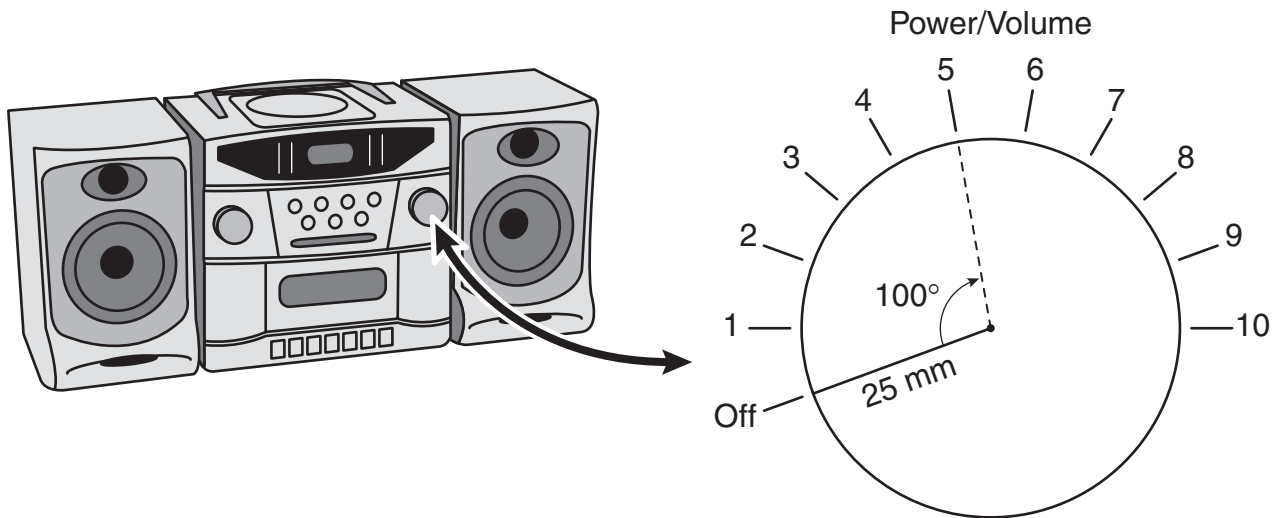
When the stereo is turned on and the knob is turned to a volume level of 5, the knob is rotated 100° from its off position. What is the approximate arc length of the path traveled by the knob's rotation from the off position to a volume level of 5?

F   545 mm

G   157 mm

H   22 mm

J   44 mm

23 Last Friday a used-car dealer had cars for sale for $600, $690, $695, $710, $725, $750, $850, $995, $995, $995, and $1495. Select the most effective measure to use to convince potential customers that the dealer's prices are very low.

A Mean

B Median

C Mode

D Range

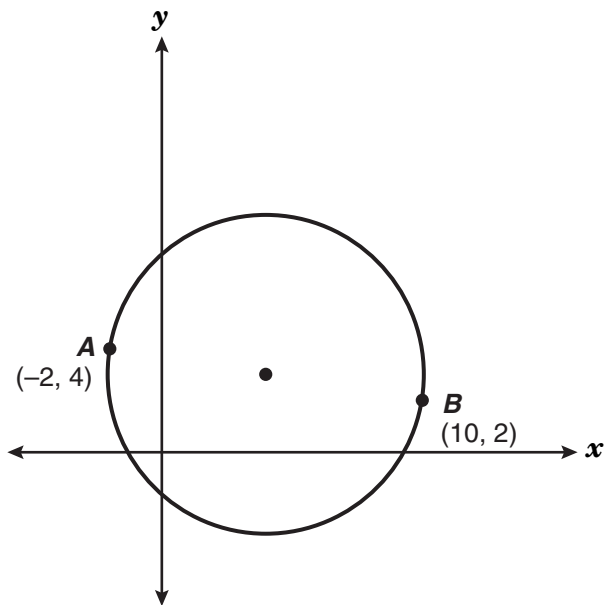**24** If $r + s = t$ and $x = y$, which of the following must be true?

    F $r + s - x = y - t$

    G $r + s - t = x + y$

    H $r + s + t = x - y$
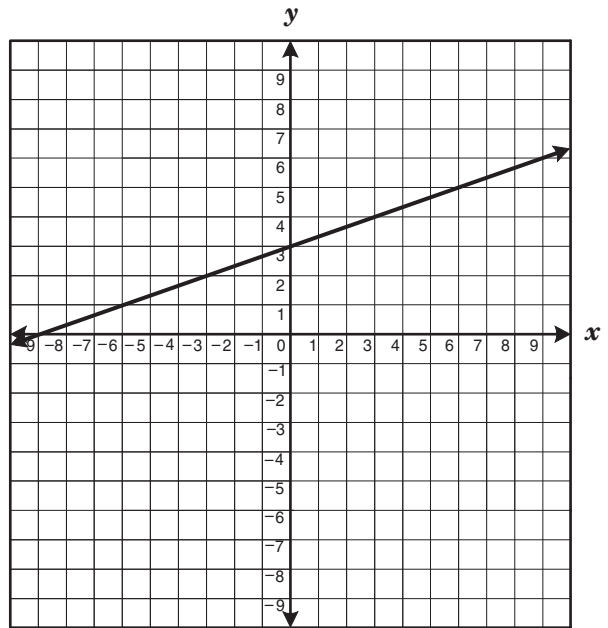
    J $r + s + x = t + y$

25 $\overline{AB}$ is a diameter of the circle shown below.

Which is closest to the length of the radius of the circle?

A 3.1 units

B 4.3 units

C 6.1 units

D 12.2 units

26 The graph of a linear function is shown below.

If the line is translated 2 units down, which equation will best describe the new line?
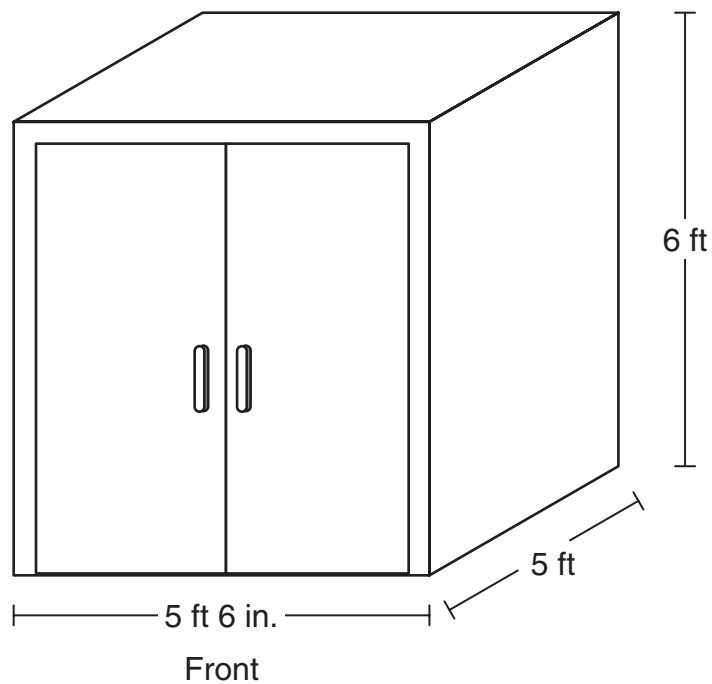
F $y = 3x + 1$

G $y = \dfrac{1}{3}x + 1$

H $y = 3x + 5$

J $y = \dfrac{1}{3}x + 5$

Page 54

27 Henry built a wooden storage shed in the shape of a rectangular prism for his tools. The figure below shows the dimensions of the storage shed.

Front

If Henry plans to paint only the top, front, left, and right sides of his shed, which is closest to the surface area that will be painted?

A 121 ft^2

B 181 ft^2

C 154 ft^2

D 91 ft^2

28 If y is directly proportional to x and $y = 12$ when $x = 16$, what is the value of x when $y = 5$?

F $1\frac{1}{3}$

G $3\frac{3}{4}$

H $6\frac{2}{3}$

J $\frac{3}{4}$

29 For each grading period Mr. Brown gives his students one project and two tests. The project counts as 20% of the students' final grade, and the mean of the 2 test scores counts as the rest of their grade. In Mr. Brown's class Anthony earned a grade of 87 on his first test and a grade of 96 on his second test. Which of the following is a reasonable minimum grade Anthony must score on his project in order to have a final grade of at least 90?

A 66

B 84

C 87

D 92

30 The spreadsheet below contains 20 cells. A cell in a spreadsheet can be identified first by the column letter and then by the row number. For example, the number 10 is found in Cell C4.

	A	B	C	D	E
1	6	−3	7	1	5
2	12	−4	8	2	
3	18	−5	9	3	−35
4	24	−6	10	4	

If the number in Cell A3 = B4 − 3(E2 + D4), which of the following must be the number in Cell E2?
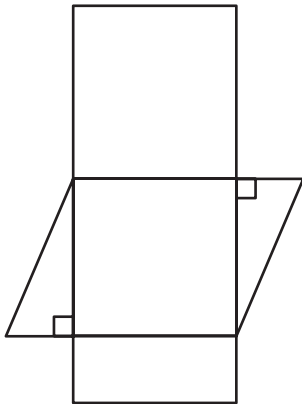
F −21

G −15
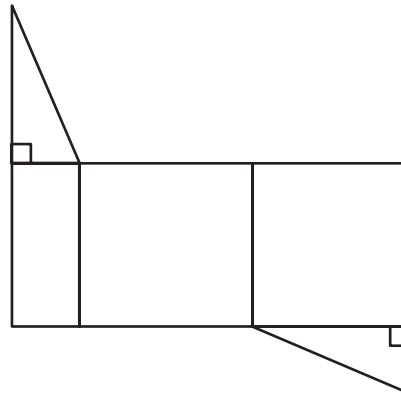
H −4

J −12

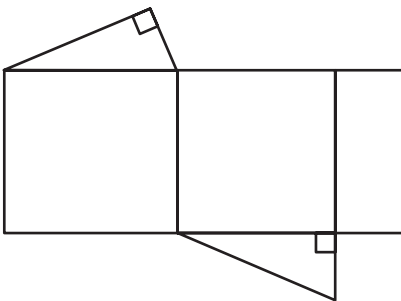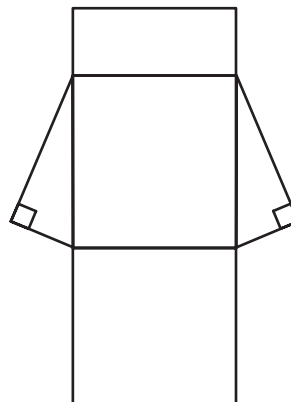**31** Which net best represents the triangular prism shown below?
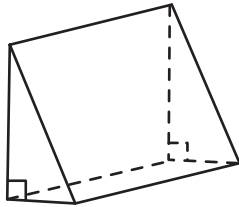
A

C

B

D

32 The graph of a system of linear equations is shown below.
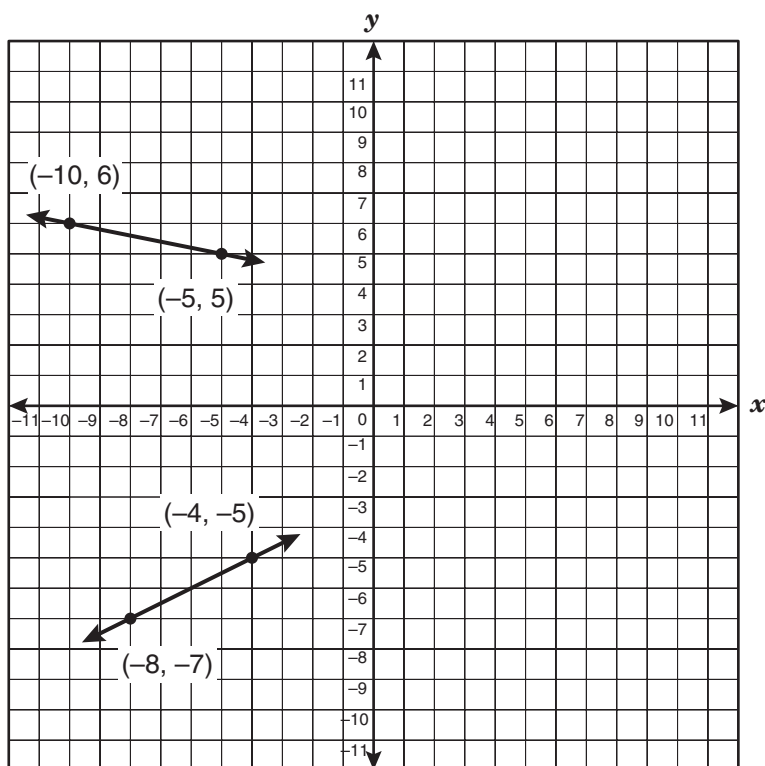
Which of the following is the solution to this system of linear equations?

F (0, 4)

G (8, 1)

H (0, −3)

J (10, 2)

33 Look at the figure shown below.
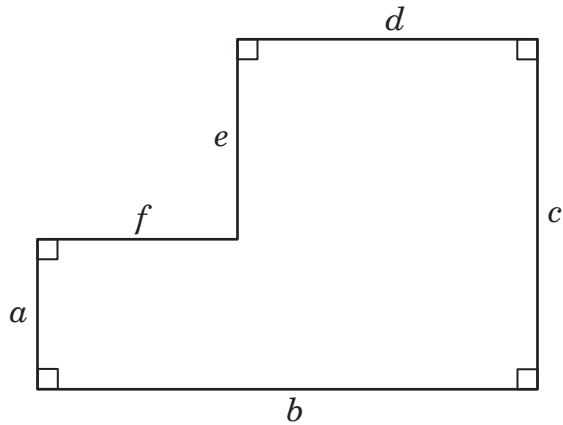
Which expression does not represent the area of the figure?

A $bc - ef$

B $af + ad - de$

C $de + af + ad$

D $af + cd$

34 The Hawthorne Mustangs have won 4 games and lost 6 games this season. Based on these results, which is the best prediction of the number of games the Mustangs must play in order to win 6 games?

F 8

G 9

H 12

J 15

35 The figure below shows a CD in its rectangular storage case.
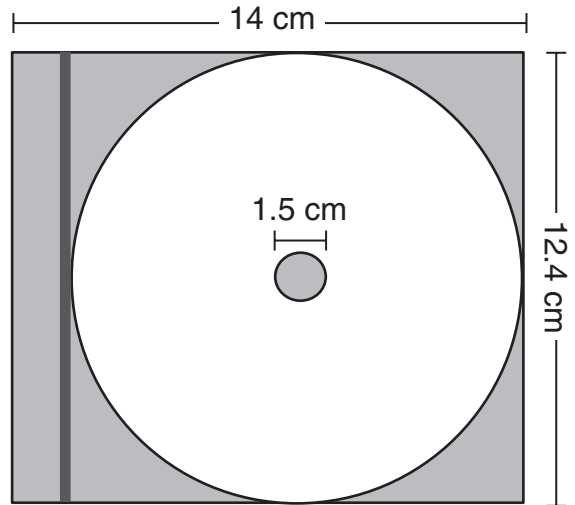
Which is closest to the area of the storage case not occupied by the CD?

A 55 cm^2

B 46 cm^2

C 51 cm^2

D 60 cm^2

36 Parallelogram *WBMP* is shown on the grid below.
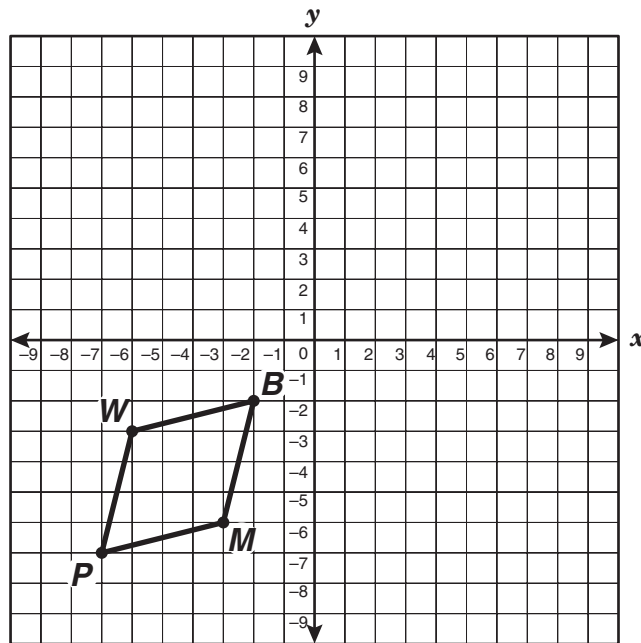
If *WBMP* is reflected across the line $y = -x$ and then translated 4 units down to become parallelogram *W′B′M′P′*, what will be the coordinates of *M′*?

F (−6, −7)

G (6, −1)

H (6, 7)

J (6, 3)

37 The profit earned on the sale of tool sets can be represented as the product of the number of tool sets sold and the difference between the selling price and the cost of making each set. The selling price of each tool set is $19.95, and the cost of making each set is $4.37. Which equation represents *p*, the profit, in terms of *s*, the number of tool sets sold?

A $p = s(19.95 - 4.37)$

B $p = s(19.95 + 4.37)$

C $p = 19.95 + 4.37s$

D $p = 19.95s - 4.37$

38 The figure below shows a conical cup containing water. The water depth can be represented by x, and the area of the water surface can be represented by A. As the water depth changes, the area of the water surface changes, as shown in the table below.
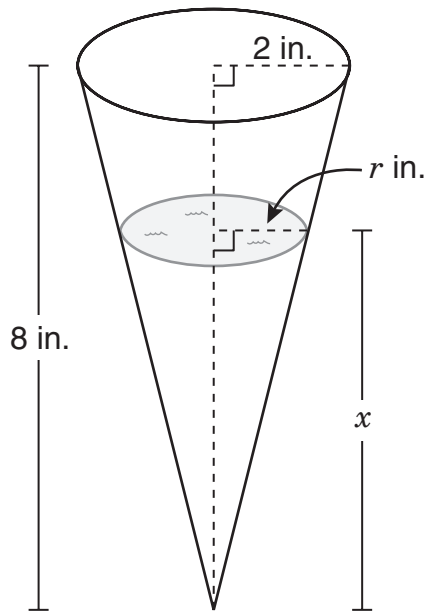
Water Depth (inches)	Area of Water Surface (square inches)
1	$\frac{\pi}{16}$
2	$\frac{\pi}{4}$
3	$\frac{9\pi}{16}$
4	π
8	4π

Which equation best represents the relationship between the area of the water surface and the water depth?

