STUDENT NAME _____

Texas Assessment of Knowledge and Skills

GRADE 5
MATHEMATICS
READING

Administered June 2006

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	square	$P = 4s$
	rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
Area	square	$A = s^2$
	rectangle	$A = lw$ or $A = bh$
	triangle	$A = \frac{1}{2}bh$ or $A = \frac{bh}{2}$

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

Which digit is in the thousands place in the number 4,861,392?

A   6

B   4
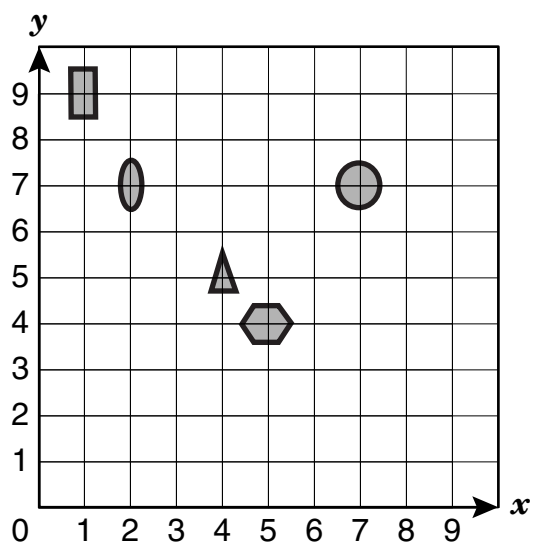
C   1

D   Not here

SAMPLE B

Joey has 8 books. Roberto has twice as many books as Joey has. How many books does Roberto have?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.
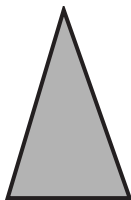
1 A manufacturer made the grid below to show the parts inside a machine.
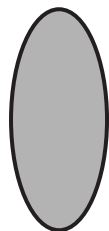
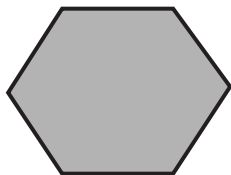

Which shape is located at the ordered pair (5, 4)?

A

C

B

D

2 The table below shows how the ticket prices to concerts and theme parks have increased over the years.

Ticket Prices

| Year	1970	1980	1990	2000
Concerts	$30	$40	$50	$60
Theme Parks	$6	$16	$26	$36

Based on the table, what is the relationship between the ticket prices of concerts and theme parks over the years?

F Concert ticket prices are $10 more than theme park ticket prices.

G Concert ticket prices are $36 more than theme park ticket prices.

H Theme park ticket prices are $24 less than concert ticket prices.

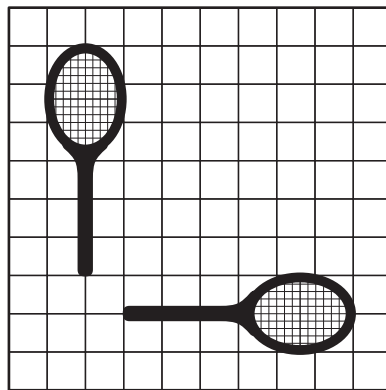**J** Theme park ticket prices are $26 less than concert ticket prices.

3 Roxanne's book has 240 pages. If she reads 20 pages a day, how many days will it take her to read the entire book?

A 12 days

B 48 days

C 120 days

D 260 days

4 Which pair of tennis rackets shows only a translation?

F
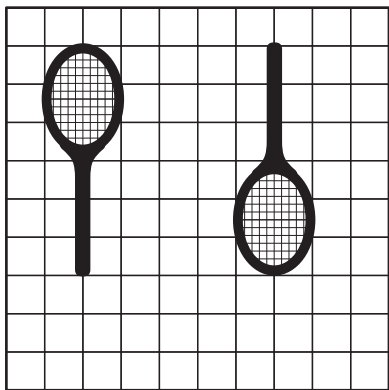
H

G
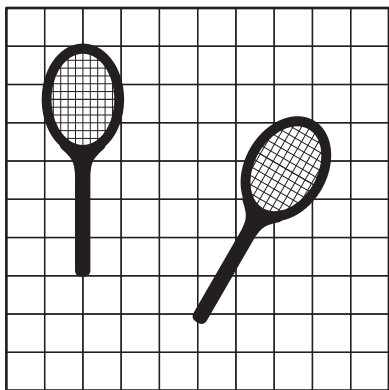
J
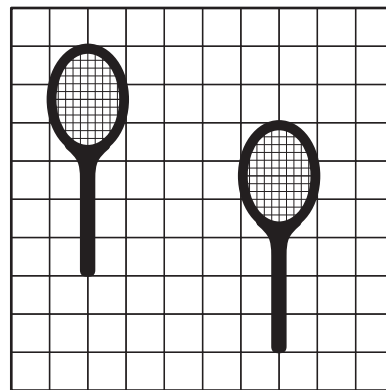
5 The sign below shows the prices of different items at Foster's Frozen Treats.

Foster's Frozen Treats

Ice-cream cone $1.12
Milk shake $1.35
Frozen-yogurt cone $1.07
Snow cone $0.89

All prices include tax.

Anthony bought one frozen-yogurt cone for each of his 2 friends. He also bought one for himself. If Anthony paid with a $5 bill, how much change should he have received?

A $0.57

B $1.79

C $3.21

D $2.86

6 The table below shows the distance a turtle traveled over a period of 8 minutes.

Turtle Travel

Number of Minutes	Number of Feet
0	0
4	1
8	3

Which graph best represents the data in the table?

F
Turtle Travel

Number of Feet vs. Number of Minutes

H
Turtle Travel

Number of Feet vs. Number of Minutes

G
Turtle Travel

Number of Feet vs. Number of Minutes

J
Turtle Travel

Number of Feet vs. Number of Minutes

GO ON
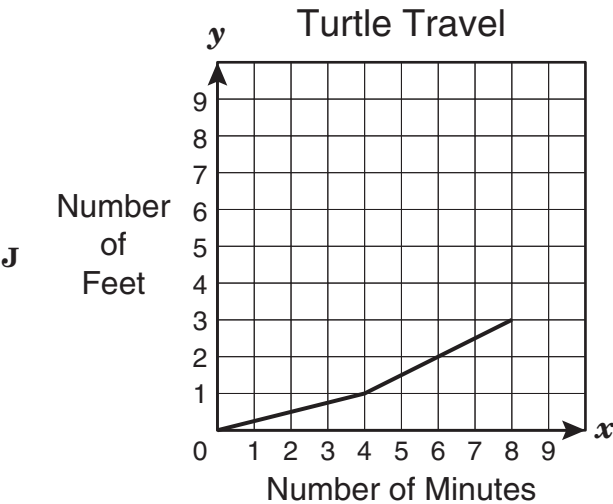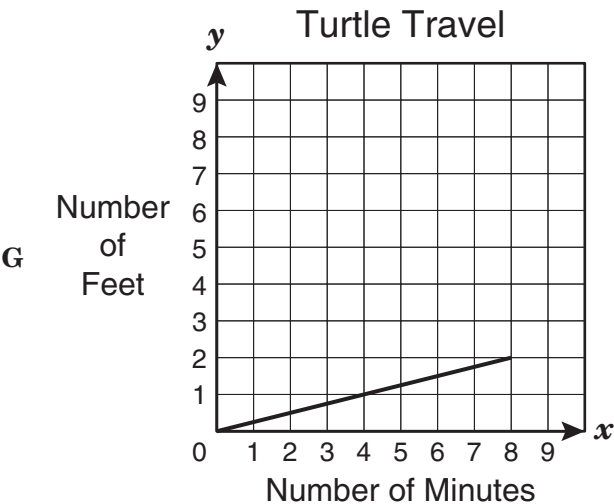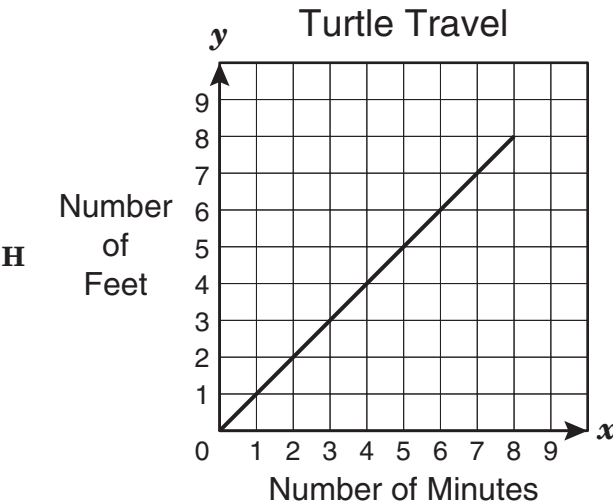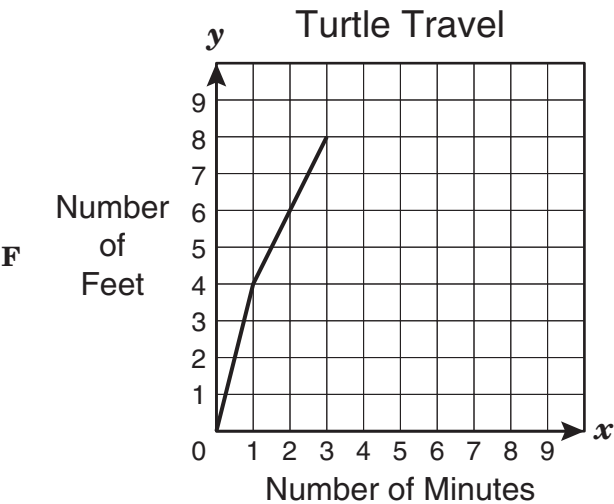
7 What fractional part of a meter is 1 centimeter?

A $\frac{1}{3}$

B $\frac{1}{10}$

C $\frac{1}{100}$

D $\frac{1}{1,000}$

8 The table below shows the price of different sizes of cereal boxes, including tax.

Cereal

Box Size	Price
10 ounces	$2.00
14 ounces	$3.00
20 ounces	$4.00

If Mrs. Cortez spent exactly $8.00 on cereal, which of the following could **NOT** be a combination of cereal boxes that she purchased?

F Two 14-ounce boxes and one 10-ounce box

G Two 10-ounce boxes and one 14-ounce box
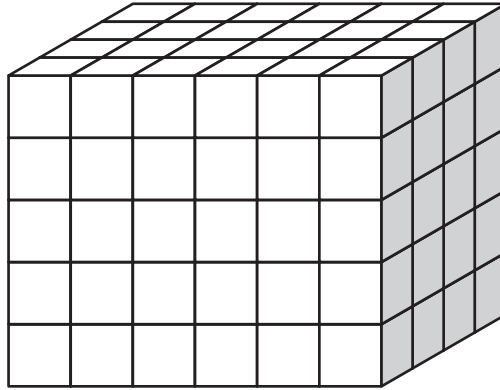
H Two 10-ounce boxes and one 20-ounce box

J Four 10-ounce boxes

GO ON

9 A model made of 1-foot cubes is shown below.

What is the volume of this model?

A 120 cubic feet

B 30 cubic feet

C 24 cubic feet

D 74 cubic feet

10 It took Emerald 15 minutes to apply a coat of paint to a piece of pottery. After each coat she waited close to 60 minutes for the paint to dry. Which is a reasonable amount of time it could have taken for Emerald to have applied 3 coats of paint and for the pottery to be completely dry?

F 105 minutes

G 225 minutes

H 195 minutes

J 903 minutes

11 Which statement about trapezoid *STUV* appears to be true?
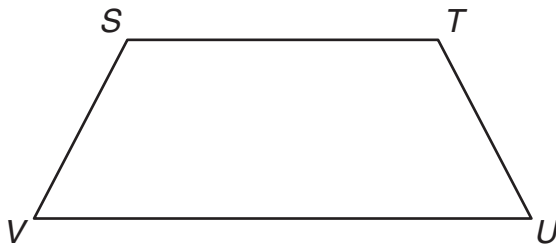
A $\overline{SV}$ and $\overline{VU}$ form a right angle.

B $\overline{ST}$ and $\overline{TU}$ are perpendicular.

C $\overline{SV}$ and $\overline{ST}$ form an acute angle.

D $\overline{ST}$ and $\overline{VU}$ are parallel.

12 The table below shows the results of the fifth graders' votes on their favorite wild animal.

Wild-Animal Votes

Animal	Number of Votes
Bear	125
Tiger	79
Elephant	14
Lion	105
Monkey	28

Which wild animal received the median number of votes?

F Bear

G Tiger

H Elephant

J Monkey

13 Yvonne needed 200 centimeters of ribbon. How many millimeters of ribbon did she need?

A 2 mm

B 200,000 mm

C 20 mm

D 2,000 mm

14 The weekly rainfall totals for 4 cities are listed in the table below.

Weekly Rainfall Totals

City	Rainfall (inches)
Lakeside	0.4
Mountain View	4.0
Pine Valley	0.04
Westside	0.004

According to the table, which city had four hundredths of an inch of rain?

F Lakeside

G Mountain View

H Pine Valley

J Westside

15 Gina drove with her family to her grandparents' house. The family drove 360 miles the first day, 385 miles the second day, and 240 miles the third day. What is the best estimate of the total number of miles Gina's family drove during these 3 days?

A 800 mi

B 900 mi

C 1,000 mi

D 1,100 mi

16 Alex is buying a few candy canes. The table shows the price of different numbers of candy canes.

Number of Candy Canes	20	25	30	40	45
Price	40¢	50¢	60¢	80¢	90¢

What is the relationship between the number of candy canes and the price in cents?

F The price is two times the number of candy canes.

G The number of candy canes is 30 less than the price.

H The price is 20 more than the number of candy canes.

J The number of candy canes is two times the price.

GO ON

17 The table below shows the number of minutes Aurora spent playing softball during one week at summer camp.

Softball Schedule

Day	Time (minutes)
Monday	75
Tuesday	75
Wednesday	75
Thursday	75
Friday	75
Saturday	90
Sunday	90

Which shows one way to find the total number of minutes Aurora spent playing softball during camp?

A Add 75 and 90

B Multiply 75 by 90

C Multiply 75 by 2, multiply 90 by 5, and then add the products

D Multiply 75 by 5, multiply 90 by 2, and then add the products

18 Fifteen students want to attend an orchestra concert. If each car can safely seat 4 students, how many cars will be needed to transport all 15 students to the concert?

F 19

G 4

H 11

J 3

19 Elaine saw the restaurant sign shown below.

✦ Manager's Special ✦

Choose 1 main dish, 1 side dish, and 1 bread for $4.99.

Main Dish	Side Dish	Bread
Meat loaf	Corn	Dinner roll
Chicken-fried steak	Beans	Biscuit
	Mashed potatoes	
	Macaroni & cheese	
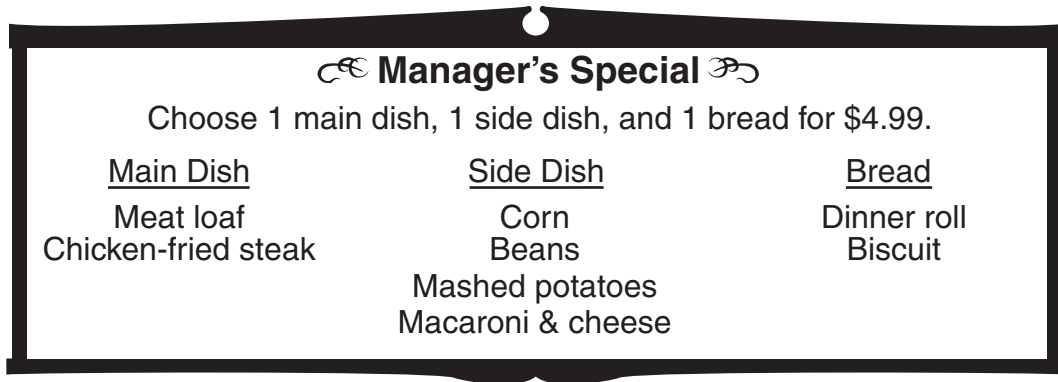
How many different combinations are possible if Elaine buys the manager's special?

A 8

B 16

C 24

D 11

20 The table below shows the amount of money that Tanya and Stacy spent on ingredients and materials for their lemonade stand.

Expenses

Item	Cost (including tax)
Lemons	$8.00
Sugar	$1.37
Pitcher	$2.58
Plastic cups	$3.79
Poster board	$0.84

Tanya and Stacy earned $20.00 selling lemonade. After they subtracted their expenses, how much money was left?

F $3.42

G $1.71

H $16.58

J $6.84

21 What number goes in the box to make this equation true?

$$\frac{4}{7} = \frac{\square}{21}$$

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

22 Kiran wants to paint a design along the top of each wall of his room. The stenciled design is 18 inches long. What information is needed to determine the number of times Kiran needs to paint the design?