F $A = \dfrac{\pi(2x - 1)^2}{16}$ in.^{2}

G $A = \dfrac{\pi x}{2}$ in.^{2}

H $A = \dfrac{\pi x^2}{16}$ in.^{2}

J $A = \dfrac{\pi x}{16}$ in.^{2}

Page 61

39 In the figure shown below, $MN = 10$ centimeters.

$$\overleftrightarrow{LM} \;\|\; \overleftrightarrow{RS} \;\|\; \overleftrightarrow{YZ}$$

$$\overline{TN} \perp \overline{YZ}$$
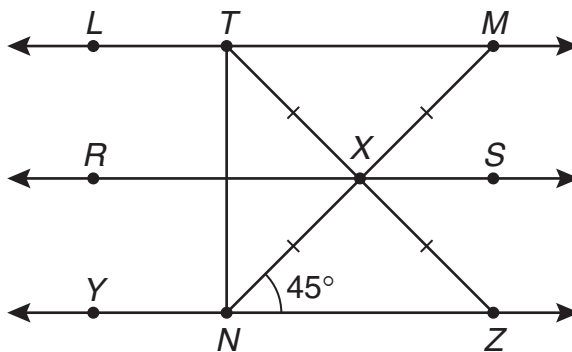
Which is closest to the length of $\overline{TN}$?

A   7 cm

B   6 cm

C   17 cm

D   14 cm

40 Casey conducted an experiment and recorded the data in the table shown below.

x	y
1	1
2	2
3	5
4	10

Which equation best describes these data?

F $y = x$

G $y = 2x - 1$

H $y = x^2 + x - 1$

J $y = (x - 1)^2 + 1$

41 Patti works as a waitress. She earns $4.50 per hour plus tips and serves an average of 6 customers per hour. If Patti earned $108 during an 8-hour shift, which amount best represents the average tip per customer?

A $4.00

B $1.50

C $3.00

D $13.50

42 The energy of a certain particle is 3.86 joules. If this particle loses 0.105 joule of energy every 30 seconds, what will its energy be after 8 minutes?

F 2.18 joules

G 1.68 joules

H 3.02 joules

J 2.29 joules

43 Which of the following is the vertex of the graph of the equation $y = -x^2 + 2x + 3$?

A (0, 3)

B (−1, 0)

C (1, 4)

D (3, 0)

GO ON
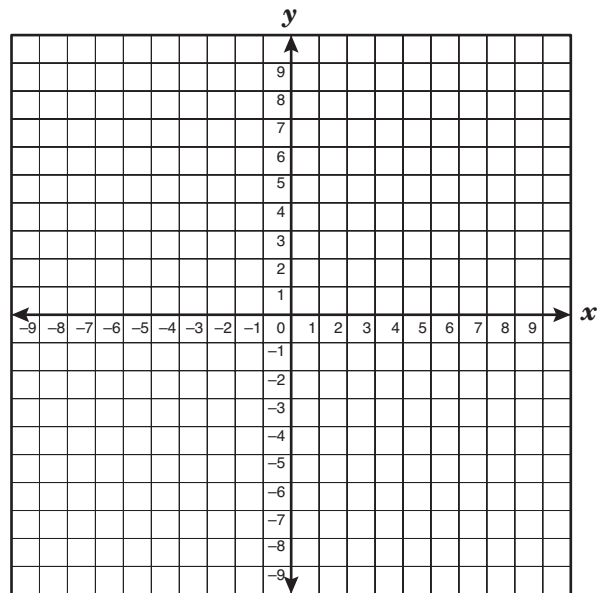
44 Look at the solid sphere and the cylinder containing water shown in Figure 1.
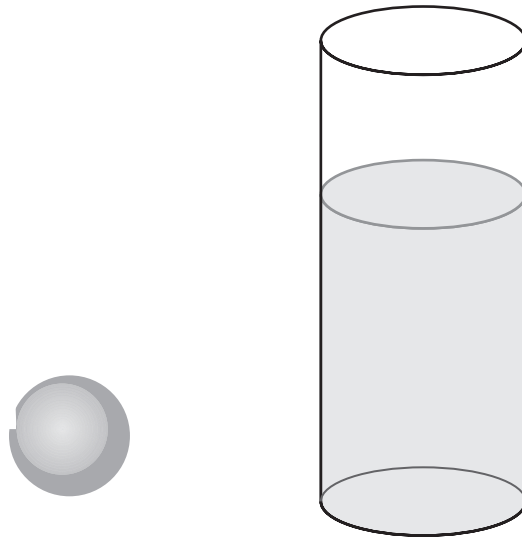
Figure 2 shows the sphere submerged in the water inside the cylinder.

Which is closest to the height of the water level in Figure 2?

F 13 cm

G 17 cm

H 15 cm

J 11 cm

45 Which graph best represents a line that is parallel to the graph of the equation $y = -\dfrac{4}{5}x - 2$?

A

C

B

D

GO ON
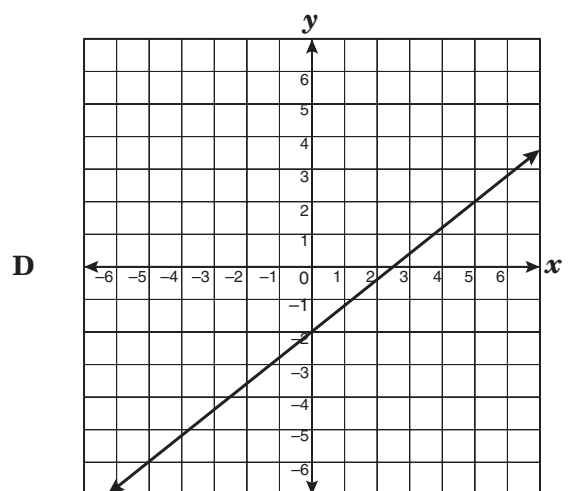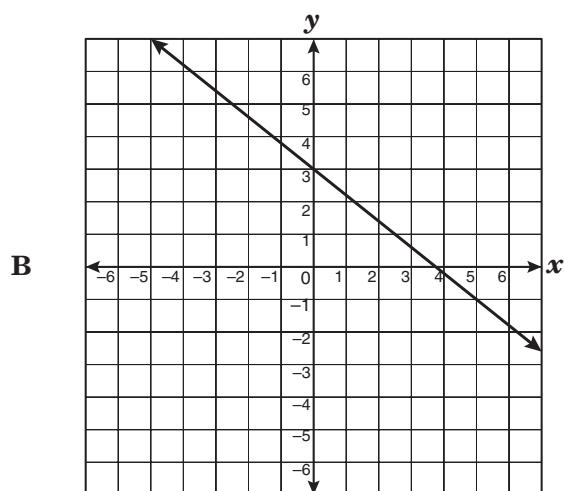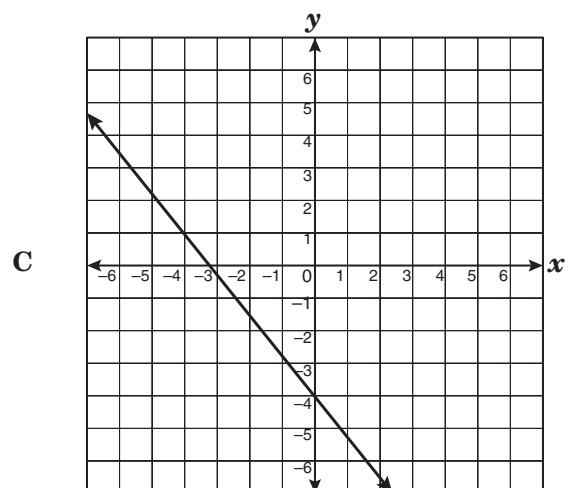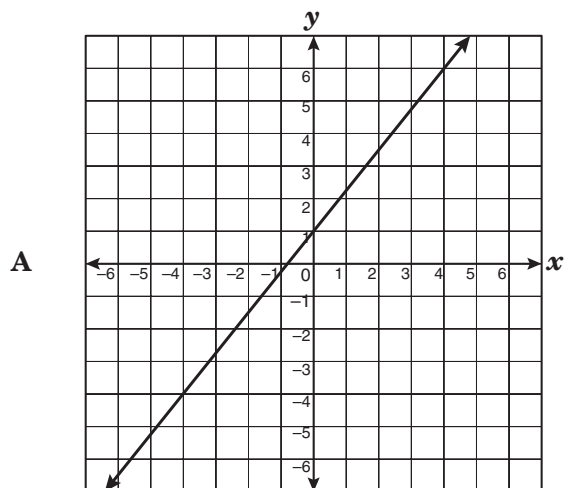
46 How does the graph of $y = -\frac{3}{4}x^2$ differ from the graph of $y = \frac{4}{3}x^2$?

F The graph of $y = -\frac{3}{4}x^2$ opens downward and is wider than the graph of $y = \frac{4}{3}x^2$.

G The graph of $y = -\frac{3}{4}x^2$ opens upward and is wider than the graph of $y = \frac{4}{3}x^2$.

H The graph of $y = -\frac{3}{4}x^2$ opens upward and is narrower than the graph of $y = \frac{4}{3}x^2$.

J The graph of $y = -\frac{3}{4}x^2$ opens downward and is narrower than the graph of $y = \frac{4}{3}x^2$.

---

47 Four square pieces are cut from the corners of a square sheet of metal. As the size of the small squares increases, the remaining area decreases, as shown below.
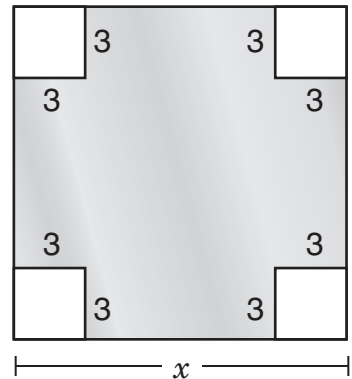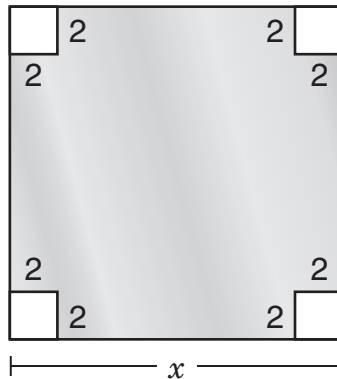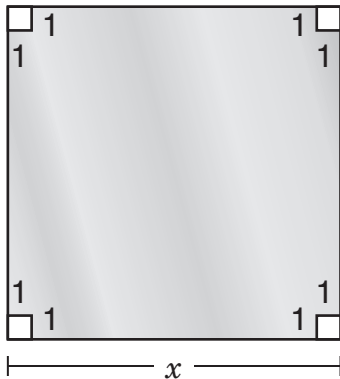
If this pattern continues, what will be the difference between the first square's shaded area and the fifth square's shaded area?

A 4 square units

B 24 square units

C 49 square units

D 96 square units

GO ON

48 The graph below shows the amount of force needed to stretch a certain spring to various distances.

Stretched Spring
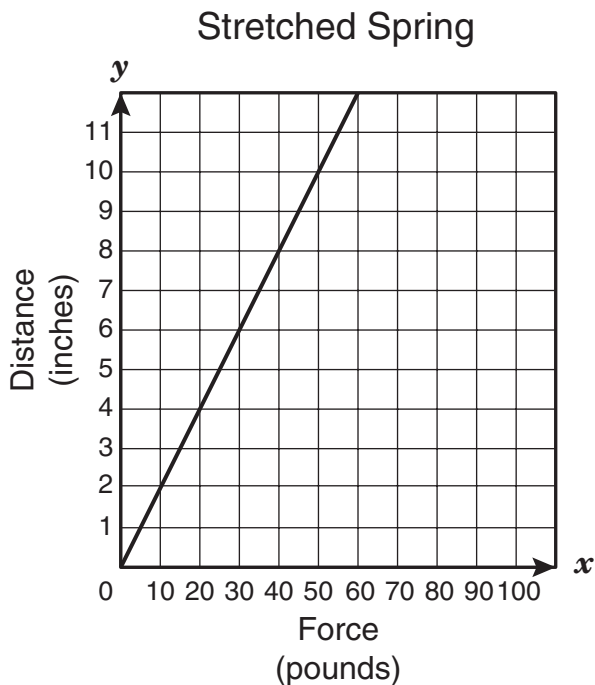
Which of the following best represents the difference between the amount of force in pounds needed to stretch the spring to 10 inches and the amount needed to stretch it to 4 inches?

F   6

G   14

H   30

J   70

49 Find the x- and y-intercepts of $-4x + 7y = -28$.

A x-intercept: $(-4, 0)$
   y-intercept: $(0, 7)$

B x-intercept: $(7, 0)$
   y-intercept: $(0, -4)$

C x-intercept: $(0, 7)$
   y-intercept: $(-4, 0)$

D x-intercept: $(0, -4)$
   y-intercept: $(7, 0)$

50 Four friends took turns using the stationary bike at a health club. Huan used it three times as long as Melanie. Susie used it half as long as David, and David used it 15 minutes longer than Huan. The four friends used the stationary bike for a total of 2.5 hours. How long did Susie use the stationary bike?

F   60 min

G   45 min

H   30 min

J   15 min

Page 67

51 In the figures below, $\Delta HKM \sim \Delta RTV$, and the area of ΔHKM is equal to 10 square units.
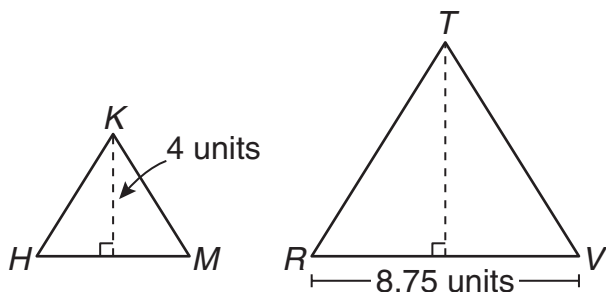
What is the area of ΔRTV?

- **A** 30.625 square units
- **B** 87.5 square units
- **C** 21.875 square units
- **D** 61.25 square units

52 What is the rate of change of the function $y = -7$?

- **F** 7
- **G** −7
- **H** 0
- **J** Undefined

53 The manager of the Sherbet Shoppe wants to construct a circle graph showing the popularity of the various sherbet flavors he offers. Here is the tally of the favorite flavors of his first 30 customers on Saturday.

Favorite Sherbet Flavors

Pineapple	ℍℍ⊥ I
Lime	IIII
Lemon	ℍℍ⊥ I
Raspberry	IIII
Orange	ℍℍ⊥ ℍℍ⊥

In the circle graph, which proportion can be used to find the number of degrees in the sector for orange sherbet?

- **A** $\dfrac{10}{20} = \dfrac{x}{180}$
- **B** $\dfrac{10}{30} = \dfrac{x}{180}$
- **C** $\dfrac{10}{20} = \dfrac{x}{360}$
- **D** $\dfrac{10}{30} = \dfrac{x}{360}$

54 Which graph best represents the relationship shown in the table below?

x	y
−1	−0.5
0	0
1	0.5
2	4

F

H

G

J
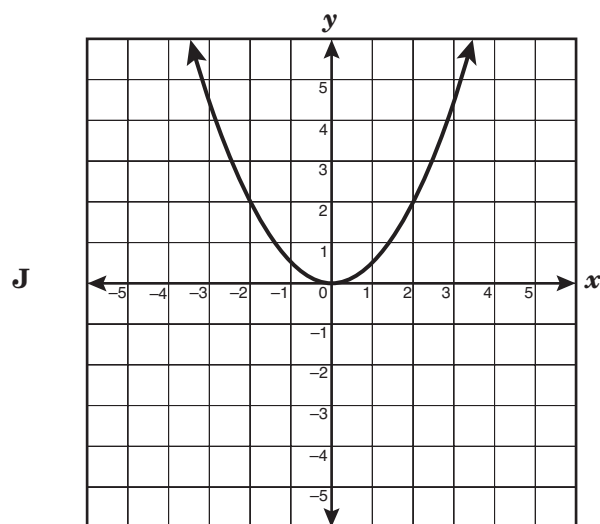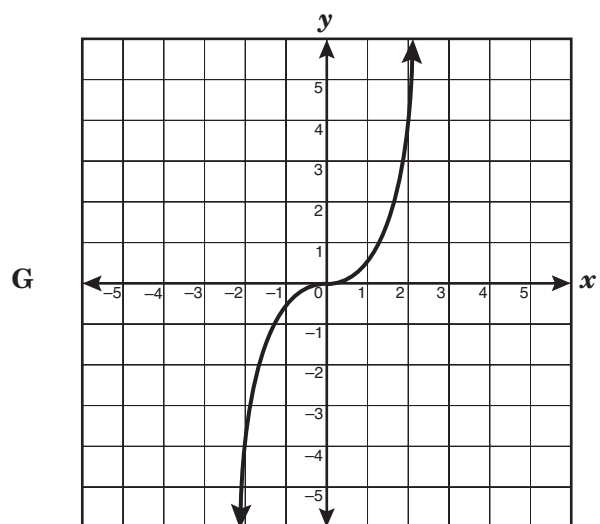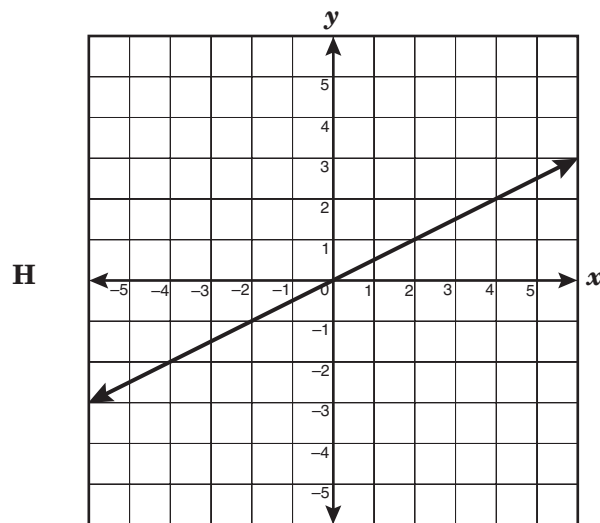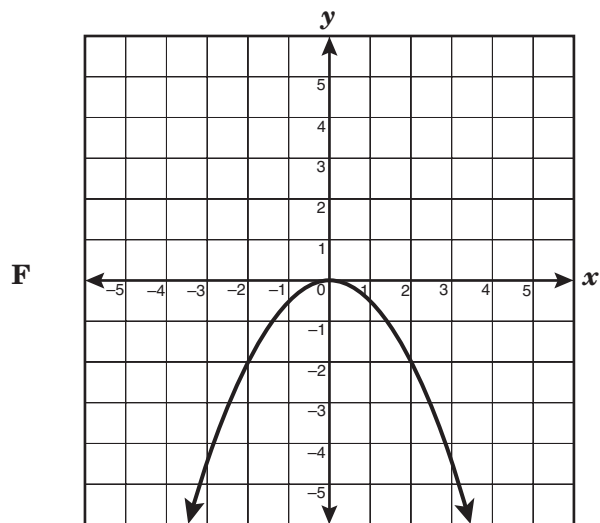
55 Lisa wants to make a long-distance telephone call to her friend. She does not want to spend more than $5.00 on the telephone call. If there is a $0.50 connection fee and a charge of $0.11 per minute, which best represents the number of minutes that Lisa can talk to her friend?