F The height of his room

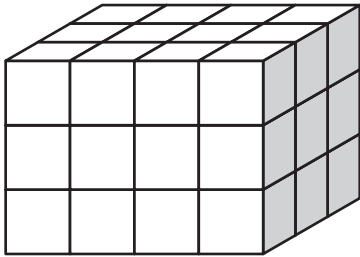**G** The perimeter of his room

H The amount of paint needed for each design

J The number of minutes required to paint each design

23 The figures below are made up of 1-unit cubes. Which of the figures has a volume of 48 cubic units?

A
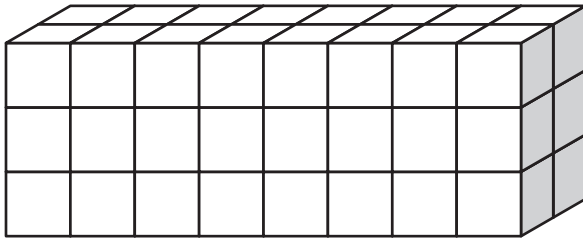
B

C
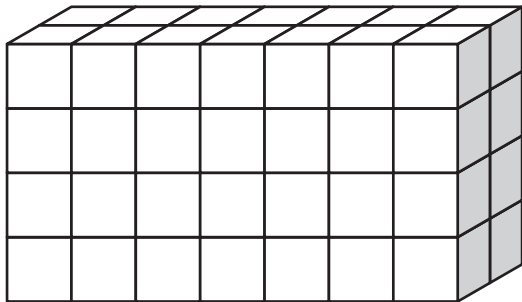
D
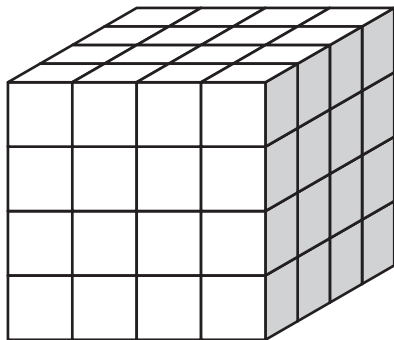
24   What are the prime factors of 30?

    F   1, 5, 6

    G   2, 5, 15

    H   1, 29

    J   2, 3, 5

25 The route of a bicycle race is shown below.

Start

Red barn

Field of flowers

Finish

Pond

Zeke's Crossing

Key

1 inch = 4 miles
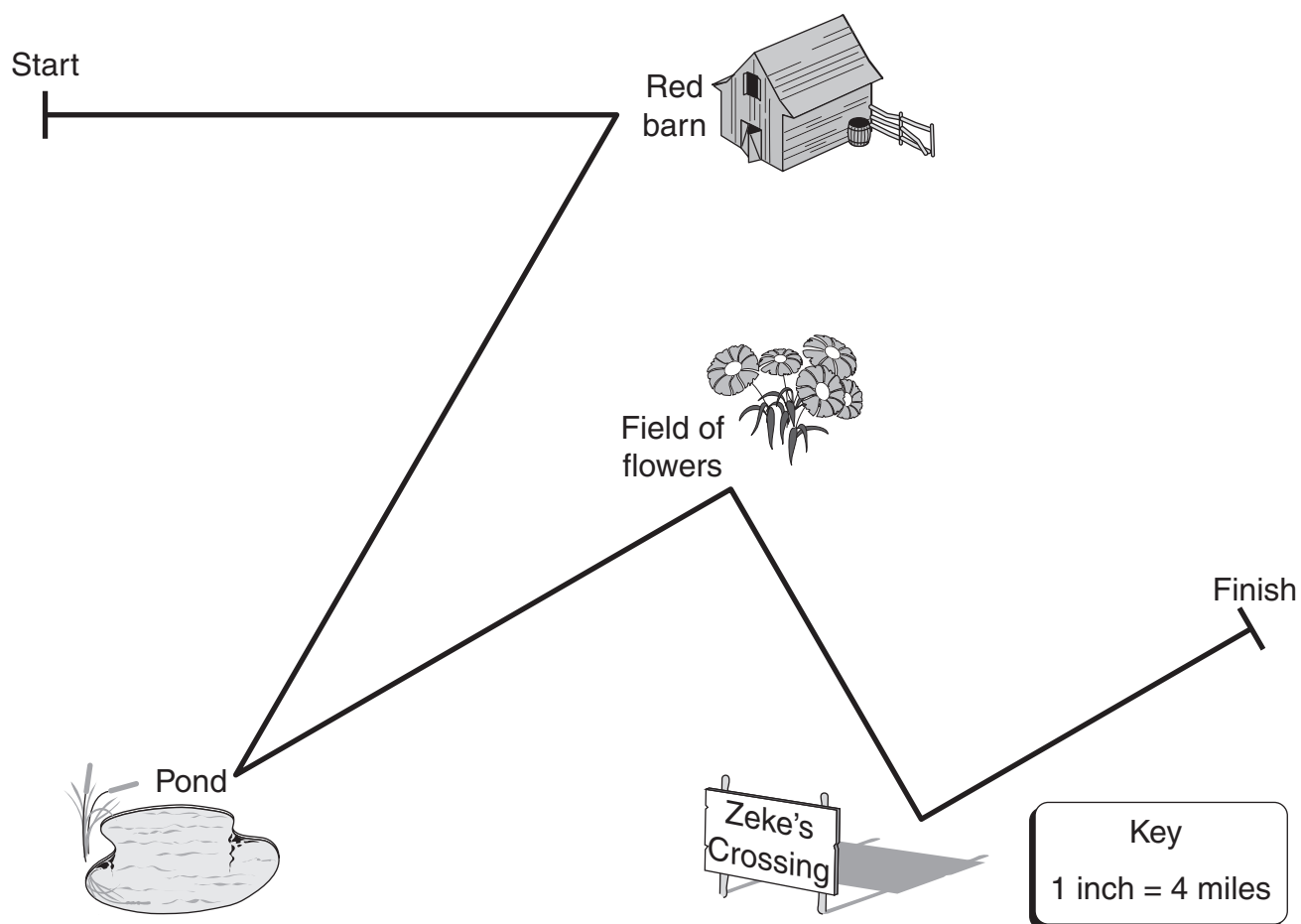
Use the ruler on the Mathematics Chart to measure to the nearest inch the line segments along the route from start to finish. What is the total distance in miles from start to finish?

A   35 mi

B   56 mi

C   140 mi

D   14 mi

26 The coordinate grid below represents a gym.

Gym
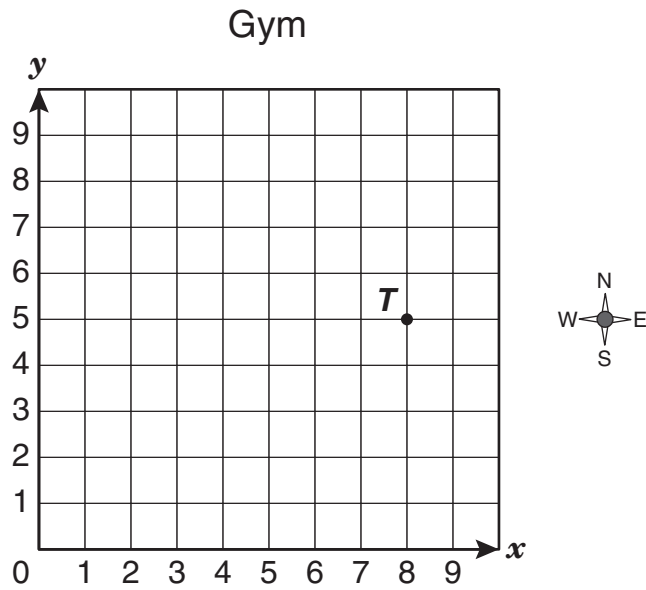
A trampoline is at point T in the gym. A balance beam that is not shown on the grid is 2 units south of the trampoline. What are the balance beam's coordinates?

F (8, 7)

G (8, 5)

H (8, 3)

J (6, 5)

27 Elena picked up a handful of coins from a bowl without looking. She got 8 pennies, 4 nickels, 3 dimes, and 1 quarter. What fraction of the coins that she picked up were dimes?

A $\dfrac{3}{16}$

B $\dfrac{3}{13}$

C $\dfrac{8}{16}$

D $\dfrac{10}{16}$

28 A rectangular driveway measures 38 feet by 12 feet. What is the area of the driveway?

F 50 square feet

G 100 square feet

H 316 square feet

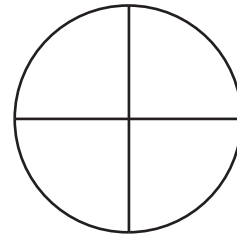**J** 456 square feet

29 Which figure appears to include perpendicular lines?

A

B
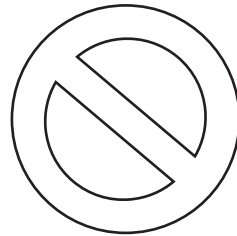
C
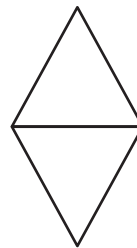
D
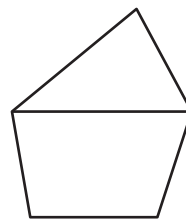
30 A community swimming pool is open on different days depending on the air temperature. The table below shows the air temperature on different days.