A

0   10   20   30   40   50

B

0   10   20   30   40   50

C

0   10   20   30   40   50

D

0   10   20   30   40   50

---
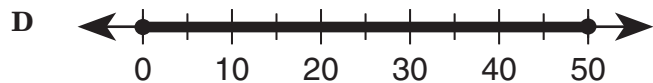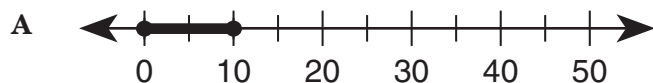
56 A sporting-goods store sold a total of 80 backpacks at the beginning of a new school year. Each backpack sold for either $35 or $50, not including tax. If x represents the number of $35 backpacks the store sold, which expression represents the total amount of money in dollars from the sales of the two kinds of backpacks, not including tax?

F $35x + 50(x - 80)$

G $50x + 35(80 - x)$

H $35x + 50(80 - x)$

J $50x + 35(x - 80)$

57 Which equation is the parent function of a quadratic equation?

A $y = \sqrt{x}$

B $y = x$

C $y = |x|$

D $y = x^2$

Page 70

GO ON

58 The owners of Crispy Sweet Doughnut Shop want to open a shop centrally located to the police station, the high school, the fire station, and the factory.
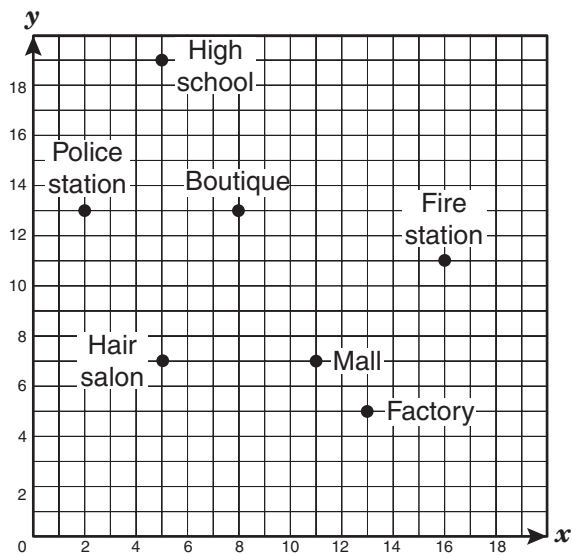
Based on the information given, which of the following points best represents the location where the new Crispy Sweet Doughnut Shop should open?

F (9, 12)

G (5, 13)

H (6, 10)

J (8, 13)

59 According to the data shown below, which would be the best prediction of the number of passengers at the International Jetport for the year 2008?

Passengers at International Jetport

Year	Number of Passengers (millions)
1980	30.6
1985	38.5
1990	46.4
1995	54.3
2000	62.2

A 70.1 million

B 68.5 million

C 74.8 million

D 78.0 million

60 The illustration below shows a 3-dimensional
view of a screw.

—

Which of the following best represents a front,
a side, or a top view of this screw?

F
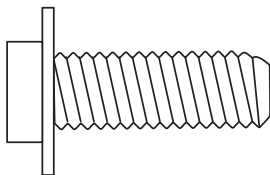
G

H

J

SCIENCE

FORMULA CHART

Density = $\dfrac{\text{mass}}{\text{volume}}$	$D = \dfrac{m}{v}$
$\left(\begin{array}{c}\text{heat gained}\\\text{or lost}\end{array}\right) = \left(\begin{array}{c}\text{mass in}\\\text{grams}\end{array}\right)\left(\begin{array}{c}\text{change in}\\\text{temperature}\end{array}\right)\left(\begin{array}{c}\text{specific}\\\text{heat}\end{array}\right)$	$Q = (m)(\Delta T)(C_p)$
Speed = $\dfrac{\text{distance traveled}}{\text{time}}$	$v = \dfrac{d}{t}$
Acceleration = $\dfrac{\text{final velocity} - \text{initial velocity}}{\text{change in time}}$	$a = \dfrac{v_f - v_i}{\Delta t}$
Momentum = mass × velocity	$p = mv$
Force = mass × acceleration	$F = ma$
Work = force × distance	$W = Fd$
Power = $\dfrac{\text{work}}{\text{time}}$	$P = \dfrac{W}{t}$
% efficiency = $\dfrac{\text{work output}}{\text{work input}} \times 100$	$\% = \dfrac{W_O}{W_I} \times 100$
Kinetic energy = $\dfrac{1}{2}$ (mass × velocity ^{2})	$KE = \dfrac{mv^2}{2}$
Gravitational potential energy = mass × acceleration due to gravity × height	$PE = mgh$
Energy = mass × (speed of light) ^{2}	$E = mc^2$
Velocity of a wave = frequency × wavelength	$v = f\lambda$
Current = $\dfrac{\text{voltage}}{\text{resistance}}$	$I = \dfrac{V}{R}$
Electrical power = voltage × current	$P = VI$
Electrical energy = power × time	$E = Pt$

Constants/Conversions
g = acceleration due to gravity = 9.8 m/s^2
c = speed of light = 3×10^8 m/s
speed of sound = 343 m/s at sea level and 20°C
1 cm^3 = 1 mL
1 wave cycle/second = 1 hertz (Hz)
1 calorie (cal) = 4.18 joules
1000 calories (cal) = 1 Calorie (Cal) = 1 kilocalorie (kcal)
newton (N) = kg m/s^2
joule (J) = Nm
watt (W) = J/s = Nm/s
volt (V)   ampere (A)   ohm (Ω)

Periodic Table of the Elements

Legend:
- Atomic number — 14
- Symbol — Si
- Atomic mass — 28.086
- Name — Silicon

Group 1 IA	2 IIA	3 IIIB	4 IVB	5 VB	6 VIB	7 VIIB	8 VIII	9 VIII	10	11 IB	12 IIB	13 IIIA	14 IVA	15 VA	16 VIA	17 VIIA	18 VIIIA
1 **H** 1.008 Hydrogen																	2 **He** 4.0026 Helium
3 **Li** 6.941 Lithium	4 **Be** 9.012 Beryllium											5 **B** 10.81 Boron	6 **C** 12.011 Carbon	7 **N** 14.007 Nitrogen	8 **O** 15.999 Oxygen	9 **F** 18.998 Fluorine	10 **Ne** 20.179 Neon
11 **Na** 22.990 Sodium	12 **Mg** 24.305 Magnesium											13 **Al** 26.982 Aluminum	14 **Si** 28.086 Silicon	15 **P** 30.974 Phosphorus	16 **S** 32.066 Sulfur	17 **Cl** 35.453 Chlorine	18 **Ar** 39.948 Argon
19 **K** 39.098 Potassium	20 **Ca** 40.08 Calcium	21 **Sc** 44.956 Scandium	22 **Ti** 47.88 Titanium	23 **V** 50.942 Vanadium	24 **Cr** 51.996 Chromium	25 **Mn** 54.938 Manganese	26 **Fe** 55.847 Iron	27 **Co** 58.933 Cobalt	28 **Ni** 58.69 Nickel	29 **Cu** 63.546 Copper	30 **Zn** 65.39 Zinc	31 **Ga** 69.72 Gallium	32 **Ge** 72.61 Germanium	33 **As** 74.922 Arsenic	34 **Se** 78.96 Selenium	35 **Br** 79.904 Bromine	36 **Kr** 83.80 Krypton
37 **Rb** 85.468 Rubidium	38 **Sr** 87.62 Strontium	39 **Y** 88.906 Yttrium	40 **Zr** 91.224 Zirconium	41 **Nb** 92.906 Niobium	42 **Mo** 95.94 Molybdenum	43 **Tc** (98) Technetium	44 **Ru** 101.07 Ruthenium	45 **Rh** 102.906 Rhodium	46 **Pd** 106.42 Palladium	47 **Ag** 107.868 Silver	48 **Cd** 112.41 Cadmium	49 **In** 114.82 Indium	50 **Sn** 118.71 Tin	51 **Sb** 121.763 Antimony	52 **Te** 127.60 Tellurium	53 **I** 126.904 Iodine	54 **Xe** 131.29 Xenon
55 **Cs** 132.905 Cesium	56 **Ba** 137.33 Barium	57 **La** 138.906 Lanthanum	72 **Hf** 178.49 Hafnium	73 **Ta** 180.948 Tantalum	74 **W** 183.84 Tungsten	75 **Re** 186.207 Rhenium	76 **Os** 190.23 Osmium	77 **Ir** 192.22 Iridium	78 **Pt** 195.08 Platinum	79 **Au** 196.967 Gold	80 **Hg** 200.59 Mercury	81 **Tl** 204.383 Thallium	82 **Pb** 207.2 Lead	83 **Bi** 208.980 Bismuth	84 **Po** (209) Polonium	85 **At** (210) Astatine	86 **Rn** (222) Radon
87 **Fr** (223) Francium	88 **Ra** 226.025 Radium	89 **Ac** 227.028 Actinium	104 **Rf** (261) Rutherfordium	105 **Db** (262) Dubnium	106 **Sg** (263) Seaborgium	107 **Bh** (262) Bohrium	108 **Hs** (265) Hassium	109 **Mt** (266) Meitnerium	110 (269)								

Lanthanide Series

58 **Ce** 140.12 Cerium	59 **Pr** 140.908 Praseodymium	60 **Nd** 144.24 Neodymium	61 **Pm** (145) Promethium	62 **Sm** 150.36 Samarium	63 **Eu** 151.97 Europium	64 **Gd** 157.25 Gadolinium	65 **Tb** 158.925 Terbium	66 **Dy** 162.50 Dysprosium	67 **Ho** 164.930 Holmium	68 **Er** 167.26 Erbium	69 **Tm** 168.934 Thulium	70 **Yb** 173.04 Ytterbium	71 **Lu** 174.967 Lutetium

Actinide Series

90 **Th** 232.038 Thorium	91 **Pa** 231.036 Protactinium	92 **U** 238.029 Uranium	93 **Np** 237.048 Neptunium	94 **Pu** (244) Plutonium	95 **Am** (243) Americium	96 **Cm** (247) Curium	97 **Bk** (247) Berkelium	98 **Cf** (251) Californium	99 **Es** (252) Einsteinium	100 **Fm** (257) Fermium	101 **Md** (258) Mendelevium	102 **No** (259) Nobelium	103 **Lr** (262) Lawrencium

Mass numbers in parentheses are those of the most stable or most common isotope.

Revised October 15, 2001
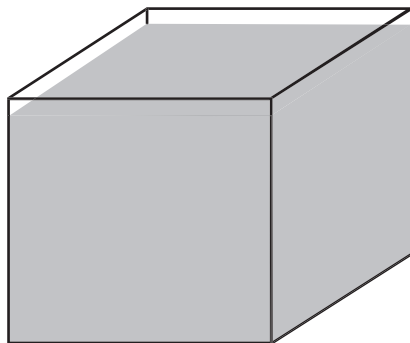
DIRECTIONS
Read each question and choose the best answer. Then fill in the correct answer on your answer document.

SAMPLE A

When a 10% hydrochloric acid solution is heated in an open test tube, the test tube should always be pointed —

A   so bubbles are visible

B   at a 180° angle from the flame

C   toward a ventilated area
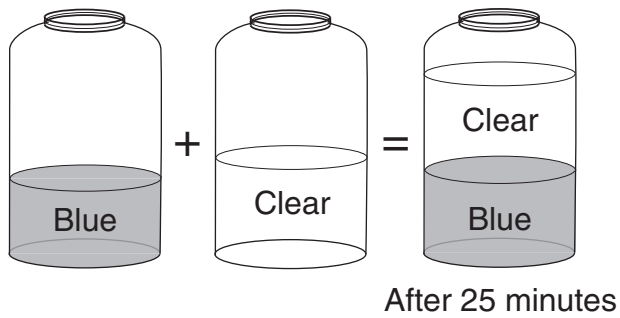
D   away from nearby people

Mass = 40 g

Volume = 20 mL

The picture shows a cube that contains 20 mL of a solution. The solution has a mass of 40 grams. What is the density in g/mL of this solution? Record and bubble in your answer on the answer document.

After 25 minutes

1   The picture shows the results of pouring a blue liquid into a clear liquid and allowing the mixture to settle for 25 minutes. Compared to the clear liquid, the blue liquid is more —

   A   massive

   B   dense

   C   viscous

   D   soluble

2   The bacteria *Bacillus thuringiensis* produce protein crystals that are toxic to the digestive system of insects. How can these bacteria be used to control insects in crops?
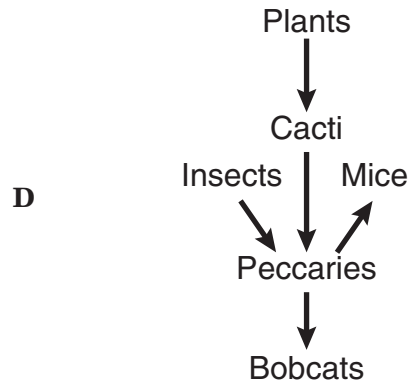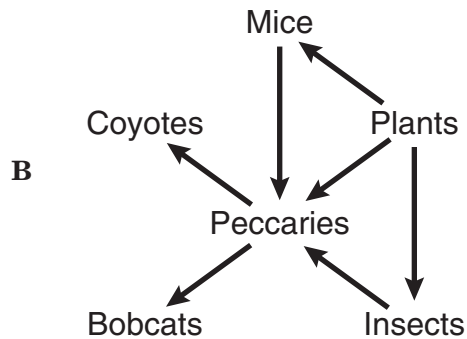
   F   Apply the bacteria to growing plants.

   G   Expose the bacteria to low levels of light.

   H   Remove plants from areas containing the bacteria.

   J   Treat the bacteria with a solution of the protein crystals.

The Collared Peccary

> The collared peccary is often mistaken for a pig. It has a short pig-like snout and crushing molars. The peccary has a mass of 10–20 kg and a shoulder height of about 50 cm.
>
> The collared peccary is omnivorous, eating mostly roots, seeds, fruit, cacti, and occasionally insects and mice. Peccaries travel in herds of 6–30 animals. The natural enemies of the peccary are bobcats and coyotes.

3 Which of these is a food web based on the relationships described above?

A

Insects

Bobcats

Plants

Coyotes

Peccaries

Mice

C

Coyotes

Bobcats

Peccaries

Insects

Plants

B

Mice

Coyotes

Plants

Peccaries

Bobcats

Insects

D

Plants

Cacti

Insects

Mice

Peccaries

Bobcats
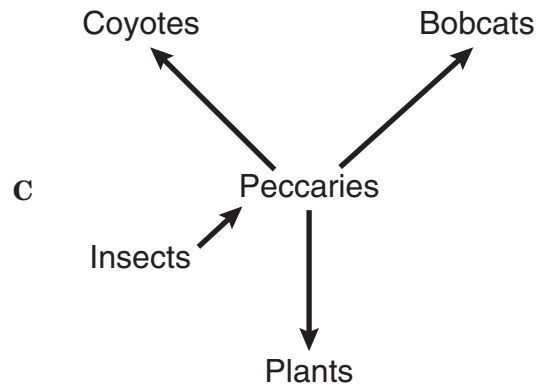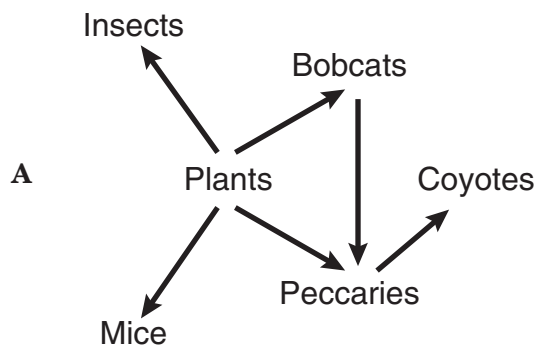
© Getty Images (29181.JPG)

4 This picture shows a small section of a solar power plant. Which of these decreases the energy production at such power plants?

    F   Cloudy skies

    G   Ozone in the air

    H   Hot weather

    J   Low humidity

5 Which of these could be used to determine whether a substance is a base?

    A   Thermometer

    B   Litmus paper

    C   Balance

    D   Bunsen burner

GO ON

Laser Light Striking a DVD
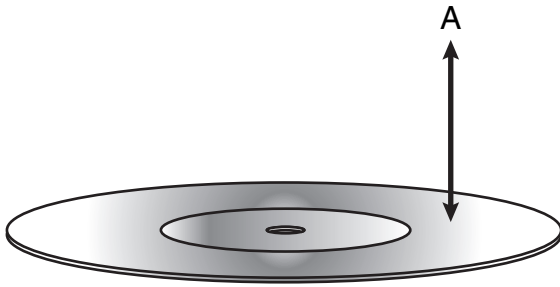
6 When a DVD is read, laser light touches the DVD surface and is then measured at location A. What allows light to return to location A after striking the DVD surface?

F Conduction

G Refraction

H Magnification

J Reflection

7 Which of these best explains how mutation can be beneficial to an organism?

A Phenotypic change may create an advantage over other organisms.

B Recombined genetic material improves genotype stability.