Swimming Pool

Date	Air Temperature
May 1	68°F
June 1	73°F
July 1	82°F
August 1	87°F
September 1	92°F
October 1	75°F

Of the dates listed above, the pool was closed on May 1, June 1, and October 1. If the pool was open on all the other dates listed, which statement best describes the air temperature when the pool is open?

F The air temperature must be between 74°F and 90°F.

G The air temperature must be lower than 93°F.

H The air temperature must be higher than 75°F.

J The air temperature must be between 68°F and 92°F.

31 Which figure appears to have 2 obtuse angles and 2 acute angles?

A

B

C
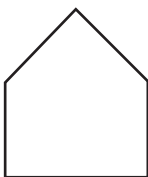
D

32 How is the number 5,956,021 written in words?

F Five billion, nine hundred fifty-six thousand, two hundred ten

G Five million, nine thousand fifty-six hundred, twenty-one

H Five million, nine hundred fifty-six thousand, twenty-one

J Five billion, nine hundred fifty-six million, twenty-one

33 Luisa cut a cake into 9 equal pieces. Her friends ate $\frac{1}{3}$ of the cake, as shown by the unshaded part of the picture below.
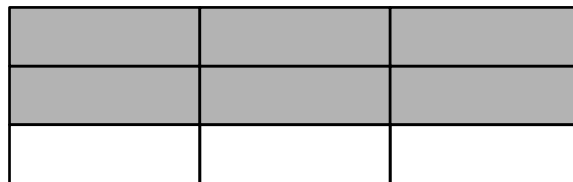
What fraction of the cake was left?

A $\frac{3}{4}$

B $\frac{2}{3}$

C $\frac{1}{2}$

D $\frac{1}{9}$

34 Sue is taller than Bianca and shorter than Colette. If Colette is shorter than Dora, who is the shortest person?

F Sue

G Bianca

H Colette

J Dora

Page 27

35 Orlando counted the number of people in line for tickets at the movie theater. Every time he saw 5 people, he added a check mark to his counting sheet, as shown below.

✓✓✓✓✓✓✓✓✓✓✓✓✓✓

Orlando saw 2 more people after he added his last check mark. Which could be used to find p, the total number of people he saw?

A $14 + 2 + 5 = p$

B $14 \times 2 \times 5 = p$

C $14 \times 5 + 2 = p$

D $14 + 5 - 2 = p$

36 The table below shows the number of students enrolled in 3 schools.

Lake City Schools

School	Number of Students Enrolled
Lake Elementary School	411
Lake Middle School	598
Lake High School	894

Which is the best estimate of how many more students are enrolled at Lake High School than at Lake Elementary School?

F 200

G 300

H 400

J 500

37 Stan was putting fruit into baskets. He wanted each basket to be more than $\frac{7}{10}$ full. Which fraction is more than $\frac{7}{10}$?

A $\frac{4}{5}$

B $\frac{1}{2}$

C $\frac{2}{3}$

D $\frac{3}{5}$

38 Each of Ted's 3 chess sets has 16 black pieces and 16 white pieces. Which shows one way to find the total number of black pieces and white pieces in all of Ted's chess sets?

F $(16 + 16) + 3 = \square$

G $(16 \times 16) + 3 = \square$

H $(16 + 16) \times 3 = \square$

J $(16 \times 16) \times 3 = \square$

39 Lara has taken 11 science quizzes this year. The table below shows the grades she earned on these quizzes.

Science Quizzes

Grade	Number
A	7
B	3
C	1

Based on these results, what is the probability that Lara will earn an A on her next science quiz?

A $\frac{1}{7}$

B $\frac{3}{11}$

C $\frac{1}{3}$

D $\frac{7}{11}$

40 Malcolm is studying polygons. Which of the following polygons has a prime number of sides?

F

G

H

J
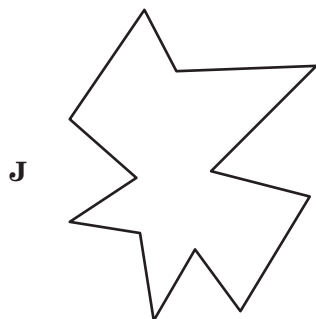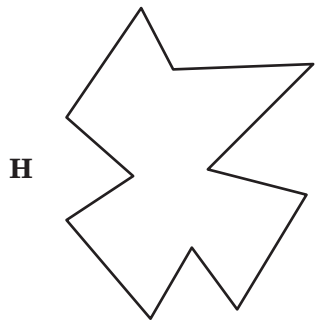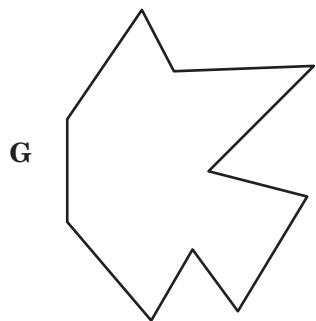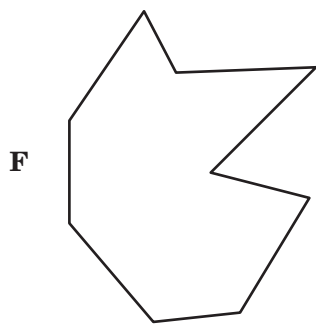
41 A picnic jug holds 4 quarts of lemonade. How many ounces of lemonade does it hold?

  A 128 oz

  B 100 oz

  C 80 oz

  D 64 oz

42 A statue in Greece stands 42 feet tall. If a lighthouse in Alexandria, Egypt, is 11 times as tall as the statue, how tall is the lighthouse?

  F 53 feet

  G 84 feet

  H 462 feet

  J 4,422 feet

43 The members of Marynell's family had their pictures taken at a photo studio. Their choices for ordering pictures are shown in the table below.

Photo Choices

Size (inches)	Style
2 × 3	Color
3 × 5	Black-and-white
4 × 6	
5 × 7	
8 × 10	
11 × 17	

How many different combinations of size and style can Marynell's family choose from?

A   8

B   12

C   6

D   36

44 Which pair of figures below shows only a reflection?

F

G

H

J

STOP
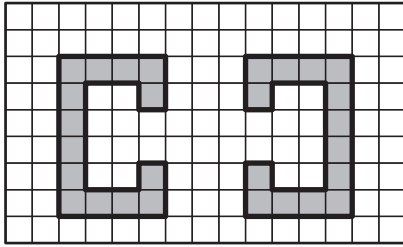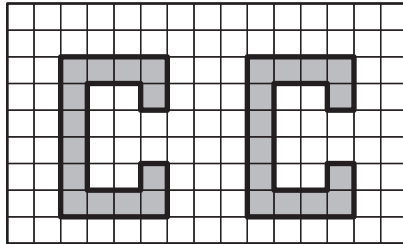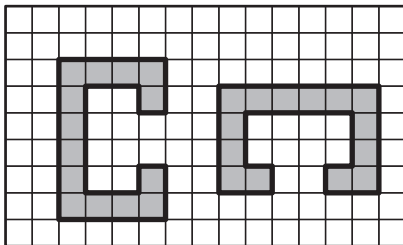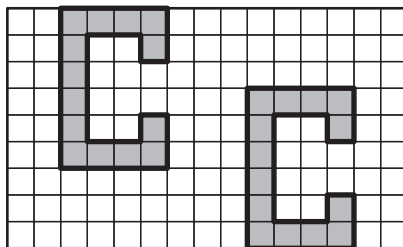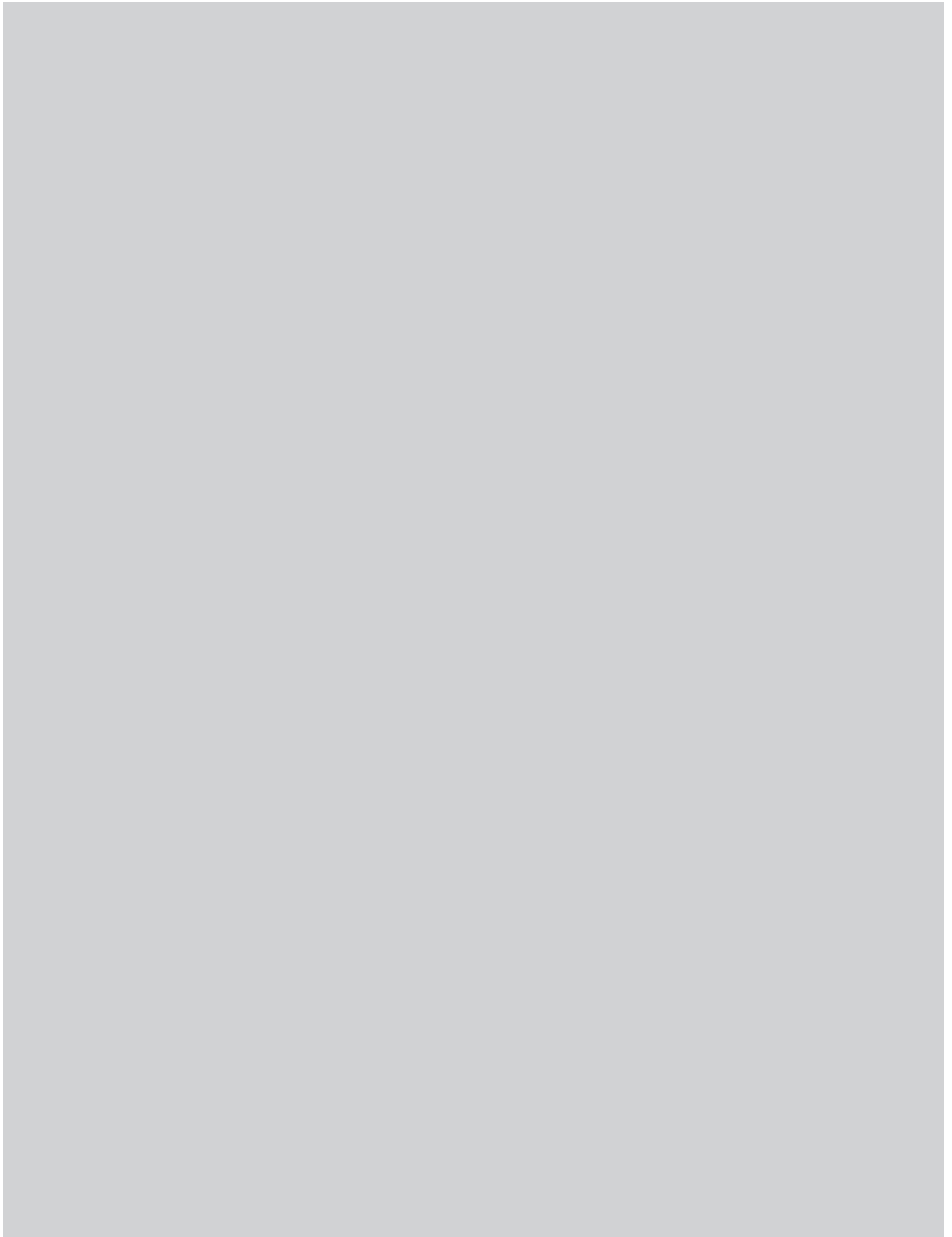
READING

The Sculptor and His Sons

1   Long ago there lived a man who was the greatest sculptor in China. As he grew older, his eyesight grew poorer, so one day he decided to prepare his three sons Chen, Li, and Tao to take over his business.

2   The old man gave each son a specific task to complete. "Chen, you are as strong and sturdy as a mountain," he said. "It will be your task to find the finest marble in Asia, chisel slabs of it, and carry them home." Chen bowed and made plans for a trip to the quarry.

3   Next Li approached his father. "Li, you are good with your hands. Your task is to carve each slab, unlocking its inner beauty." Li bowed and left the room.

4   Finally the sculptor turned to his youngest son and said, "Tao, with your sharp eyes, you notice details that others miss. When Li finishes carving, it will be your task to smooth and polish each sculpture until it glistens like a thousand diamonds."

5   At first, the three brothers were happy with their different tasks. With Chen selecting the marble, Li carving it, and Tao polishing it, the brothers produced several fine sculptures. Word of their skill spread until it reached the emperor himself. He commissioned a sculpture for his fountain and promised the brothers a handsome reward when they completed it.

6   It was not long before greed got the better of the three brothers. They began to squabble.

7   "Lugging home a gigantic slab of marble is tiring work," complained Chen. "I might as well perform each task myself so that I can keep the emperor's whole reward." It did not take long for Li and Tao to chime in with their own complaints. Each brother believed his assignment was the most valuable.

8   The brothers argued continuously until their father finally interrupted them. "My sons, you must stop quarreling and listen to me," he said. "Each of you must go to the edge of the koi pond and bring me a stick." The brothers looked questioningly at their father, but they did as they were instructed.

9   The old man gathered the three branches and tied them together into a bundle. "This bundle represents my three sons. Chen, use your strength and try to break the bundle." Chen took the bundle from his father and labored with all his might, but he could not break it. Li and Tao attempted the task next, but neither was successful.

10   Then the old man untied the bundle. "Each of you must now take your stick and try to break it," he commanded. Chen, Li, and Tao easily snapped their sticks in two. The brothers lowered their heads in shame. Having learned their lesson, the brothers worked together to create the most exquisite sculptures in all of China.

Strength in Numbers

1   A lion was wandering the plain. He stopped when he spotted several bulls grazing at the center of a grassy field, each facing a different direction. "Ah, a meal awaits me," thought the lion as he planned his attack. Sharpening his claws on a nearby log, he dreamed of the feast that awaited him.

2   The lion skulked through the underbrush, waiting for an opportunity to take advantage of his good fortune. As he watched the bulls, he mused, "How I would hate to be as weak as a bull. Surely they live in terror of strong animals like me." He thought with satisfaction, "I fear no one, except the hunter who comes here now and then."

3   The lion dashed across the plain, preparing to pounce on a bull. But to his surprise, the bulls quickly stood back to back, facing outward. Try as he might, the lion could not attack them. No matter which direction he tried to spring from, he was stopped by a menacing pair of horns threatening to pierce his hide.
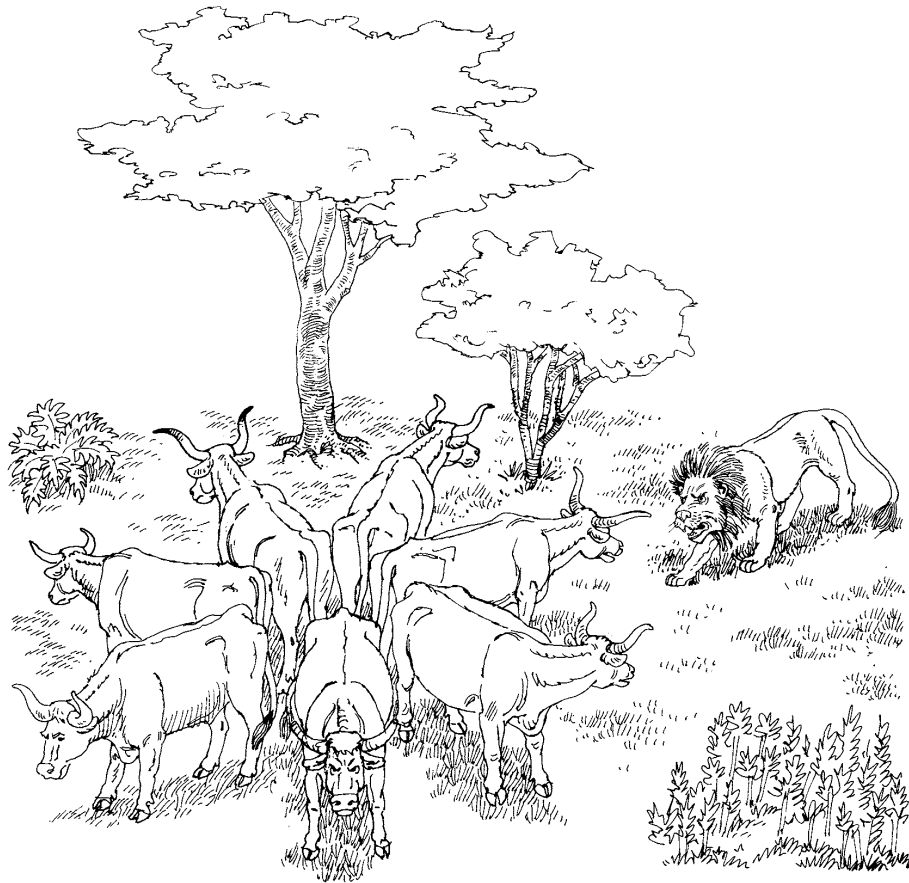
4   "This is not as easy as it seemed at first," said the lion as he crouched beneath a tree. He was frustrated and out of breath. Still, he decided not to dwell on his failure. "All it takes is a little time," he said before dozing off.

5   For three days the lion hid and watched the bulls. On the fourth day something unusual happened.

6   "I'm tired of facing east," said one bull. "The sunrise hurts my eyes. Let's switch places."

7   "Oh, no," said another bull. "Don't you remember how you insisted on being the one to face east? You wouldn't let anyone else see the sunrise. That's what you get for being so greedy."

8   "If anyone gets to switch places, it should be me," growled another bull. "I face south and have to smell that horrible watering hole all day. I do more for this group than anyone else, and no one appreciates it." Soon all the bulls were arguing loudly, each claiming that he had it harder than the others.