C Mitosis becomes a favored means of reproduction.

D Deoxyribose sugars develop into additional nucleotides.

Kidneys and Dialysis

- Proteins and other large molecules cannot move through the membranes of healthy kidneys.
- The presence of large molecules in urine is an indication of unhealthy kidneys.
- Dialysis is a medical treatment that does the work for failing kidneys.
- In dialysis, an artificial membrane impermeable to large molecules is used.
- Dialysis lowers protein levels in urine.

8 The box contains some facts about kidneys and dialysis. Which of the following best explains why dialysis works?

F Dialysis reduces the size of proteins.

G Proteins are dissolved by urine.

H Dialysis filters proteins from solution.

J Proteins transport membrane fragments.

9 The bonding characteristics of oxygen are most similar to the bonding characteristics of —

A hydrogen

B silicon

C helium

D sulfur

10 How is the excretory system most likely to respond when an animal is thirsty?

F By relaxing the smooth muscles

G By retaining body fluids

H By absorbing heat from lymph glands

J By releasing hormones

11 Compounds with the same chemical composition may have different densities because they —

A have differences in reactivity

B are able to bond with oxygen

C vary in solubility

D exist in different phases

12 An advertisement claims that a certain truck has the most powerful engine in its class. If the engine has more power, which of the following can the truck's engine do, compared to every other engine in its class?

F Produce fewer emissions

G Operate more efficiently

H Perform work faster

J Accelerate longer

GO ON
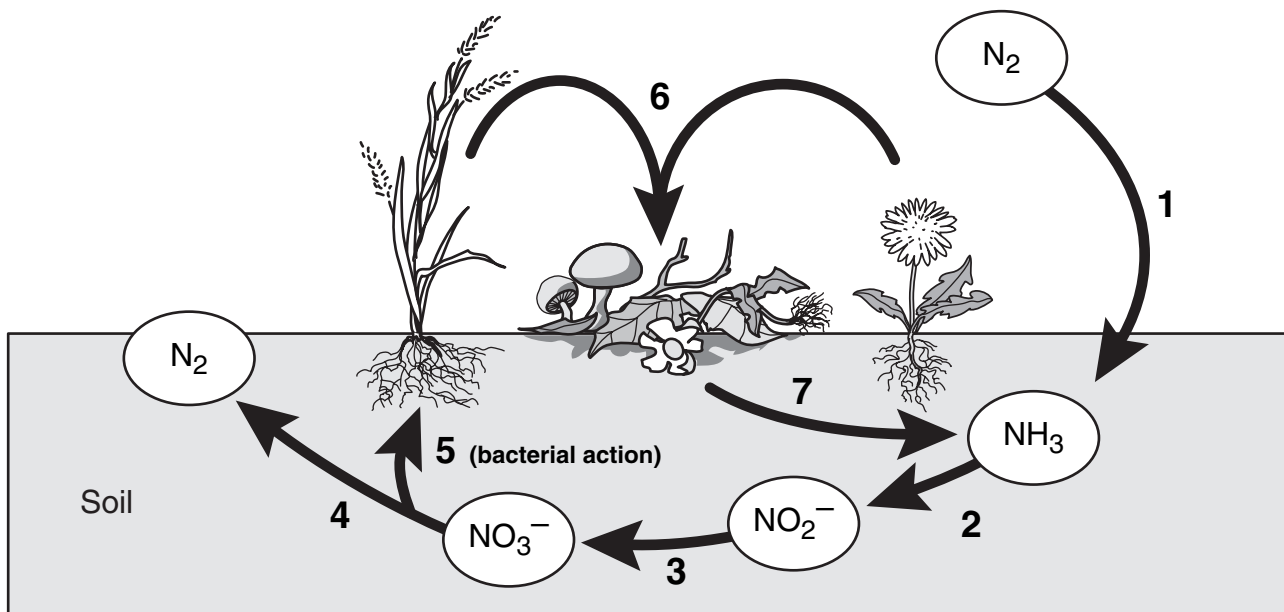
13 The diagram shows several phases of the nitrogen cycle. Which of the following describes the most likely effect of removing some plants from the area by using chemical herbicides?

    A The rate of erosion of rocks on the ground would be slowed.

    B The flow of necessary nutrients would be disrupted.

    C The ability of plants to complete photosynthesis would be increased.

    D The infiltration of water into the ground would be halted.

14 Which of the following cannot metabolize nutrients?

F

G
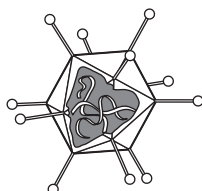
H
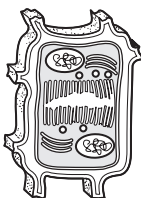
J
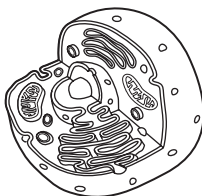
15 About 10% of the energy at one trophic level is passed to the next level. What usually happens to the energy that is not passed to the next trophic level or used to carry out life processes?

   A   It is given off as heat.

   B   It is stored as vitamins.

   C   It is used in reproduction.

   D   It is used in protein synthesis.

$$2C_2H_2(g) + 5O_2(g) \rightarrow 4CO_2(g) + \underline{\quad}$$
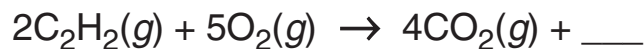
16 Which additional product balances this reaction?
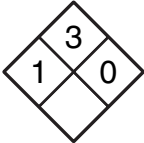
   F $4OH(aq)$

   G $CH_4(g)$

   H $H_2O_2(g)$

   J $2H_2O(g)$

17 An empty cup was tightly covered with plastic wrap, and a few grains of salt were sprinkled on top of the plastic. When a tuning fork was struck and placed slightly above the plastic wrap, the salt began to move. Which characteristic of waves does the movement of the salt best demonstrate?

A Echo formation

B Diffraction

C Resonance

D Specular reflection

18 What is the net force exerted on a 90.0 kg race-car driver while the race car is accelerating from 0 to 44.7 m/s in 4.50 s?

F 9.8 N

G 20 N

H 201 N

J 894 N

Acetone C_3H_6O	Generic Chemicals 1717 Industrial Row Anytown, USA 10059
Technical grade 500 mL CAS 67-64-1 ⟨3 / 1 0⟩	• Highly volatile • Flammable liquid and vapor • Respiratory irritant • Harmful if swallowed or inhaled • May cause injury to eyes • Effects may be delayed

19 The label shown above contains information about some harmful effects of acetone. A group of students plans to use acetone to rinse out a glass container. A second group of students is working at the same lab table. Which of the following lab procedures should the second group of students avoid?

A Heating water with an open flame

B Pouring hydrochloric acid into a beaker

C Filtering precipitates from a liquid solution

D Collecting oxygen from plants in a test tube

GO ON
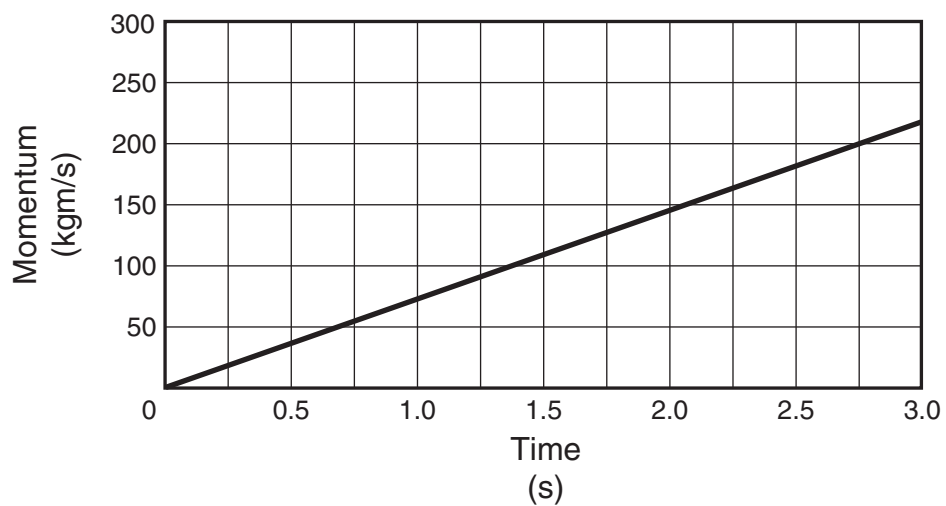
20 The graph shows how the momentum of a given mass changes during a period of motion. According to the information, what is the momentum in kg m/s at 2.75 seconds? Record and bubble in your answer to the nearest whole number on the answer document.

21 Power plants that discharge warm water into rivers have a negative effect on aquatic life. This is because the higher water temperature —

    A increases the pressure of the river water

    B increases the pH value of the river water

    C decreases sediment solubility in the river water

    D decreases the dissolved oxygen in the river water

22 Which configuration of pulleys and belts shown below will result in the fastest rotation of Spindle 2?

F

G

H

J
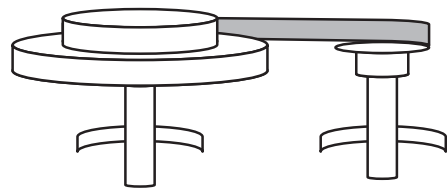
Liquid	Description	Density (g/mL)	Boiling Point (°C)
Q	Nonflammable colorless compound	1.62	59.5
R	Flammable colorless compound	0.71	34.6
S	Yellow mixture with strong odor	0.73	160.4
T	Viscous pale-yellow oil	0.93	300.0

23 The table shows properties of four liquids that are insoluble in water. If the four liquids are poured into an Erlenmeyer flask containing water, which liquid will form a layer below the water?

A   Q

B   R

C   S

D   T

Voltage Required to Maintain Constant Current
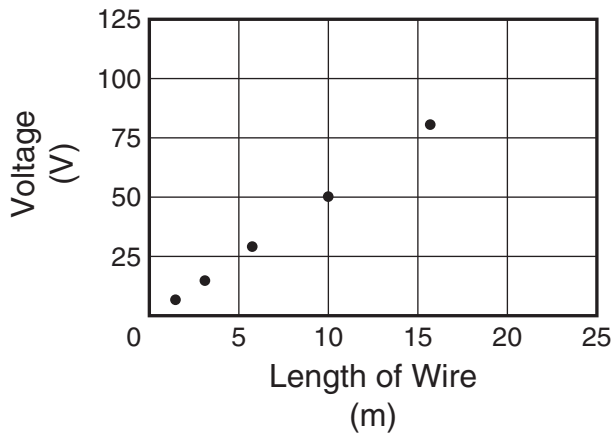
24 The graph shows how the voltage needed to maintain a constant current of 1.5 amps through a wire conductor varies with the length of the wire. If the trend continues, what is the most likely voltage needed to maintain a 1.5-amp current through 80 meters of the wire?

F 10 volts

G 18 volts

H 250 volts

J 400 volts

25 Which characteristic of water best explains its ability to dissolve a great variety of materials?

A Its transparency in light

B Its electrical conductivity

C Its physical state of matter

D Its molecular arrangement

GO ON

Location	Corpus Christi	Fort Davis	Lipscomb
Latitude	27°48′N	30°35′N	36°14′N
Longitude	97°24′W	103°54′W	100°16′W
Elevation (m)	0 (sea level)	1494	728
Sanitizing Time (min)	20	25	22
Boiling Point of Water (°C)	100.0	95.0	97.6

26 Boiling water can be used to sanitize dishes. The data above show how sanitizing time varies in different locations. Which inference is supported by these data?

F The boiling point of water is constant at higher altitudes.

G The boiling point of water is affected by elevation.

H Water takes longer to boil at Fort Davis than at sea level.

J Boiling water changes temperature at a faster rate at Corpus Christi than at higher elevations.

27 A medical researcher hypothesizes that a newly developed medication can reduce high blood pressure. Which of these would most likely be the dependent variable in a study involving this medication?

A The number of participants in the study

B The ages of people treated for high blood pressure with other medications

C The blood pressure of the participants in the study

D The number of people treated for high blood pressure with other medications

Boyle's law gives the relationship between the pressure and volume of a gas if the temperature and mass of the gas are held constant:

- If the volume of the gas is increased, the pressure of the gas decreases.
- If the volume of the gas is decreased, the pressure of the gas increases.
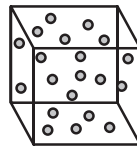
Temp. = 20°C
Pressure = 10 atm
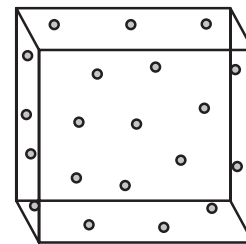
Temp. = 20°C
Pressure = 2.5 atm

28 What can be concluded from the relationships described above?

    F   Gas molecules travel longer distances at greater speeds when the volume of the gas is decreased.

    G   A gas is more likely to lose kinetic energy when its volume is reduced.

    H   Gas molecules collide less frequently when the volume of the gas is increased.

    J   A gas is more likely to increase in momentum when its volume is increased.

29 Which of these represents a properly balanced system?

A

0.75 m   1.5 m

48 N   96 N

B

1.5 m   1.5 m

48 N   96 N

C

3.0 m   1.5 m

48 N   96 N

D

4.5 m   1.5 m

48 N   96 N
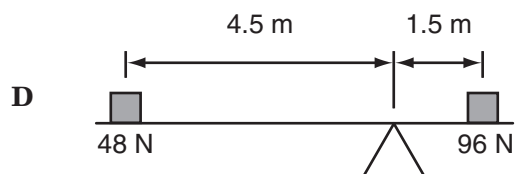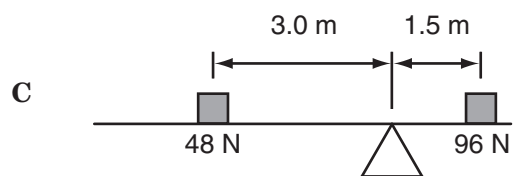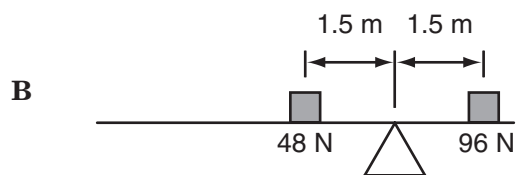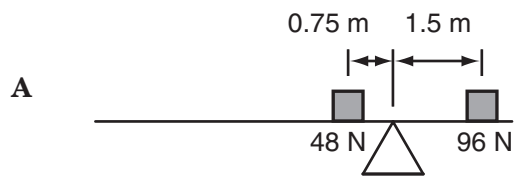
Variation in Leaf-Dropping Times

Plot	Gases Added to Surrounding Air	Time (days)
1	CO_2	26
2	O_3	3
3	$CO_2 + O_3$ mixture	10
4	None (control)	18
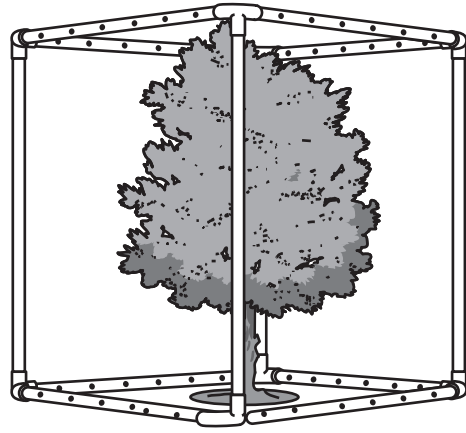
30 The table shows the time it took trees of the same type and size to drop all of their leaves after being grown in different atmospheres. For the experiment to be valid, which of these must be a constant for all the trees?

F The height of all the trees during the entire experiment

G The amount of water available to all trees during the experiment

H The mass of fallen leaves collected from each tree

J The rate of photosynthesis in all trees during the experiment

31 Sickle-cell anemia is a disorder resulting from a mutation that leads to the production of an abnormal protein. Which component of the DNA molecule provides instructions for the production of the protein?

A The phosphate groups

B The sugar molecules

C The sequence of nitrogen bases

D The bonds that hold the sugars to the bases

GO ON

Before   After

48 kg   40 kg   48 kg   40 kg

2.5 m/s   3.0 m/s
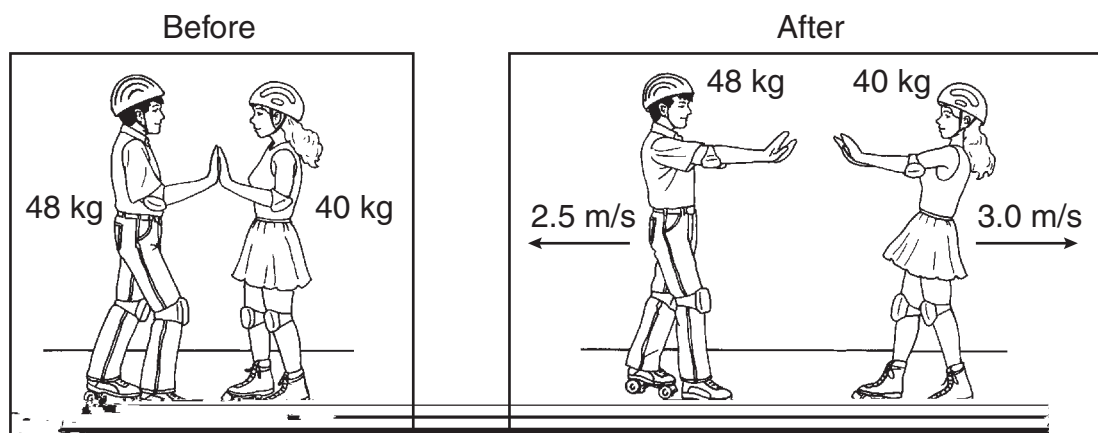
32 Starting from rest at the center of a skating rink, two skaters push off from each other over a time period of 1.2 s. What is the force of the push by the smaller skater?

F   16 N

G   32 N

H   88 N

J   100 N

Louis Pasteur's Experiment

Like many other scientific breakthroughs, the discovery of immunization happened by accident.

In 1880 Louis Pasteur was trying to protect chickens from cholera. To study the disease, Pasteur and his assistants gave injections of cholera bacteria to several groups of chickens. The chickens usually died from cholera after being injected with the bacteria. However, one group of chickens survived. Pasteur noticed that these chickens had been injected with a six-week-old batch of cholera bacteria.