9   "This looks like a good opportunity," said the lion as he licked his chops. He ran toward the bulls and leaped into the air. Each bull ran in a different direction. A broad smile spread across the lion's face. "Things are looking simpler," he gloated. Just then, however, the hunter appeared and startled the lion.

10   Knowing this was their only chance, the bulls quickly escaped. "I think we have learned a valuable lesson," said one of them. "We are strong only when we stand together." After that the bulls never again argued, and the lion had to seek his meals elsewhere.

1   The old sculptor has his sons break their own sticks to show them —

   A   how wood cannot be used for sculptures

   B   how disappointed he is in them

   C   how quickly their careers can end

   D   how each is weak without the others

3   What would most likely have happened if the father had not asked his sons to break the bundle of sticks?

   A   They would have made a fine sculpture for the emperor.

   B   They would have switched tasks with one another.

   C   They would have asked their father for help.

   D   They would have kept arguing instead of working together.

2   Why do Chen, Li, and Tao argue after the emperor asks them to create a sculpture?

   F   Each has a different idea about how the sculpture should look.

   G   They do not trust one another to finish the work on time.

   H   Each believes that he deserves the reward for himself.

   J   They know the emperor will punish them if they fail.

4   Paragraphs 2 through 4 are mainly about —

   F   the tasks given to the brothers because of their talents

   G   the steps in making a sculpture

   H   the respect the brothers show their father

   J   the marble the sculptor wants his sons to use

GO ON

5 What is the best summary of this story?

A A lion wanders the plain until he sees several bulls. He thinks about how he would hate to be a bull. Then he prepares to attack them. When his plan does not work, he waits for a while before trying to attack them again.

B A lion prepares to attack a group of bulls, thinking it will be easy. He is surprised when the bulls stop him by standing back to back. When the bulls start arguing, he almost gets his meal. However, they escape and decide never to argue again.

C A lion is frustrated by his failure to catch a bull for his meal. First the bulls stand back to back. The lion cannot spring at them without landing on their horns. Then a hunter startles him, which allows the bulls to escape.

D A lion sets out to attack a group of bulls standing in a field. When this does not work, he watches them for three days. On the fourth day, they begin to argue about who has the hardest job. The lion takes this opportunity to attack them again.

6 What do the words <u>dwell on</u> mean in paragraph 4?

F To try to change

G To keep thinking about

H To repeat mistakes

J To spread news of

7 Which sentence from the story shows that the lion is vain and foolish?

A *As he watched the bulls, he mused, "How I would hate to be as weak as a bull."*

B *The lion dashed across the plain, preparing to pounce on a bull.*

C *"All it takes is a little time," he said before dozing off.*

D *A broad smile spread across the lion's face.*

8 What can the reader conclude about the bulls?

F They would rather live somewhere else.

G They are too heavy to run very fast.

H They have had to defend themselves in the past.

J They think the lion is harmless.

9 Without meaning to, how does the lion help the bulls?

A He causes them to be better runners.

B He makes them realize that they are strong only when they cooperate.

C He startles them so that they run away before the hunter comes.

D He causes them to switch places.

GO ON

10 How are the stories alike?

   F They both show characters who face a threat to their safety.

   G They both show how a desire for money is harmful.

   H They both show what happens when individuals think only of themselves.

   J They both show what life was like in ancient China.

11 Which of the following is an important message in both stories?

   A Hunting and sculpting are hard work.

   B Individuals are strongest when they work together.

   C Quarrels are a natural part of relationships.

   D People should always watch out for enemies.

12 The brothers in "The Sculptor and His Sons" are different from the bulls in "Strength in Numbers" because, unlike the bulls, the brothers —

   F each have a special talent

   G cannot survive alone

   H are sorry that they quarreled

   J feel jealous of one another

GO ON
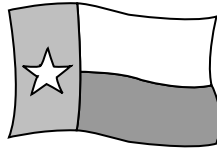
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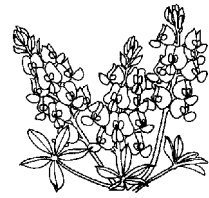
Travel Section

August 12, 2002   **Section D**

Ancient Art at Hueco Tanks

by Charles Perko

1   A row of dancers, painted in white, playing instruments. A solid-red mask with an antelope-horned headdress. A hunter with a spear for an arm. These images are just some of the artwork that can be found at Hueco (Wə-cō) Tanks State Historical Park, 32 miles northeast of El Paso, Texas. But these works of art aren't found hanging in frames on a museum wall. They are actually *part* of the walls.

2   Hueco Tanks State Historical Park is home to thousands of Native American paintings and drawings. Hueco Tanks is

A stone arch at Hueco Tanks

actually three large rocky hills that rise almost 450 feet above the desert floor, about as high as a 38-story building. Ancient works of rock art dating back thousands of years lie within cracks and caves hidden in the hills. Because rock paintings bind to the rock over time, the paintings at Hueco Tanks have lasted for centuries. Even the red, yellow, and orange colors the Native American artists used for their drawings and paintings can still be seen.

The Walls Tell Stories of Many People and Many Times

3   For at least 10,000 years, several different groups of people have traveled through and lived in the area around Hueco Tanks. These groups often left their mark with rock paintings and drawings. Scientists have studied these ancient works of art to learn more about the people who made them. Scientists believe that around 6000 B.C. a group now known as the Desert Archaic people occupied the Hueco Tanks area. The earliest of their drawings are simple wavy and straight lines. Later drawings show scenes of people holding spears while deer and other animals run around them.

GO ON

4　　Around A.D. 1000 the Mogollon people lived in the area. The Mogollon were farmers. More than most farmers, the Mogollon valued water, which was vital for surviving in the desert. For them water held great meaning. This group of farmers painted many pictures of water flowing over the land and rain with lightning.

5　　The Mescalero Apaches created some of the most recent rock art at Hueco Tanks. They stayed in the area for a short time around A.D. 1600. Spanish explorers had arrived in North America by this time. Many of the cave paintings from this period show Spanish soldiers on horses. The paintings also show giant white snakes and dancers with musical instruments. These groups of Native Americans, however, were not the only people to travel through Hueco Tanks.

6　　In 1849 the California Gold Rush was well under way. Some people traveled through hot, dry West Texas as they made their way to California's goldfields. Hueco Tanks provided water and shade for these travelers. From 1858 to 1861, the Butterfield Stage Company took its mail through the Hueco Tanks area. These stagecoaches carried both the mail and passengers. Many of these travelers put their names and dates on the rocks at Hueco Tanks. These writings are still found on the rocks today.

Protecting the Paintings Today

7　　Until the time it became a state park, Hueco Tanks was not well kept. Visitors to the area left trash around the caves and built fires in them. Rock climbers harmed paintings when they climbed over them.

Painting of a sun disk at Hueco Tanks State Historical Park

Much of the damage was done accidentally. However, vandals did destroy some of the paintings on purpose. Many people thought something should be done to protect Hueco Tanks and the paintings.

8　　In May 1970 Hueco Tanks was made a state park, giving the Texas Parks and Wildlife Department control of the area. The park officials created a number of new rules to protect the land. For instance, instead of letting visitors walk around freely, the park now offers guided rock-art tours. And although rock climbing is still

allowed, a guide must climb alongside the visitors. In addition, the number of hikers and climbers allowed in the park at any one time is limited. These rules help keep Hueco Tanks from being damaged further.

9   The Texas Parks and Wildlife Department is using technology to help take care of the rock art. The park has hired two rock-art experts to map the locations of all the paintings. Many of the paintings and drawings are difficult to see because they have faded over time. The experts use the latest kind of equipment to photograph the art. Then they scan the pictures into a computer. Amazingly, the paintings and drawings that are difficult to see in photographs come out clear and sharp on the computer screen. These results have made the rock-art experts wonder whether all the artwork in the area has been discovered. Now they believe that it is more important than ever to protect the rock art at Hueco Tanks. By studying these works of art, visitors and scientists can learn much about the lives of some early Native Americans.

Photographs courtesy of © David Muench/CORBIS.

13 This article is mainly about —

    A the drawings and paintings at a historical state park

    B the travelers who wrote their names on the rocks at Hueco Tanks

    C the Native American groups that once lived in West Texas

    D the new rules at the Hueco Tanks State Historical Park

14 Which words in paragraph 7 help the reader know the meaning of <u>vandals</u>?

    F *until the time, not well kept*

    G *some of the paintings*

    H *did destroy, on purpose*

    J *around the caves*

15 Which sentence from this article best supports the idea that the Desert Archaic people were probably hunters?

    A *The earliest of their drawings are simple wavy and straight lines.*

    B *Later drawings show scenes of people holding spears while deer and other animals run around them.*

    C *This group of farmers painted many pictures of water flowing over the land and rain with lightning.*

    D *They stayed in the area for a short time around A.D. 1600.*

16 How does the author organize paragraphs 3 through 6 of this article?

    F The author explains how the rock art was damaged and what park officials are doing to protect it.