Pasteur's assistants prepared new colonies of cholera bacteria and injected these chickens a second time. They also injected a group of chickens that had not been previously injected. Pasteur was surprised that the chickens that had been injected previously with the old bacteria remained healthy, while all the chickens in the second group became sick and died.

This is how Pasteur came to discover that exposure to weakened pathogens can provide immunity from disease. The idea was later used to protect animals from other serious diseases. Today immunizations help protect people from many illnesses.

GO ON

33 Which of these probably served as the most useful data after Pasteur injected a group of chickens with bacteria from the older culture?

A The health and behavior of the injected chickens

B The total number of cholera cases observed

C The changes in the shape and color of the bacterial colonies

D The recovery rate of chickens previously infected with cholera

Cholera-causing bacteria belong to the genus *Vibrio*. Some species of *Vibrio* cause diseases in chickens and humans. However, some species have mutualistic relationships with fish and other marine life.

34 Which of these is the best example of a mutualistic relationship in an aquatic environment?

F Some fish can survive repeated infections by harmful bacteria.

G Some fish have bacteria living in their digestive tract that help the fish digest food.

H Some bacteria are present in aquatic food chains in which fish are secondary consumers.

J Some bacteria are aquatic decomposers that recycle nutrients useful to fish.

35 Cholera-causing bacteria have a single flagellum that allows these bacteria to —

A move

B reproduce

C excrete water

D produce sugar

Group	Temperature (°C)	Solubility (g/100 mL)
A	0	28
B	10	31
C	20	34
D	30	37
E	40	40
F	60	45
G	80	51
H	90	54
I	100	56

36 Nine groups of students dissolved as much potassium chloride as possible in water. Each group used 100 mL of water heated to a different temperature. Which graph shows the relationship between solubility and temperature for potassium chloride?

F

Solubility (g/100 mL) vs Temperature (°C)

H

Solubility (g/100 mL) vs Temperature (°C)

G

Solubility (g/100 mL) vs Temperature (°C)

J

Solubility (g/100 mL) vs Temperature (°C)

GO ON
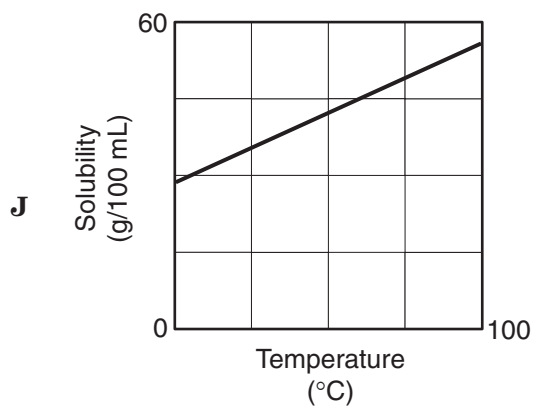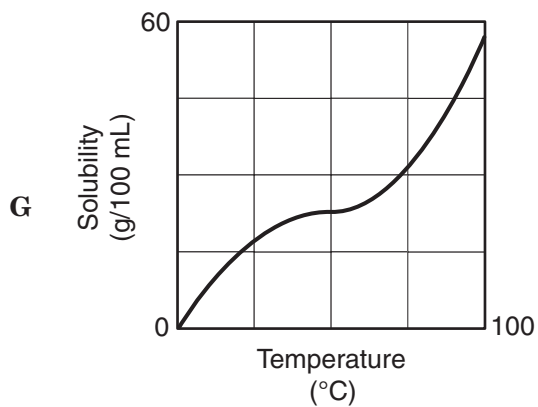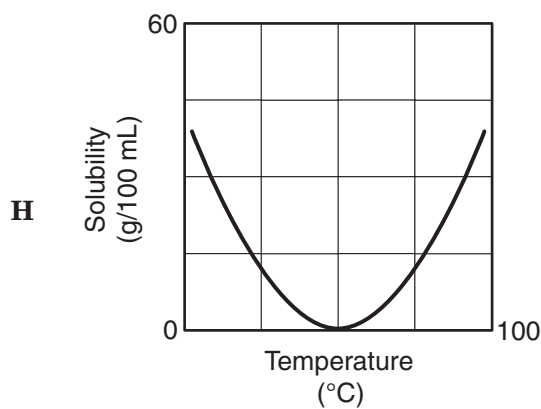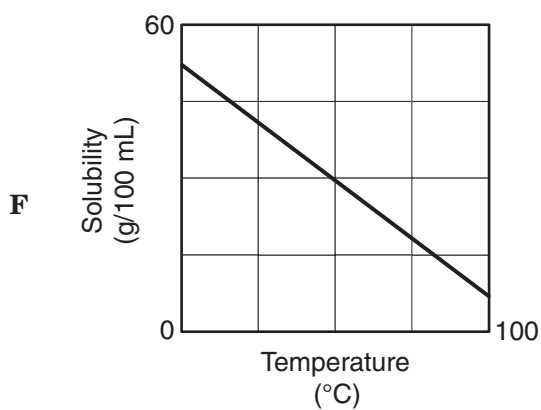
37 Which of these produces most of the compounds responsible for causing acid rain?

  A Nuclear fission

  B Fossil fuels

  C Solar cells

  D Windmills

38 Which of these elements is most likely to donate one electron?

  F Be

  G Cs

  H Rn

  J He

Effectiveness of Horse Medication
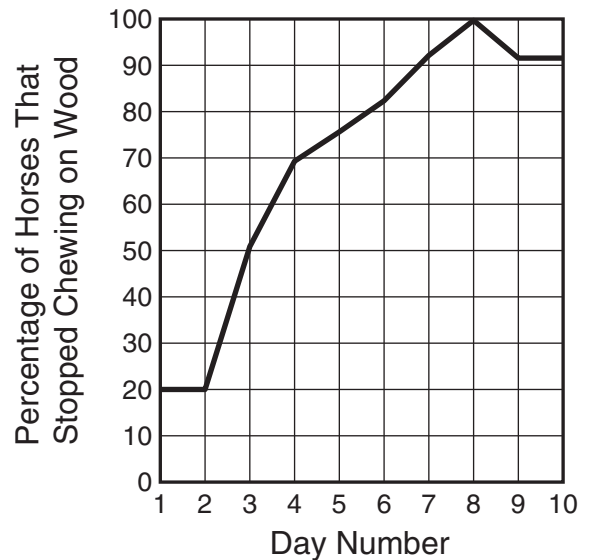
39 Horses kept in stables sometimes chew on wood. This can lead to damage to the mouth and digestive system. The graph shows the results of a study of a medication that prevents horses from chewing on wood. From the graph, what inference can be made about the effectiveness of the product?

  A Most horses like the medication.

  B The medication is most effective between Days 4 and 5.

  C Most horses will show improvement within 7 days.

  D The effects of the medication are long lasting.

GO ON

40 In all plant and animal cells, the nucleus contains long molecules of DNA. Which of the following best describes the function of DNA?

    F DNA provides the shape and structure of the nucleus.

    G DNA packages materials for transport through the nucleus.

    H DNA carries materials into and out of the nucleus.

    J DNA contains the blueprint for producing the whole organism.

41 The following hypothesis refers to iron in the topsoil found on an island formed from limestone.

> Hypothesis: Much of the iron found in the topsoil of the island was carried from Africa by huge dust clouds.

Which study would most likely be used to investigate this hypothesis?

    A Tracking dust clouds with satellite photos

    B Determining the effects of iron on limestone

    C Calculating erosion rates in African limestone mines

    D Analyzing the content of comet dust clouds

42 Alpha particles are one type of radioactivity. These particles have a nucleus of two protons and two neutrons but have no orbital electrons. Based on this information, it can be inferred that alpha particles are positive ions of the element —

F actinium

G curium

H radium

J helium

Eyepiece

Rotating nosepiece

Coarse-focus knob
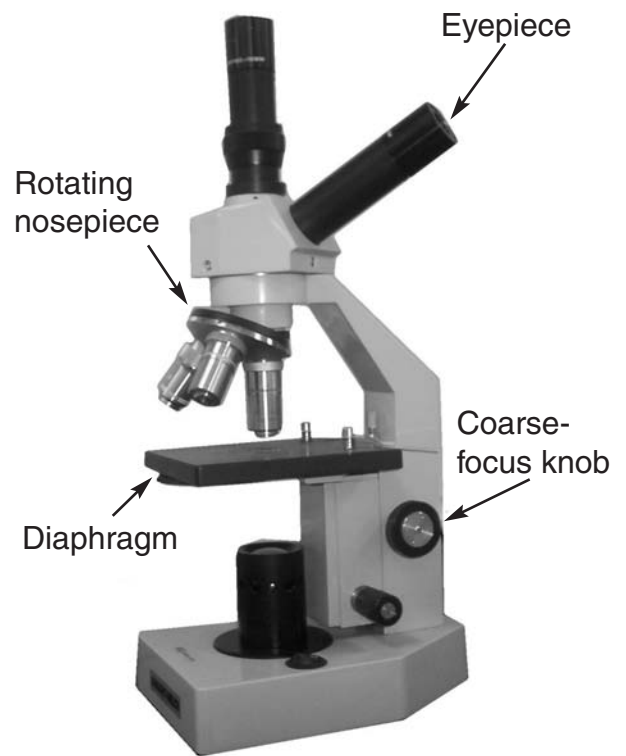
Diaphragm

43 The picture above shows a compound microscope. What part of the microscope should be used to adjust the amount of light illuminating a prepared slide?

A Eyepiece

B Rotating nosepiece

C Diaphragm

D Coarse-focus knob

About 10,000 years ago two populations of tassel-eared squirrels were separated from each other. Today these squirrels are so different that they are unable to interbreed when brought together.

```
                    Tassel-eared squirrel

        Northern                        Southern
        isolation                       isolation


     Kaibab squirrel                  Abert's squirrel
```
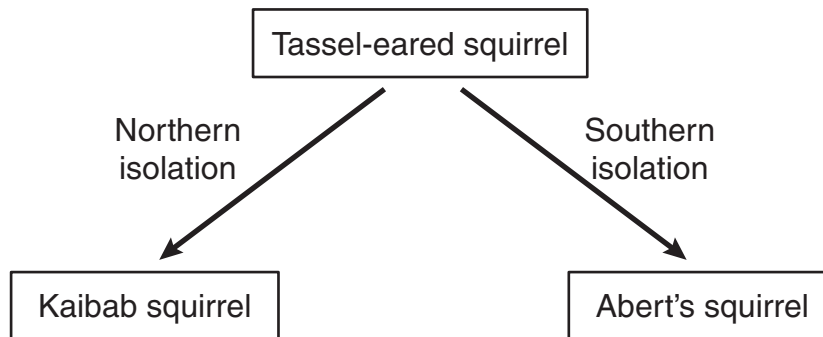
44 Which of the following explains this phenomenon?

    F Competition

    G Extinction

    H Predation

    J Speciation

45 Erwin Chargaff studied the DNA of organisms within a single species. Chargaff discovered that the amount of adenine is about equal to the amount of thymine. Which of these explains why the ratio of adenine to thymine is nearly 1:1?

    A Adenine and thymine pair with each other.

    B Adenine binds with phosphates, while thymine binds with nitrates.

    C Adenine and thymine are identical in chemical composition.

    D Adenine bases contain a form of thymine.

Electron Configuration

Energy level	1	2	3
Electrons	2	8	8

46 According to the periodic table and the information above, which element has this electron configuration?

    F Sodium

    G Neon

    H Magnesium

    J Argon

GO ON

47 Which of these does a virus need in order to multiply?

A Chloroplasts from a host cell

B A host cell to provide oxygen for the virus

C New ADP from a host cell

D A host cell to replicate the virus's DNA

> Trade winds blow from east to west across the Pacific Ocean. The winds move surface waters westward across the ocean. This causes deeper, colder water to rise to the surface along the coast. This upwelling of deep ocean waters brings with it nutrients that would otherwise lie near the bottom of the ocean.

48 Which of the following conclusions is supported by the information above?

F Trade winds help maintain some food chains.

G Trade winds produce useful minerals in some oceans.

H Trade winds can reverse parts of the water cycle.

J Trade winds may be able to reduce greenhouse gases.

49 Which of these best explains why a freshwater aquarium would be a dangerous habitat for saltwater fish?

A The tissues of the saltwater fish would absorb too much acid.

B The organs of the saltwater fish would produce too much protein.

C The organ systems of the saltwater fish would consume too much energy.

D The cells of the saltwater fish would gain too much water.

50 Which lever requires the least effort to lift the load?

Effort

F

50 kg

Effort

G

50 kg

H

Effort

50 kg

J

50 kg

Effort

Page 108
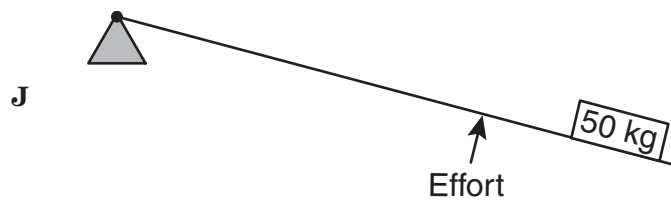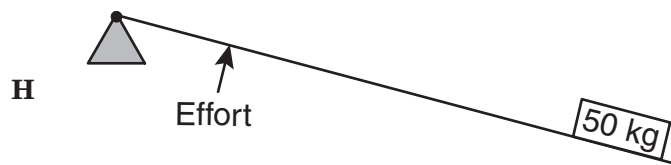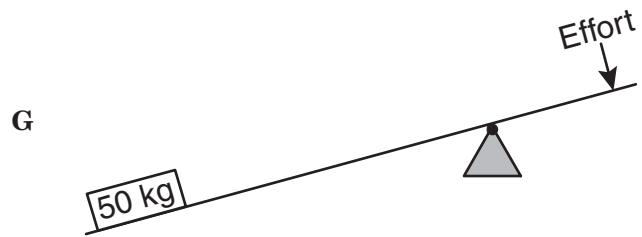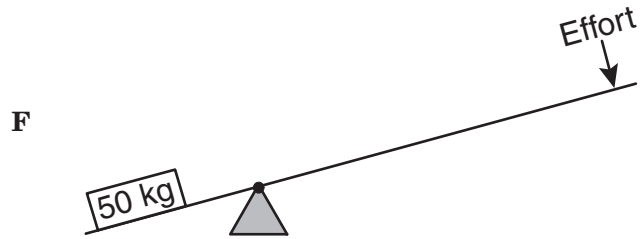
Conclusion: Hearing aids are an effective way to treat hearing loss.

51 A study was conducted to test the effectiveness of hearing aids. People with different types of hearing loss were included in the study. Which question would help in determining whether the conclusion above is valid?

   A What was the average age of the people in the study?

   B What was the most common occupation of people in the study?

   C How many people were included in the study?

   D How many people in the study had vision problems?

52 When the air is released from a balloon, the air moves in one direction, and the balloon moves in another direction. Which statement does this situation best illustrate?

   F What goes up must come down.

   G For every action there is an equal and opposite reaction.

   H The shape and size of an object affect air resistance.

   J The acceleration due to Earth's gravity is 9.8 m/s^2.

53 A certain atom has a nucleus containing six protons and eight neutrons and has six electrons orbiting the nucleus. This atom is a form of the element —

   A silicon

   B carbon

   C magnesium

   D calcium

GO ON

54 The myxoma virus was used to control an overpopulation of European rabbits in Australia. When first introduced in the mid-1900s, the virus greatly reduced the European rabbit population. Today the virus is not an effective control of the European rabbit population. Fewer European rabbits are affected by the virus today because they have —

F learned to avoid the virus

G moved away from infected areas

H undergone a change in diet

J developed resistance to the virus

200 mL
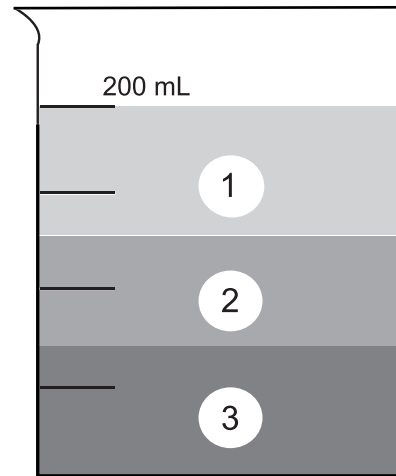
55 Three liquids were poured into a beaker and formed three layers. Which conclusion is best supported by the information above?

A The mass of Liquid 2 is greater than the mass of Liquid 3.

B The volume of Liquid 1 is less than the volume of Liquid 3.

C The density of Liquid 3 is greater than the density of Liquid 2.

D The buoyancy of Liquid 2 is greater than the buoyancy of Liquid 1.