    G The author compares Hueco Tanks before and after it became a state historical park.

    H The author describes different groups of people that left art or other messages on the rocks of Hueco Tanks.

    J The author tells about the technology scientists are using to discover new drawings and paintings.

17 Read this part of an outline of information from the article.

> C. **Current Rules at Hueco Tanks**
>
>   1. Visitors can't walk about freely.
>
>   2. _____
>
>   3. The number of hikers and climbers allowed is limited.

Which detail belongs on the blank line?

    A No photography is allowed.

    B Visitors must purchase maps.

    C Damaged drawings can't be viewed.

    D Rock climbers must be accompanied.

18 Read this dictionary entry for the word <u>period</u>.

> **period** \'pir-ē-əd\ *noun* **1.** a punctuation mark at the end of a sentence **2.** a division of time **3.** a class or a portion of the school day **4.** a unit of time for a game or sporting event

Which definition represents the meaning of <u>period</u> in paragraph 5?

F Definition 1

G Definition 2

H Definition 3

J Definition 4

19 What can the reader tell about the Mescalero Apaches?

A They were farmers like the Mogollon.

B They damaged many of the drawings in the caves.

C They came into contact with early Spanish explorers.

D They were the first people to climb rocks at Hueco Tanks.

20 What can the reader tell about the works of art described in the article?

F They were usually made for museums.

G They show pictures that had meaning to early Americans.

H They consist only of straight and wavy lines.

J They were always done in the colors of red, yellow, and orange.

21 In paragraph 4, the word <u>vital</u> means —

A harmful

B related

C necessary

D successful

22 The park hired rock experts to map the locations of the rock art —

F because park guides didn't want to get lost

G to find the rock art and keep it safe

H to see how large the park is

J so that the rock art could be counted

23 Read the following from paragraph 1 of the article.

> *A row of dancers, painted in white, playing instruments. A solid-red mask with an antelope-horned headdress. A hunter with a spear for an arm.*

Why does the author begin the article with these descriptions?

A To help readers picture what the art looks like

B To explain to readers how rock art is made

C To describe to readers why rock art is important

D To show readers how old the rock art is

GO ON

The following story is based on actual events.

The Flag Designer

1   "People," Mr. Pratt began, getting his students' attention. "For years, the U.S. flag has had 48 stars, one for each of our 48 states. Soon Alaska and Hawaii might become states. If they do, we will need a new flag. Your homework assignment is to design one."

2   The year was 1958. Robert Heft sat quietly at the back of his history class in Lancaster, Ohio. He had always been a bashful person who never wanted to draw any attention to himself. Now Robert sat up straight in his chair as he listened to his teacher describe the assignment.

3   Robert already knew that there were 48 stars on the flag and that there was one red stripe or one white stripe for each of the 13 original U.S. states. As he thought about the two new states, he came up with a plan. He would make a flag with a star for each of the 50 states. He made a sketch of his design, which had five rows of six stars and four rows of five stars.

4   When school was over that day, Robert went straight home to ask his mother for help, but she refused. She was worried about what people might think if he changed the design of the flag.

5   Disappointed but not completely discouraged, Robert took his sketch and went to his room. He spent some time thinking about how he would sew together a flag. Although he had often seen his mother sewing, he hadn't paid much attention to what she was doing. He decided that he would first ask his mother for the material he needed.

6   Robert found red, white, and blue material in a bag of his mother's scrap pieces. After measuring the length and width of the stripes, Robert began making strips of the red and white material, trying to cut as straight as possible. Then he carefully cut out a rectangle of blue material. Robert felt confident about the work he had done, but he still needed to cut 50 stars.

GO ON

7   Robert used a pattern to cut out the white stars. He tried to be as precise as possible since he wanted all the stars to be the same size and shape. When all the pieces had been cut, Robert laid them out on the floor. As he looked at his design, he just knew it would make the best flag. That is, if he could get all the pieces sewn together.

8   Again Robert tried to picture his mother sewing in order to determine his next step. He threaded a needle, picked up the two bottom stripes of his design, and carefully stitched them together. After sewing together all the stripes, he added the blue rectangle. Then he sewed on all 50 stars, one at a time. After spending 12 long hours of his weekend cutting, arranging, and sewing his flag together, Robert could hardly wait to show his teacher his work.

9   The day that his assignment was due, Robert brought his flag to school. He proudly hung it on the wall beside the drawings that the other students had tacked up. Robert knew he had gone above and beyond the expectations of his teacher and would be rewarded with an excellent grade. But Mr. Pratt was not impressed. "Robert, you get a B–," he said. "Anyone could make this same flag."

10   Robert was speechless. He had spent so much time sewing his flag together. Despite the fact that he had given his best effort, he

was getting only a B–! The only thing Robert could do was stare at Mr. Pratt in disbelief.

11   Seeing the disappointment on Robert's face, Mr. Pratt said, "I'll tell you what. If you can get Congress to accept your flag, I'll give you a better grade."

12   Robert went back to his desk. As he looked at his flag, he became determined to show his teacher that he deserved a better grade. It was time for him to find another plan of action.

13   Robert remembered that a member of Congress actually lived in his neighborhood. That afternoon he took his flag and rode his bicycle to Congressman Moeller's house. When Mr. Moeller answered the door, Robert said, "Hello, sir. My name is Robert Heft. I would like you to take my flag to Congress." Robert explained about his assignment and said, "If Congress ever decides to have a contest for a new flag, would you please enter my flag?"

14   Mr. Moeller agreed and took Robert's flag. But as the days turned into months, Robert wondered whether he would ever hear anything more about his flag. He finished high school and started college. Then one day he got a phone call from Congressman Moeller. "The president likes your flag, son," he said.

President Dwight D. Eisenhower signed a law accepting Robert's flag as the official U.S. flag on August 21, 1959. Since then, the flag that Robert made has flown over every state capitol in the United States, as well as over many official buildings in 88 countries. If Robert had not received what he thought was a poor grade on his project, he would not have brought his flag to Congressman Moeller, and the flag would not have achieved such fame.

24 Why does Mr. Pratt think the United States may need a new flag?

   F   The old flag was never popular.

   G   Congress feels the old flag is outdated.

   H   The president might want a new flag.

   J   Alaska and Hawaii are likely to become states.

25 What does Robert do when his mother refuses to help him?

   A   He talks to his teacher about his design.

   B   He decides he can sew the flag himself.

   C   He changes the design to make it easier to sew.

   D   He worries that the flag will be difficult to make.

26 The reader can conclude that the stars and stripes on the flag —

   F   have always been difficult to sew together

   G   cannot be included in a new design

   H   are symbols of our nation's beginning

   J   will remain in the same position on future flags

27 Which of these is the best summary of the story?

   A   In history class Robert is told to design a new flag. He spends many hours cutting out and sewing the material for his flag. Robert is proud of his flag, so he is disappointed when he receives only a B– on his assignment. He thinks this grade is unfair.

   B   Robert must design a flag for his history class. He very carefully cuts and sews his flag. After his flag is graded at school, he gives it to his local congressman. Then he finishes high school and enters college.

   C   Robert's history class is given an assignment to design a new U.S. flag. Robert spends many hours putting his flag together but is disappointed in his grade. He then has his flag sent to Congress and eventually learns that his design has been named the official U.S. flag.

   D   For a classroom assignment, Robert must make a new U.S. flag. Robert's mother won't help him make his flag, so Robert works on it by himself. He proudly hangs it on the wall of his classroom. Although Robert is the only one who sewed a flag, he receives only a B– for his efforts.

28 Paragraphs 6 through 8 are mainly about —

   F   how Robert makes the flag

   G   the material Robert uses for the flag

   H   how Robert cuts out the stars

   J   why Robert enjoys sewing

29 Robert is able to sew the flag because he —

    A tries different ways until he finds a way that works

    B has often watched his mother sewing

    C works quickly until it is completed

    D has taken sewing lessons from his mother

30 Why is it important for the reader to know that this story takes place in 1958?

    F To show how teachers gave assignments to students

    G To explain the meaning of the colors of the flag

    H To show how high school was different in the past

    J To provide the reason for changing the flag

31 The author organizes this story by —

    A explaining how a student improves his grade in a history class

    B showing the steps taken by Congress and the president to decide on a new flag

    C comparing Robert's flag design with that of the flag then in use

    D telling why Robert made his flag and what made him take it to his congressman

32 Why does Mr. Pratt offer Robert the choice of sending his flag to Congress?

    F He believes Robert should work harder for his grade.

    G He doesn't think Congress will like Robert's flag.