BE SURE YOU HAVE RECORDED ALL OF YOUR ANSWERS ON THE ANSWER DOCUMENT.
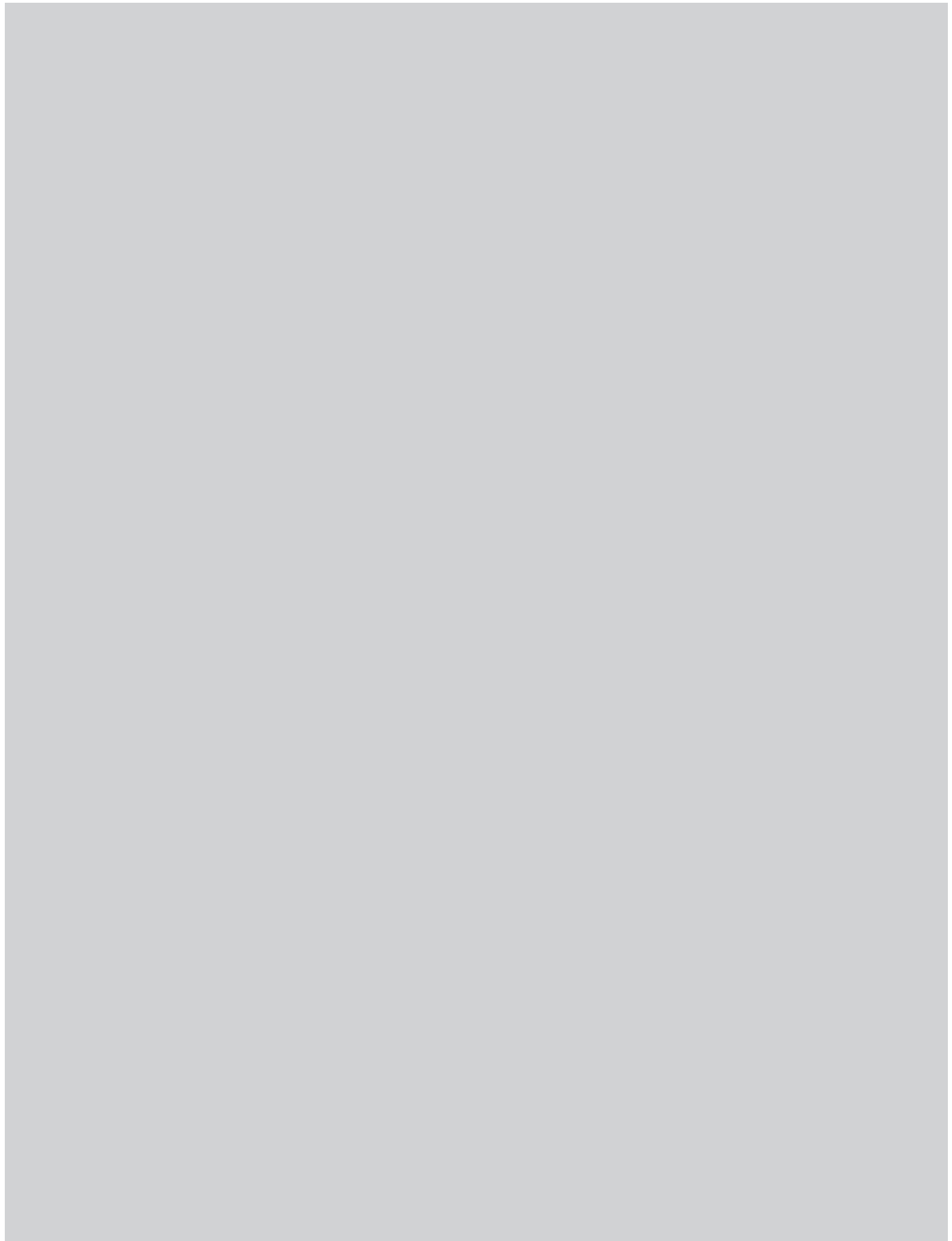
Page 110

STOP

SOCIAL STUDIES

SAMPLE A

Who served as president of the United States during the Civil War?

A   Thomas Jefferson

B   Andrew Jackson

C   James K. Polk

D   Abraham Lincoln

STOP

Use the table and your knowledge of social studies to answer the following question.

Change in Urban and Rural Population in Texas

Year	Percent Urban Population	Percent Rural Population
1900	17.1	82.9
1910	24.1	75.9
1920	32.4	67.6
1930	41.0	59.0
1940	45.4	54.6
1950	62.7	37.3
1960	75.0	25.0
1970	79.7	20.3
1980	79.6	20.4
1990	80.3	19.7

Source: U.S. Census Bureau

1 According to the table above, by which year did the percent of urban population first become greater than the percent of rural population in Texas?

A 1910

B 1950

C 1970

D 1990

The Long March of the Red Army,
October 1934–October 1935
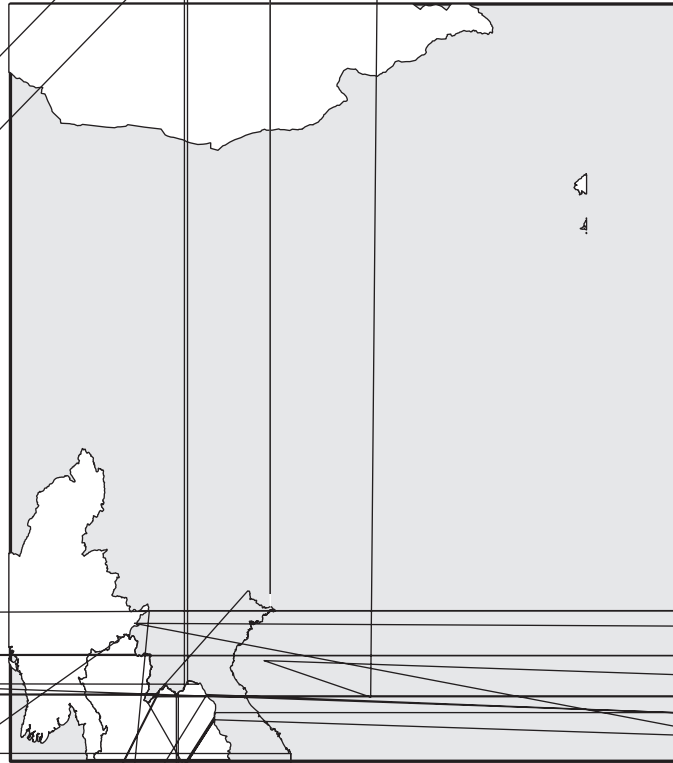
Use the information in the box and your knowledge of social studies to answer the following question.

```
• Sugar Act

• Stamp Act

• Townshend Acts

• Tea Act
```

3   American colonists protested against the acts listed in the box above because they believed the acts directly violated their —

  A   right to a free education

  B   religious freedom

  C   right to bear arms

  D   economic rights

4   One result of the U.S. Supreme Court decision in *Brown* v. *Board of Education of Topeka* was —

  F   the election of John F. Kennedy as U.S. president

  G   improved educational opportunities for African Americans

  H   compensation of Japanese Americans for their wartime internment

  J   the establishment of the U.S. Department of Labor

GO ON
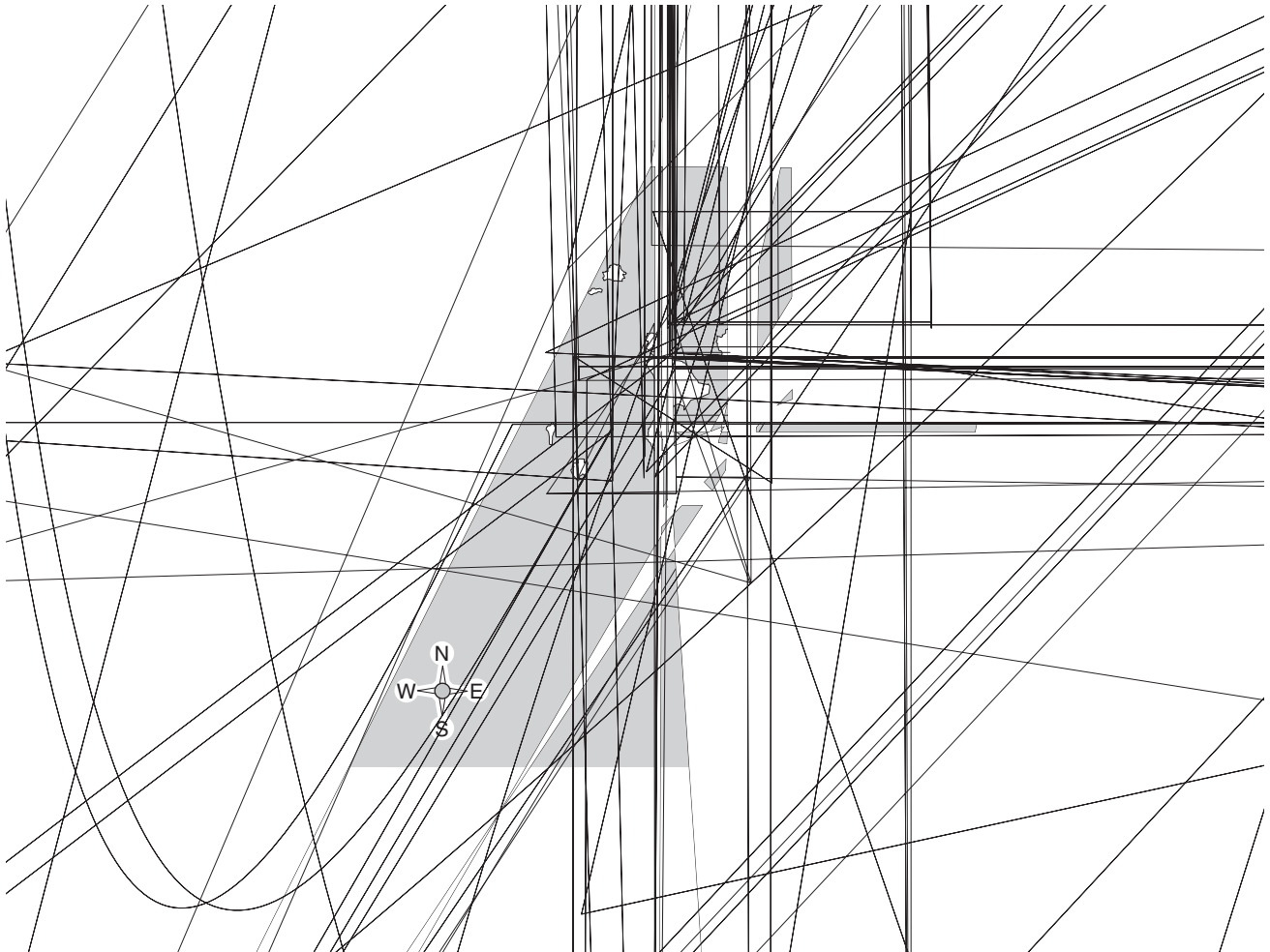
6 The unalienable rights of life, liberty, and the pursuit of happiness acknowledge the importance of the —

F community

G military

H ruler

J individual

7 What event caused the United States to immediately abandon neutrality during World War II?

A The attack on Pearl Harbor

B The Warsaw Ghetto uprising

C The bombing of Great Britain

D The Battle of Stalingrad

Use the photograph and your knowledge of social studies to answer the following question.

Fumigating for Mosquitoes

© Publishers Photo Service

8 Why was it necessary to perform the activity shown above during the construction of the Panama Canal?

    F To drive the native population away

    G To preserve crops grown to feed workers

    H To prevent the spread of yellow fever

    J To protect vegetation found in the area

GO ON

9 Which of the following New Deal programs continues to affect the lives of American workers?

    A Civilian Conservation Corps

    B Social Security Administration

    C National Recovery Administration

    D Agricultural Adjustment Act

GO ON

Use the map and your knowledge of social studies to answer the following question.

Military Occupation Zones in Berlin, 1949

▨ American	⬚ French	+++++ Railroad
▨ British	▨ Soviet	✈ Airport
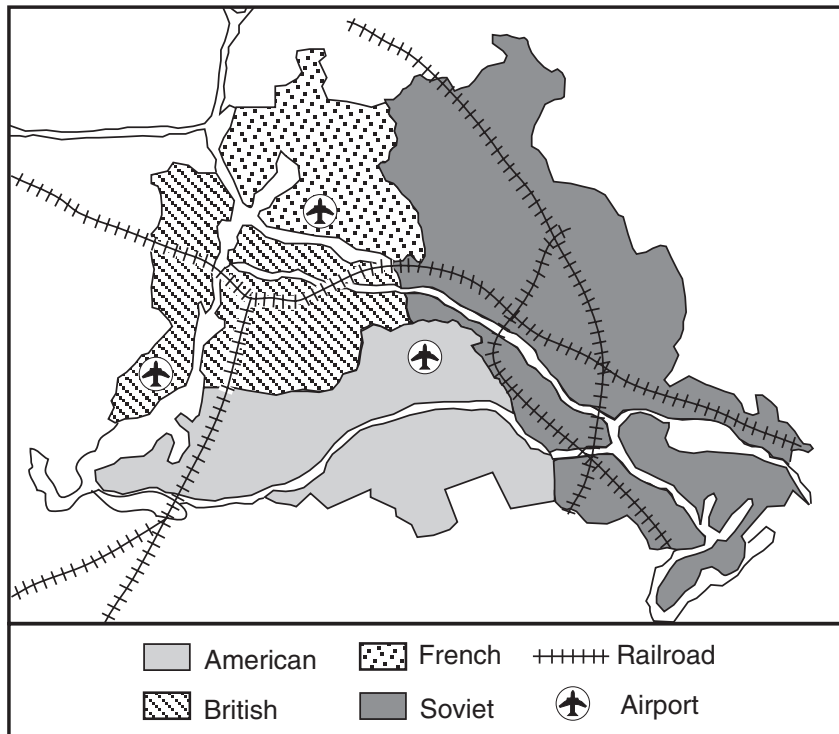
10 Which statement is supported by the information on the map?

    F   Berliners could travel freely to any part of the city.

    G   Only planes had international access to Berlin.

    H   The four occupying nations worked to unite Berlin under one government.

    J   The Soviet zone lacked direct access to air travel.

11 The prosperity of the 1920s caused many consumers to become overconfident in the economy. One result of this overconfidence was that —

A the U.S. government increased regulation of business

B many Americans purchased goods on credit

C fewer Americans invested in the stock market

D industrial production declined drastically

Use the poster and your knowledge of social studies to answer the following question.
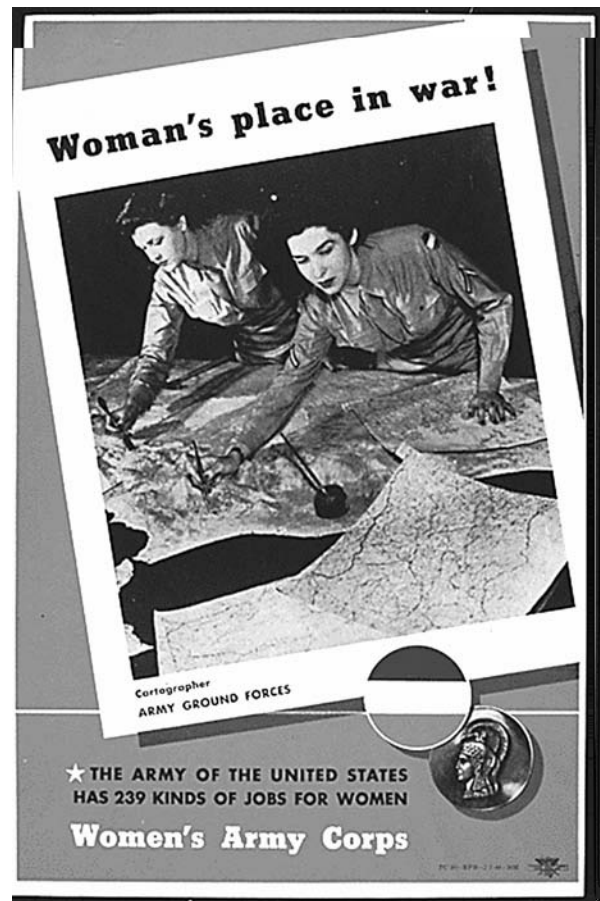
Source: NARA

12 Which of the following statements does the World War II poster above best support?

F Women were assigned to unimportant positions.

G Women worked in nontraditional occupations.

H Women did not meet the demands placed on them.

J Women were expected to return to homemaking after the war.

GO ON

Use the excerpt and your knowledge of social studies to answer the following question.

How long are the Spaniards to drench Cuba with the blood and tears of her people? How long is the peasantry of Spain to be drafted away to Cuba to die miserably in a hopeless war, that Spanish nobles and Spanish officers may get medals and honors?

— New York World, *1897*

13 The author of this article most likely believed that U.S. involvement in the Spanish-American War was necessary in order to —

    A   prevent further casualties in Cuba

    B   protect U.S. economic interests in Spain

    C   make Cuba a U.S. colony

    D   seize control of Spanish territories

Use the diagram and your knowledge of social studies to answer the following question.

```
┌─────────────────┐          ┌─────────────────┐
│  Raw materials  │          │   New markets   │
│   needed for    │          │   needed for    │
│   industrial    │          │  manufactured   │
│   production    │          │     goods       │
└─────────────────┘          └─────────────────┘
          \                      /
           \                    /
            \                  /
              ( ? )
```
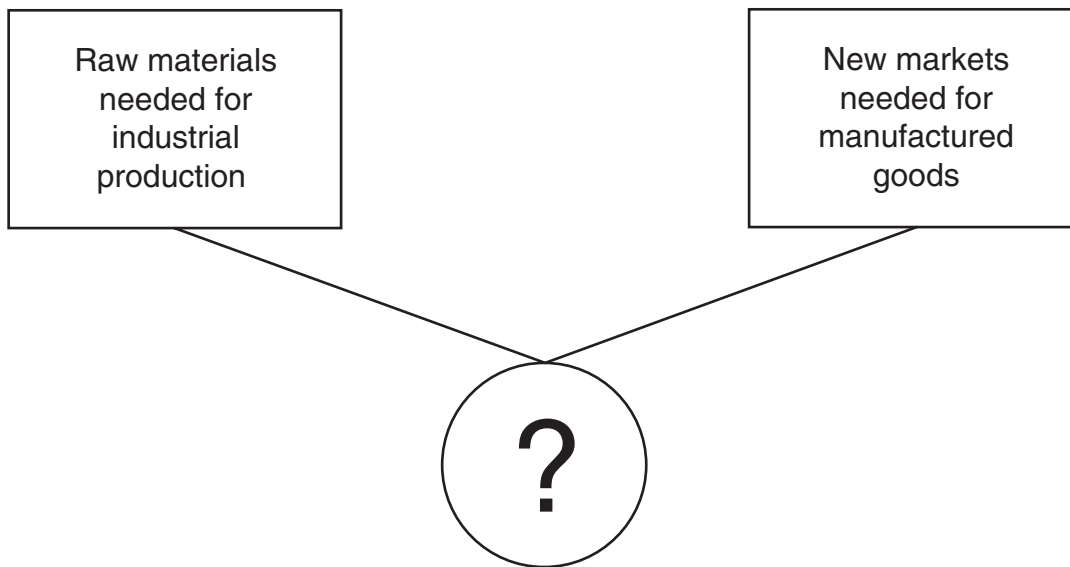
14   Which of the following best completes the diagram above?

    F   Effects of increased European immigration

    G   Reasons for the development of international trade

    H   Causes of government regulation of business

    J   Reasons for widespread unemployment

GO ON

Use the excerpt and your knowledge of social studies to answer the following question.

> In my opinion, in light of the intelligence, the idealism, and the educational achievement of the youth of today . . . the youngsters today are being discriminated against just as the women were until a few decades ago.
>
> — *Senate Majority Leader Mike Mansfield, 1971*

15 It can be inferred from the excerpt above that Senator Mansfield advocated the right of 18-year-olds to —

A enlist in the army

B marry the person of their choice

C attend the college of their choice

D vote in national elections

16 The 1973 occupation of Wounded Knee in South Dakota was one of several civil rights protests led by the —

F Black Panthers

G American Indian Movement

H United Farm Workers

J National Organization for Women

Use the information in the box and your knowledge of social studies to answer the following question.