    H He sees that Robert is unhappy with his grade.

    J He wants to see whether Robert will take his suggestion.

Part of History

1   "None of these ideas sound like fun to me," Arvia said, looking over the list of topics that her teacher had given out. "I wish I didn't have to be part of this dumb history fair."

2   "But history is important," Arvia's mother said. "It helps us know who we are and where we came from."

3   Arvia scanned the list again. "Yes, but why would I want to build a model of the pyramids? I don't know anyone from Egypt," she said.

4   "This one looks interesting," her mother said, reading over Arvia's shoulder. She pointed to the words "Family-History Project."

5   Arvia thought nobody would want to hear about where her family used to live or the time her sister had won the school spelling contest. She was sure of that. "Our family doesn't have any history," Arvia said.

6   "Yes, we do," her mother said. "All families do."

7   "Like what?" Arvia asked.

8   "Well," Arvia's mother explained, "you know your grandfather took part in the Civil Rights movement. He witnessed some of the events described in your history book."

9   "I remember hearing some of his stories," Arvia said, looking interested. "But what would I do, write a report that says my grandfather is old and remembers the Civil Rights movement?"

10   Her mother laughed and said, "I think you can probably do a little more than that." She explained that once she had seen a museum exhibit that included old photographs along with an oral history presentation. "I'll bet your grandfather has some interesting photographs. And you could interview him and ask him what things were like. This was an important time in history." She suggested that Arvia tape the interview so that people at the fair could hear a firsthand account of what it was

like to participate in the Civil Rights movement. They called Arvia's grandfather, who agreed to help, and Arvia decided to interview him the next night.

11   When Arvia arrived the following evening, her grandfather had already gone through his old photographs and pulled out a large stack of them. Arvia wasn't sure how to start the interview, so her mother helped her write out a few questions.

12   "Mom says you should state your name just for the record," Arvia said after she switched on the tape recorder. It made her feel silly to say something that sounded like a line from a television show, but she continued. After her grandfather stated his full name, Arvia asked the first question. "What do you remember about the Civil Rights movement?" Her grandfather paused a long time before answering. Arvia was about to ask him again when he started talking.

13   "Well, in those days there was a lot of fear and anger in this country," Grandfather said at last. Then he paused again, as if searching for the right words. "But there was also a lot of hope." He told Arvia that he had lived in Montgomery, Alabama, during the time when people had fought to obtain equal rights for African Americans. He had even known Rosa Parks, a woman who refused to give up her seat on a Montgomery city bus. Her actions had led to a boycott during which African Americans stopped using the city bus system. Without as many riders using the buses, Montgomery was forced to change the rules and allow African Americans to sit anywhere on the buses. Arvia's grandfather held up a picture he had of himself with Mrs. Parks at a protest meeting. Arvia was surprised that her own grandfather had known a woman whom she had read about in her history books.

14   As the interview went on, her grandfather explained how African Americans continued to struggle and finally won equal treatment from the Montgomery bus companies. "The boycott lasted over a year," he said, shaking his head. Arvia was impressed with how her grandfather and others had persevered. Every so often her grandfather would hand her a photograph of someone or something he was talking about. "Here's a photo of me with Dr. Martin Luther King, Jr.," her grandfather said.

15   "You knew Martin Luther King?" Arvia asked, astonished.

16   "Well," her grandfather laughed, "I met him a couple of times. He was a smart man and did great things for our country." Grandfather explained that the bus boycott had been only the beginning of a great movement for civil rights. He talked about a few of the other events and how he had felt during that time. His feelings had ranged from nervousness to extreme satisfaction. He shared his memories of the first time African Americans were allowed to go to a school that had been for white students only. He also told Arvia about when African Americans refused to leave a café until they were served. Listening to her grandfather recount the tales, Arvia felt a sense of pride stirring in herself.

17   "This is me in Washington, D.C., in 1963," her grandfather said, holding out another photograph. "I was there when Dr. King gave his famed 'I Have a Dream' speech."

18   "You were there?" Arvia asked. "I heard a recording of that speech in history class!"

19   "It was an amazing speech and an amazing time," her grandfather said.

20   That night when Arvia got home, she looked again at her grandfather's pictures. Under each one she put the date and the place, along with a sentence telling the importance of what was in the photograph. Arvia and her mother listened to the tape of Arvia's grandfather. Then Arvia arranged the pictures in sequence to match the order in which her grandfather had mentioned the events they showed. That way it would be easy for listeners to follow along. When the project was finished, Arvia stood back and looked at it with pride. "This is great! I can't believe my grandfather was so involved in the Civil Rights movement," Arvia told her mother.

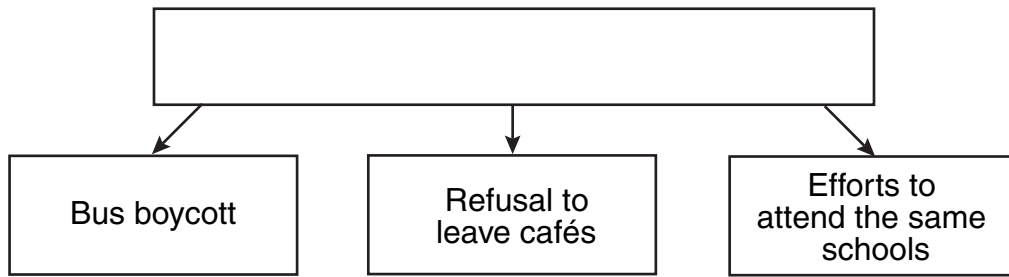21   "Well," her mother said, "here it is in words and pictures."

Photograph courtesy of © Bettmann/CORBIS.

33 Why does Arvia's mother think that Arvia should interview her grandfather?

A She knows most people have never heard of the Civil Rights movement or Martin Luther King, Jr.

B She thinks that no one else has relatives who knew famous people.

C She knows that people are always interested in hearing old stories.

D She thinks his memories will give people a better understanding of the Civil Rights movement.

34 What does the word <u>recount</u> mean in paragraph 16?

F Practice

G Describe

H Show

J Teach

35 In paragraph 12, what is the most likely reason that Grandfather pauses for a long time before he begins speaking?

A He doesn't really want to talk to Arvia.

B He is uncertain of where to begin.

C He can't remember what he wants to say.

D He wants to make sure Arvia is ready.

36 Read the diagram of information from the story.

```
┌─────────────────────────────────────────────────┐
│                                                 │
└─────────────────────────────────────────────────┘
         │                │                │
         ▼                ▼                ▼
┌──────────────┐  ┌──────────────┐  ┌──────────────┐
│              │  │  Refusal to  │  │   Efforts to │
│ Bus boycott  │  │  leave cafés │  │ attend the same│
│              │  │              │  │   schools    │
└──────────────┘  └──────────────┘  └──────────────┘
```

Which of these belongs in the empty box?

F   Speeches by Martin Luther King, Jr.

G   Protests in Washington, D.C.

H   Topics for History Projects

J   Events in the Civil Rights Movement

37 Which sentence from this story shows that the Civil Rights movement was not an easy time for Arvia's grandfather?

A   *"He witnessed some of the events described in your history book."*

B   *"Well, in those days there was a lot of fear and anger in this country," Grandfather said at last.*

C   *Without as many riders using the buses, Montgomery was forced to change the rules and allow African Americans to sit anywhere on the buses.*

D   *"It was an amazing speech and an amazing time," her grandfather said.*

38 The reader can tell that Arvia —

F   doesn't think the Civil Rights movement is very interesting

G   wasn't sure why the Civil Rights movement started

H   doesn't expect her project to do very well at the fair

J   wasn't aware of all the things her grandfather had done

39 Which words in paragraph 20 help the reader know the meaning of <u>sequence</u>?

   A *mentioned the events*

   B *listened to the tape*

   C *to match the order*

   D *telling the importance*

40 Why is Arvia impressed to learn that her grandfather heard Martin Luther King, Jr.'s "I Have a Dream" speech in person?

   F She has always wanted to go to Washington, D.C.

   G She thinks it is the best speech that King ever gave.

   H She enjoys studying about the Civil Rights movement in history class.

   J She knows it is a famous speech in U.S. history.

41 Paragraphs 13 through 19 are mainly about —

   A Rosa Parks, a woman who fought for African American civil rights

   B the time Arvia's grandfather met Martin Luther King, Jr.

   C what Arvia has read about the Civil Rights movement

   D the memories Arvia's grandfather has of the Civil Rights movement

42 The reader can tell that Arvia's grandfather —

   F wanted people to be treated fairly

   G moved to Washington, D.C., after the bus boycott ended

   H doesn't like to remember the Civil Rights movement

   J didn't agree with Rosa Parks's actions

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

STOP

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TAKS GRADE 5
MATHEMATICS
READING
JUNE 2006