- National Aeronautics and Space Administration created
- National Defense Education Act passed
- Federal money to improve schools granted
- Money for research and development appropriated
- U.S. military industrial complex grew

17 Which event stimulated the development of the measures listed above?

A Dropping of the atomic bomb on Hiroshima

B Launching of the Soviet satellite *Sputnik I*

C Army-McCarthy hearings

D U2 incident over the Soviet Union

GO ON

19 The North American Free Trade Agreement (NAFTA) was designed to increase business profits and promote trade between which three countries?

    A Canada, Great Britain, and Australia

    B Mexico, Cuba, and Brazil

    C Canada, the United States, and Great Britain

    D Mexico, Canada, and the United States

Use the map and your knowledge of social studies to answer the following question.

National Parks Attributed to President Theodore Roosevelt

Olympic
(★1909)

Crater Lake
(1902)

Sully's Hill
(1904)

Wind Cave
(1903)

Lassen Volcanic
(★1907)

Grand Canyon
(★1908)

Mesa Verde
(1906)

Petrified Forest
(★1906)

Platt
(1906)

N
W — E
S

KEY

National park
(Date became a national park)
(★Date became a national monument; later became a national park)
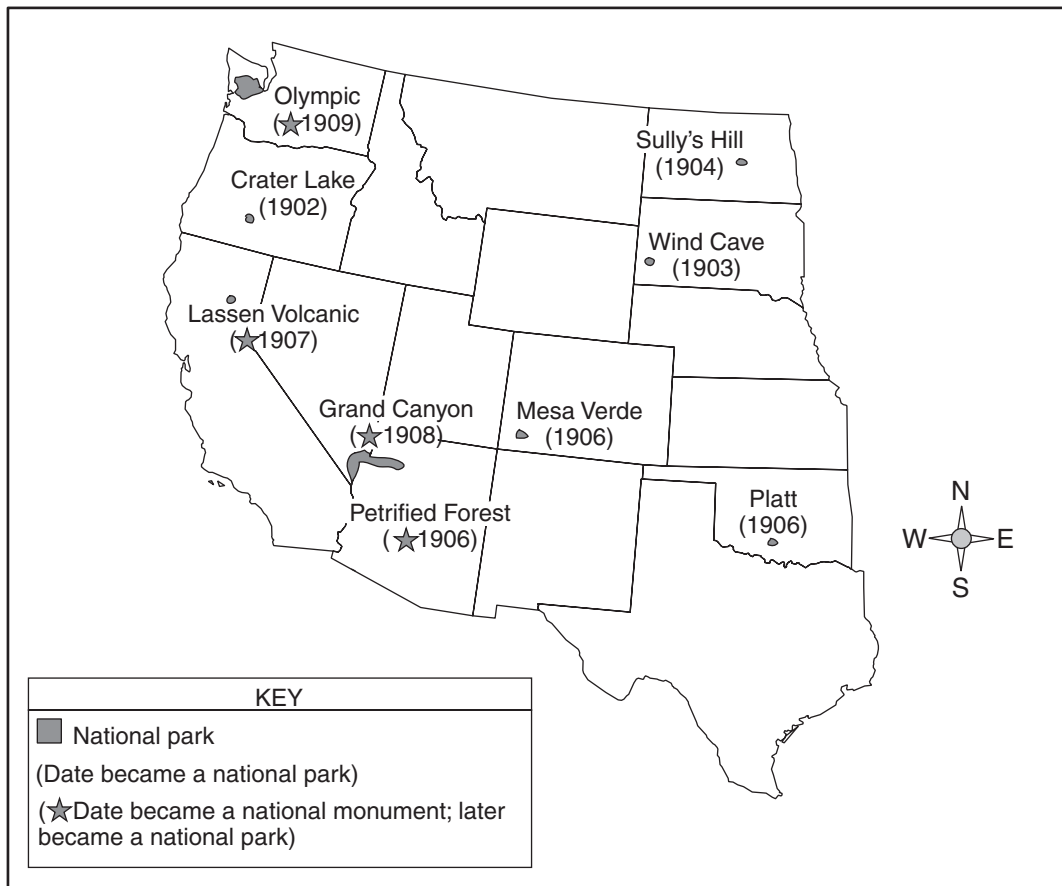
Source: U.S. Geological Survey

20 The map above best supports which statement about President Theodore Roosevelt?

    F Conservationism was a major concern for President Roosevelt.

    G President Roosevelt participated in big-game hunting.

    H Preservation of land for Native Americans was a priority for President Roosevelt.

    J President Roosevelt supported the reclamation of land for agricultural use.

21 Which document provided for the establishment of a weak central government?

   A The Federalist Papers

   B Mayflower Compact

   C Articles of Confederation

   D U.S. Constitution

Use the diagram and your knowledge of social studies to answer the following question.

```
                        ┌──────────────┐
                        │      ?       │
                        └──────────────┘
                               ↑
┌──────────────┐                            ┌────────────────────┐
│ Crusader for │                            │    Was awarded     │
│ social       │ ←──────            ──────→ │   Presidential     │
│ justice      │         ╲        ╱         │ Medal of Freedom   │
└──────────────┘          ╲      ╱          └────────────────────┘
                      ⎛   César    ⎞
                      ⎝  Chávez    ⎠
┌──────────────┐          ╱      ╲          ┌────────────────────┐
│ Advocate of  │ ←──────            ──────→ │   World War II     │
│ nonviolent   │                            │     soldier        │
│ resistance   │              ↓             └────────────────────┘
└──────────────┘       ┌──────────────┐
                       │ Leader of the│
                       │ United Farm  │
                       │ Workers Union│
                       └──────────────┘
```
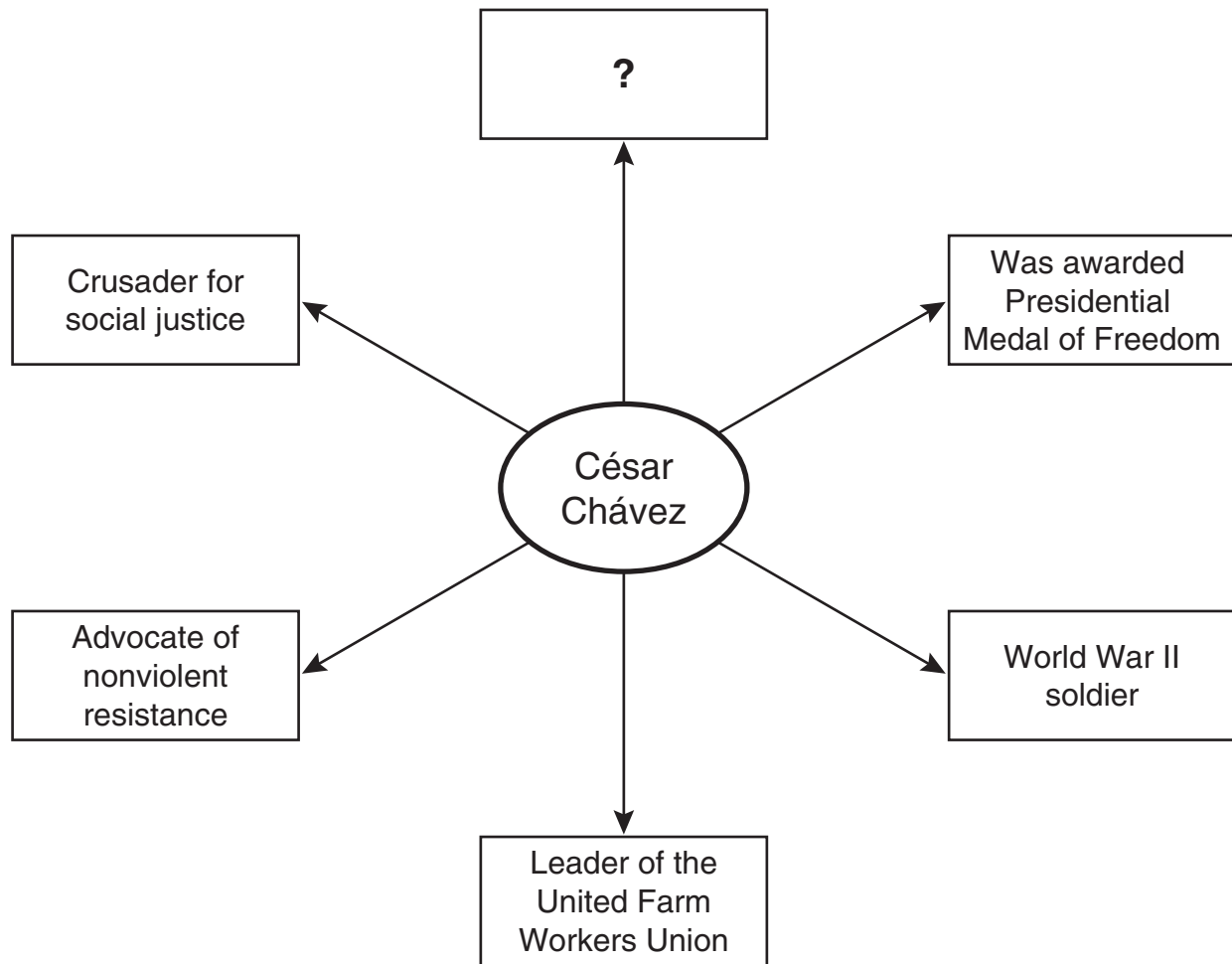
22   Which of the following best completes the diagram above?

    F   Famous inventor

    G   Labor organizer

    H   Public officeholder

    J   Wealthy industrialist

Use the table and your knowledge of social studies to answer the following question.

Selected U.S. Economic Legislation

Smoot-Hawley Tariff	Raised tariffs to an all-time high
Sherman Antitrust Act	Prevented the creation of monopolies for the purpose of restraining trade
General Agreement on Tariffs and Trade	Reduced quotas and limited tariffs
Gramm-Rudman-Hollings Act	Required the government to reduce spending when the budget deficit exceeded certain guidelines

23 Which of the following contributed to the post–World War II economic boom by decreasing the cost of imported goods?

   A   Smoot-Hawley Tariff

   B   Sherman Antitrust Act

   C   General Agreement on Tariffs and Trade

   D   Gramm-Rudman-Hollings Act

Vessels of every kind, whatever their flag, their character, their cargo, their destination, their errand, have been ruthlessly sent to the bottom without warning and without thought of help or mercy for those on board. . . .

— *Excerpt from President Woodrow Wilson's War Message, April 2, 1917*

24 The excerpt above supports justification for the U.S. entry into which of the following wars?

    F   Spanish-American War

    G   World War I

    H   World War II

    J   Russo-Japanese War

Excerpt from the Sixth Amendment to the U.S. Constitution

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the state and district wherein the crime shall have been committed. . . .

25 The provisions made in this excerpt were intended to address which of the following grievances listed in the Declaration of Independence?

    A   "For imposing taxes on us without our consent . . ."

    B   "For quartering large bodies of armed troops among us . . ."

    C   "For cutting off our trade with all parts of the world . . . "

    D   "For transporting us beyond seas to be tried for pretended offenses . . . "

GO ON

Use the diagram and your knowledge of social studies to answer the following question.

The Domino Theory

```
┌─────────────────────────────┐
│       If Vietnam            │
│    falls to Communism       │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│        Cambodia             │
│    falls to Communism,      │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│          Laos               │
│   falls to Communism, and   │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│  eventually all of Southeast Asia │
│     will fall to Communism. │
└─────────────────────────────┘
```
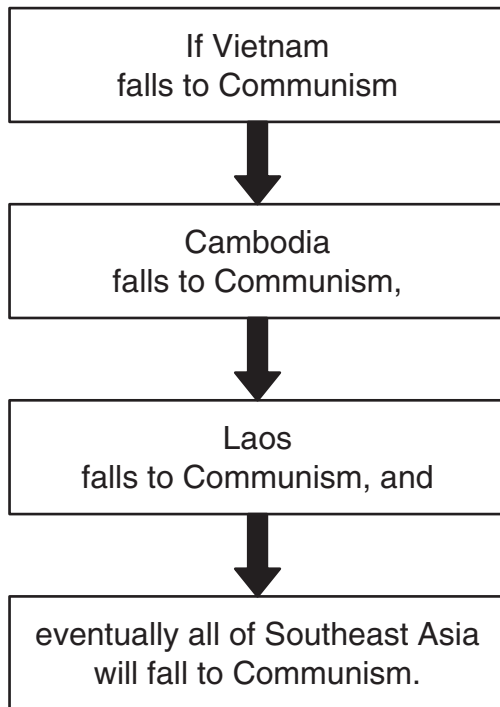
26 The theory illustrated above represents one reason why the United States continued to support —

F the Good Neighbor policy

G a policy of isolationism

H a policy of containment

J the Strategic Arms Limitations Talks

27 During the late 1800s, the United States took an expanded role in world affairs partially because of the acquisition of territory —

A in the Pacific

B on the African continent

C in the Middle East

D along the Baltic Sea

GO ON

29 The Korean conflict was part of the Cold War struggle between the United States and —

    A the United Kingdom

    B Japan

    C the Soviet Union

    D France

30 The U.S. Constitution is considered an evolving document because it —

    F has roots in earlier political documents and contains processes that allow for change

    G depends on citizens who are willing to protect liberty and justice

    H establishes a political system designed to control the use as well as the misuse of power

    J creates a framework that defines the authority of the state and federal governments

Use the graph and your knowledge of social studies to answer the following question.

India's Energy Balance

Quadrillion Btu

- ······ Consumption
- – – Production
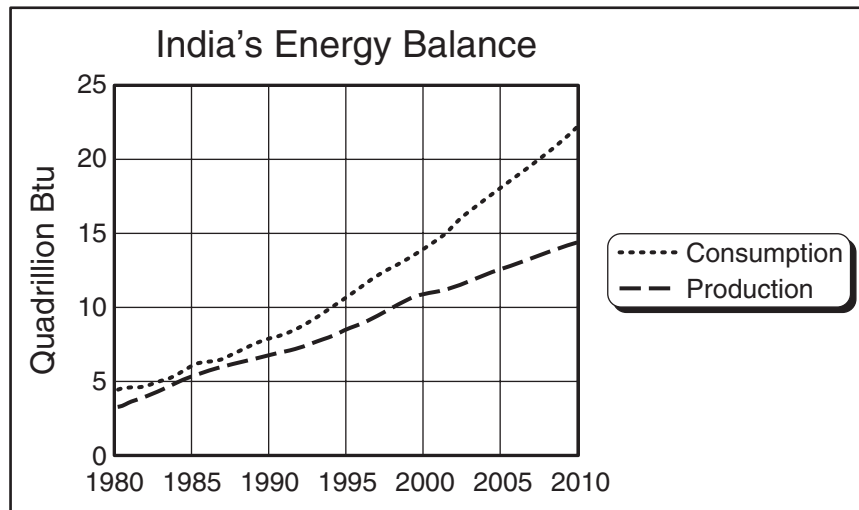
Source: U.S. Energy Information Administration

31 If the trend illustrated by the graph continues, India will most likely need to —

A limit the production of refined petroleum products

B import greater amounts of fuel

C produce less energy than it uses

D reduce its production of nuclear energy

Use the information in the box and your knowledge of social studies to answer the following question.

> • Strong currents
>
> • Poor weather conditions
>
> • Inadequate harbors

32 During World War II, the geographic factors listed above led Germany to believe that the invasion of Europe would not take place at —

    F Amsterdam

    G Calais

    H Flanders

    J Normandy

Use the headlines and your knowledge of social studies to answer the following question.

Daily News
The Spirit of St. Louis Lands in Paris

Daily News
The "Flying Fool" Claims $25,000 Prize

Daily News
Navy Ship Escorts Hero Back to Ticker-Tape Parade

33 The achievement of which of these individuals is best captured by the headlines above?

    A   Wilbur Wright

    B   Amelia Earhart

    C   Charles Lindbergh
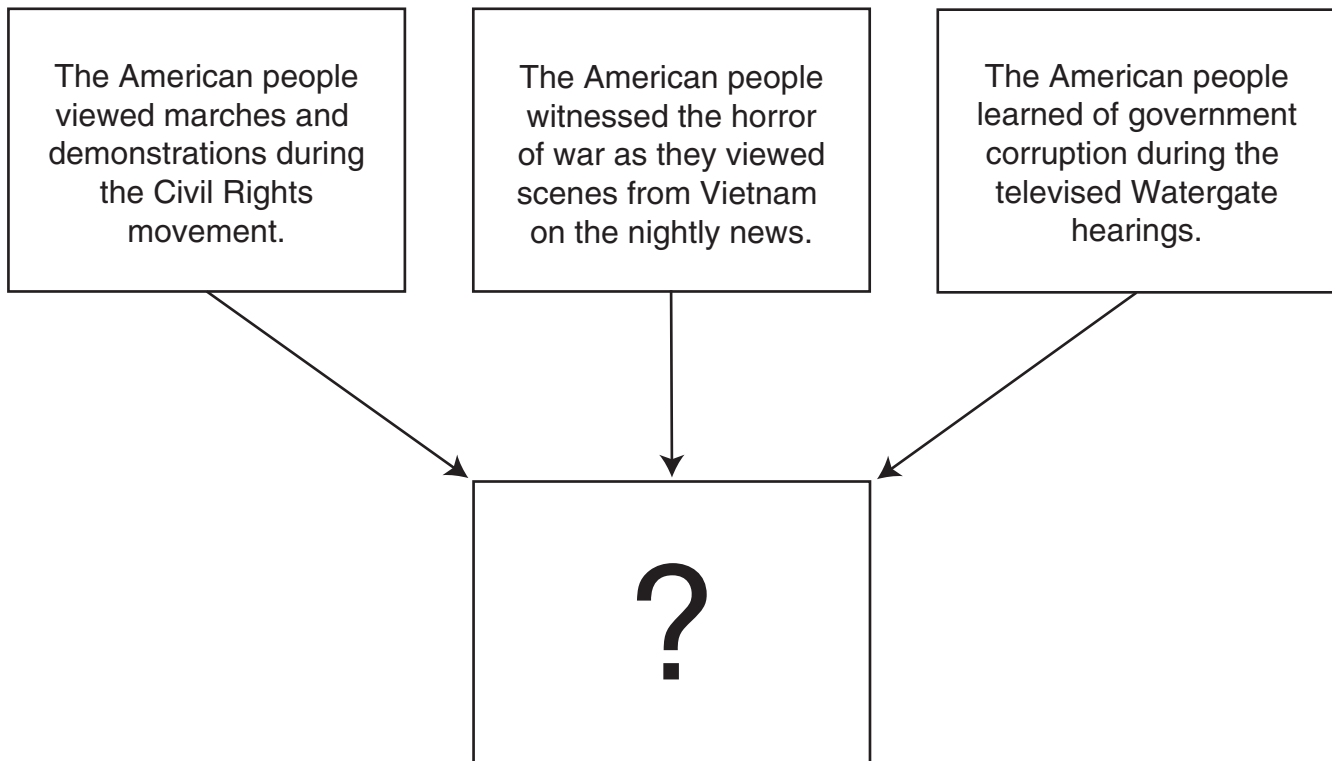
    D   Billy Mitchell

> Now, since we could see no hope of better times through the old parties and have got together and formed a new party. . . . We want . . . better prices for our produce; we want more money in circulation to pay for our labor or our produce. . . . We are living in another man's house, working another man's land. . . .
>
> — *Let Us Quit the Old Party, 1892*

34 It can best be concluded that the new political party discussed in the excerpt above would represent the hopes of —

F industrialists

G immigrant factory workers

H urban merchants

J farmers

35 What was the name of the peace settlement that made Germany accept sole responsibility for World War I?

A Treaty of Portsmouth

B Geneva Accords

C Marshall Plan

D Treaty of Versailles

GO ON

Use the diagram and your knowledge of social studies to answer the following question.

The American people viewed marches and demonstrations during the Civil Rights movement.	The American people witnessed the horror of war as they viewed scenes from Vietnam on the nightly news.	The American people learned of government corruption during the televised Watergate hearings.

?

36 Which of the following best completes the diagram above?

F Examples of judicial abuse of power

G The results of free speech and a free press

H Examples of government checks and balances

J The impact of the separation of powers

GO ON

37 The Voting Rights Act of 1965 suspended literacy tests used by some states —

A as barriers to prevent minority participation in the election process

B to ensure the election of minority candidates

C to ensure that financial contributions were made to political candidates

D as justification for increasing the number of election officials

Use the information in the box and your knowledge of social studies to answer the following question.

> • Meat Inspection Act
>
> • Secret ballot
>
> • 17th Amendment
>
> • National Park Service
>
> • Initiative, recall, and referendum

38 The above items would most likely be referred to in an essay written about —

F U.S. foreign policy

G environmental conservation

H Progressive Era reform

J civil rights legislation

39 In the late 19th century, immigration most affected American cities by contributing to which of the following?

A Overcrowded housing

B Movement to the suburbs

C Development of city parks

D Financing railroad construction

GO ON

Use the cartoon and your knowledge of social studies to answer the following question.

40 According to the cartoon above, which of the following problems was associated with Prohibition?

F   Smuggling liquor

G   Counterfeiting

H   Gambling

J   Embezzling funds

Use the excerpt and your knowledge of social studies to answer the following question.

> It is hereby declared to be the policy of the President that there shall be equality of treatment and opportunity for all persons in the armed services without regard to race, color, religion or national origin.
>
> — *Executive Order 9981, July 26, 1948*

41 President Harry Truman initiated the executive order excerpted above to —

A   help veterans finance their education

B   reduce the size of the military

C   provide benefits for veterans

D   integrate the military

Organization of Petroleum Exporting Countries (OPEC), 2000

Use the excerpt and your knowledge of social studies to answer the following question.

> For we must consider that we shall be as a city upon a hill. The eyes of all people are upon us . . . we are commanded . . . to walk in His ways and to keep His commandments and his ordinance and his laws. . . .
>
> — *John Winthrop, 1630*

43 Before arriving in North America, Winthrop penned his goals for the Massachusetts Bay Colony. Which statement about the colonial period can best be supported from the excerpt?

    A Some colonies were founded on religious principles.

    B Some colonies were havens of religious tolerance.

    C Some colonies required religious affiliation for holding an elective office.

    D Some colonies promoted religious education in the public schools.

Use the table and your knowledge of social studies to answer the following question.
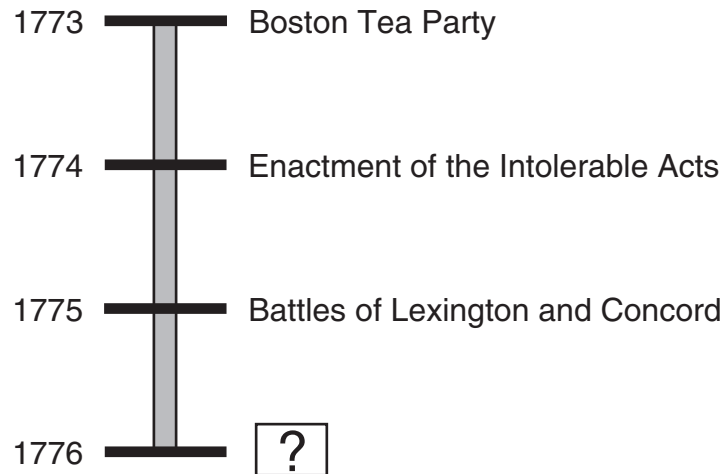
Cases of Polio Reported to the United Nations International Children's Emergency Fund (UNICEF)

UNICEF Region	Number of Cases Reported (1990)	Number of Cases Reported (2000)
Sub-Saharan Africa	4,226	1,868
Middle East/North Africa	675	87
South Asia	11,622	808
East Asia/Pacific	6,479	108
Latin America/Caribbean	18	0
Central and Eastern Europe/ Commonwealth of Independent States	345	0
World total	23,365	2,871

Source: UNICEF

44 Which action should the UNICEF regions most likely take to maintain the trend depicted in the chart above?

F Promote an effective vaccination program

G Expand immigration restrictions

H Spend more money for urban renewal

J Force families to relocate

45 Which of the following best explains how economic growth during World War II helped end the Great Depression?

A Military production during the war created jobs.

B Relaxation of production standards increased productivity.

C Reduced immigration led to higher wages.

D Government rationing created a fuel surplus.

GO ON

Use the time line and your knowledge of social studies to answer the following question.

1773	Boston Tea Party
1774	Enactment of the Intolerable Acts
1775	Battles of Lexington and Concord
1776	?

46 Which of the following events completes the time line?

F Passage of the Northwest Ordinance

G Writing of the Declaration of Independence

H Ratification of the U.S. Constitution

J Signing of the Treaty of Paris

Page 147

Use the photograph and your knowledge of social studies to answer the following question.

© Getty Images 16199

47 Based on the photograph above, which statement best explains why the Anasazi homes at Mesa Verde were built into the sides of cliffs?

    A   The cliffs provided mineral resources for trade.

    B   The cliffs made protecting the community easier.

    C   The cliffs allowed water to be diverted for irrigation.

    D   The cliffs made trapping animals more productive.

GO ON

48 A 19th-century technological innovation that increased trade and commerce along rivers was —

    F the generator

    G the steamboat

    H the clipper ship

    J the compass

Use the information in the box and your knowledge of social studies to answer the following question.

> ✓ This viral disease affects the nervous system.
>
> ✓ Epidemics occurred in cycles during the first half of the 1900s.
>
> ✓ Franklin D. Roosevelt was paralyzed by this disease.
>
> ✓ Called infantile paralysis, it often struck children.
>
> ✓ People produce antibodies for this disease when immunized.
>
> ✓ It has been virtually eliminated in the United States.

49 What is the best title for the box above?

    A Rachel Carson Raises Environmental Concerns

    B Jonas Salk Develops the Polio Vaccine

    C Louis Pasteur Fights Rabies

    D Charles Drew Improves the Processing of Blood Plasma
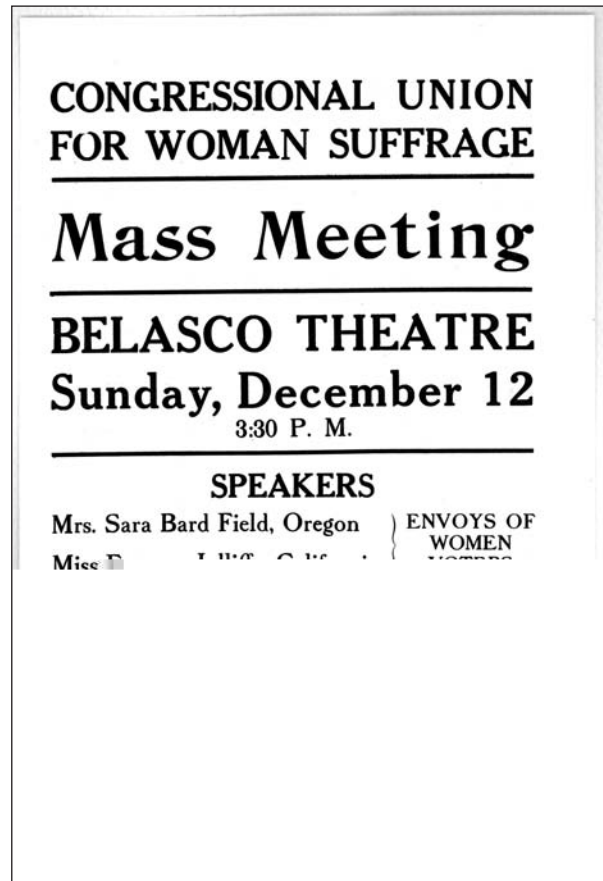
1968 Presidential Election
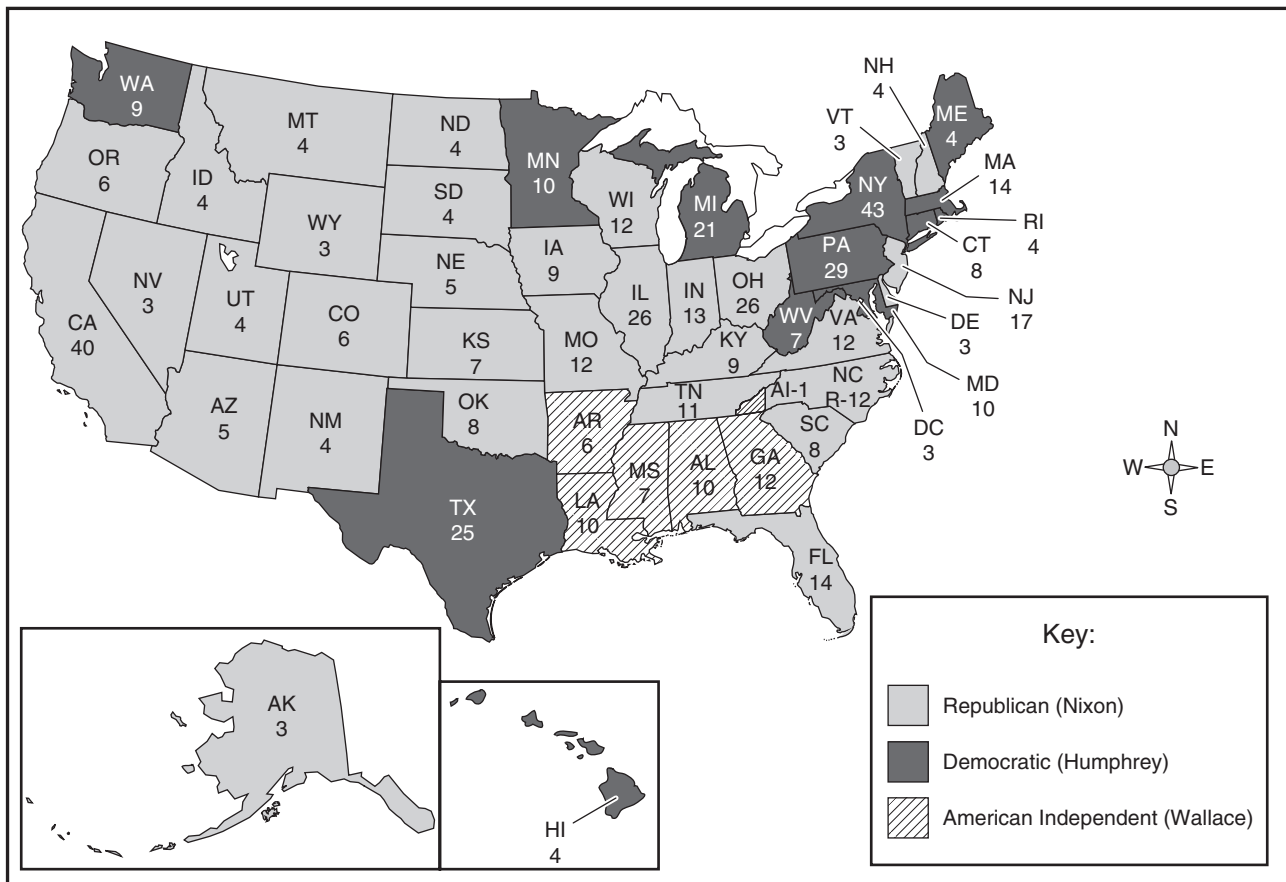
Source: U.S. Census Bureau

50 Which of the following statements about the 1968 presidential election is most accurate?

F Most of the southwest states went to Hubert Humphrey.

G George Wallace received more electoral votes in the West than Richard M. Nixon.

H Richard M. Nixon lacked support in the Midwest.

J George Wallace received his greatest support from southern states.

GO ON

51 Many Americans opposed U.S. membership in the League of Nations out of concern that it would —

  A place a financial burden on U.S. taxpayers

  B lead to U.S. involvement in international conflicts without congressional approval

  C expand the power of the president on domestic issues

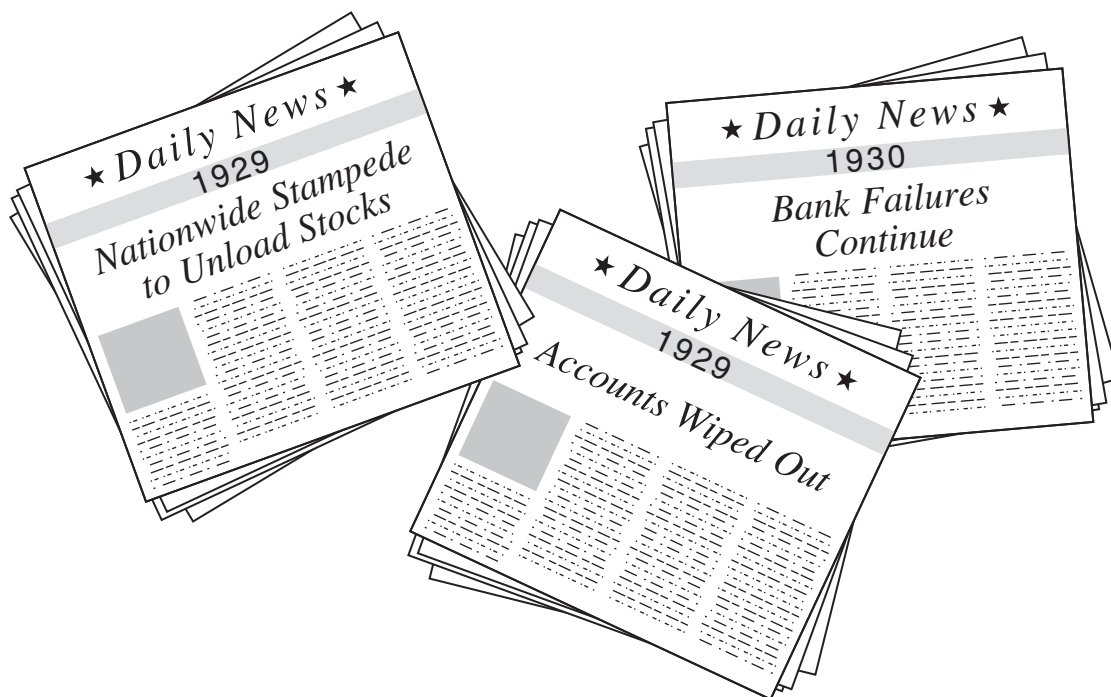 D prohibit the United States from annexing additional territory

Use the poster and your knowledge of social studies to answer the following question.

CONGRESSIONAL UNION FOR WOMAN SUFFRAGE

Mass Meeting

BELASCO THEATRE
Sunday, December 12
3:30 P. M.

SPEAKERS

Mrs. Sara Bard Field, Oregon   ENVOYS OF WOMEN
Miss D   lli   VOTERS

Source: Library of Congress

52 The poster above used which of the following to advertise a meeting in support of women's suffrage?

  F Freedom of religion

  G Right to bear arms

  H Freedom of the press

  J Right to a fair trial

GO ON

Use the headlines and your knowledge of social studies to answer the following question.

Daily News ★ 1929 — Nationwide Stampede to Unload Stocks

★ Daily News ★ 1930 — Bank Failures Continue

★ Daily News ★ 1929 — Accounts Wiped Out

53 The events described in the newspaper headlines above were a cause of —

   A   the end of Progressive reform

   B   World War I

   C   the rise of the Ku Klux Klan

   D   the Great Depression

Use the information in the box and your knowledge of social studies to answer the following question.

The Great Wall of China

- Considered one of the great wonders of the world

- Began as independent defensive fortifications during the Spring, Autumn, and Warring States periods of Chinese history

- Independent walls connected during the Qin dynasty

- Continued to be constructed through the Ming dynasty

- Stretches for 4,163 miles across deserts, grasslands, and mountains

- Considered the largest military structure in the world

54 Based on the information above, why did Chinese rulers modify the physical environment by creating a massive wall across the country?

    F To keep out enemy invaders

    G To prevent the annual flooding of Chinese rivers

    H To provide jobs for Chinese citizens

    J To encourage foreign trade

Use the photograph and your knowledge of social studies to answer the following question.

55 This photograph shows child workers in a textile mill. In the late 19th and early 20th centuries, many U.S. employers —

    A   required vocational training programs for children

    B   hired children as a source of cheap labor

    C   sought government regulation of child labor

    D   provided safe working conditions for child laborers