

# **SPECTRUM<sup>®</sup> Test Practice**

## **Comprehensive Practice Test**

# **Minnesota Edition**

## **Grade 6**

The state of Minnesota has adopted the Common Core State Standards in English Language Arts only. For more information about Minnesota mathematics standards, use the links provided below.

In addition to the Common Core English Language Arts standards, Minnesota has adopted state-specific standards that make up no more than 15% of the total. Some items on this practice test are based on these state-specific standards. These questions are identified by a black circle around the item number, as shown below.

**1.** = Minnesota Standards Question

In sixth grade, Minnesota's standards encourage students:

- To read literature by or about Minnesota American Indians.
- To understand multiple perspectives and viewpoints through wide reading.
- To use a writing process, including drafting.

For more information:

Common Core State Standards Initiative:

<http://www.corestandards.org/>

Minnesota Department of Education K–12 Academic Standards:

<http://education.state.mn.us/MDE/EdExc/StanCurri/K-12AcademicStandards/index.htm>

**MINNESOTA EDITION**  
**Grade 6 Comprehensive Practice Test****COMMON CORE ENGLISH LANGUAGE ARTS****● Part 1: Reading Literature**

**Directions:** Read the story. Mark the best answers to the questions that follow.

***Iktomi and Muskrat******A Sioux Legend***

Iktomi was a spider fairy. He dressed like a Dakota brave, in a deerskin jacket with bright beads. His funny face was painted in red and yellow, with black circles around his eyes. In truth, his paint and deerskins were the best part of him, for Iktomi was a wily imp.

His hands were always kept in mischief. Often, his own conceit led him hard against the common sense of simpler people. For these reasons, Iktomi had not a single friend. Those who admired his handsome jacket soon went away sick of his vain words and heartless laughter.

One day, Iktomi sat beneath a willow tree beside a white lake. He sat holding a long buffalo-horn spoon, about to devour a kettle of delicious fish soup.

Suddenly, Muskrat, dripping with lake water, came out from the wild rice. "How, how, my friend!" he said.

Iktomi was surprised, and not pleased to be interrupted. He said, "How, my friend!" But, he did not say, 'Will you sit down and share my food?' as was the custom of the plains people.

Muskrat waited for the expected invitation, but none came. Iktomi sat silent. He tapped his spoon against the pot. Finally, Iktomi turned his gaze upon the unwelcome visitor. "My friend," he said, "let us race. If I win, I need not share my soup with you. If you win, you shall have half."

Muskrat said, "Ikto, I cannot run against you! I am not swift, but you are as nimble as a deer."

Iktomi did not respond right away, but sat concocting a wily plot. "I shall carry a large stone on my back. That will slacken my pace, and the race will be a fair one."

He beckoned Muskrat to follow him to the opposite shore. There, he found a large stone half-buried in the shallow water. He wrapped it in his blanket and Muskrat helped lift the heavy rock upon the spider's back. "Now, my friend, you shall run on the left side of the lake and I on the other," said Iktomi. "Go!"

Iktomi ran and ran, but found his load a heavy one. Sweat hung like beads on his brow. He looked across the lake to see how far Muskrat had run, but saw no sign of him. He scanned the tall grasses on the shore, but none stirred. "He is finished already," Iktomi cried. "Enough of this!" With that, he dropped the stone and sprinted ahead.



**COMMON CORE ENGLISH LANGUAGE ARTS****● Part 1: Reading Literature (cont.)**

Iktomi reached his cold campfire and saw no kettle of soup! There was no water-man in sight! He thought, “Oh, if I had only shared my food like a real Dakota, I would not have lost it all! Why did I not know that Muskrat would go across the water? He swims faster than I could ever run!”

Iktomi peered toward the lake. “Where are you?” he cried. “I know you have taken my kettle into the deep. I am hungry! Give me a bone, at least.”

“Ha, ha,” laughed Muskrat. His voice came not from the water, but from the willow tree, where Muskrat sat overhead on a low limb with the kettle. Leaning over, he dropped a small, sharp bone right into Iktomi’s open mouth.

Iktomi almost choked to death before he got the bone out. “Next time,” Muskrat laughed, “say to a visiting friend, ‘Be seated beside me. Let me share with you my food.’”

**1. Why does Iktomi propose the race with Muskrat?**

- (A) because he wants to divide the soup fairly with the visitor
- (B) because he hopes he will not have to share the soup with his visitor
- (C) because he wants to run far away from Muskrat
- (D) because he is a wily imp

**2. What makes Iktomi decide to drop the stone?**

- (F) He is tired and sweaty.
- (G) He is worried that the fish soup is becoming cold.
- (H) He sees that Muskrat has beaten him.
- (J) He sees no sign of Muskrat and worries that his opponent is far ahead.

**3. Which is the most complete and unbiased summary of the story?**

- (A) When neighborly Muskrat pays a visit to Iktomi and receives no invitation to share in a meal, he decides to teach the deceitful spider a lesson in kindness.
- (B) Iktomi is preparing to eat soup when Muskrat rudely interrupts and demands a share. The spider fairy suggests a race to decide who gets the soup, but Muskrat cheats and takes it all for himself.
- (C) Defying local custom, Iktomi offers no soup to his neighbor Muskrat. The tricky spider suggests a race in an effort to keep the soup to himself, but ends up getting tricked himself.
- (D) The plains people usually invite each other to share meals. They eat soup with spoons made from buffalo horn. Iktomi the spider fairy tries to trick others.



**COMMON CORE ENGLISH LANGUAGE ARTS****● Part 1: Reading Literature (cont.)**

**Directions:** Use the story you read on pages 1–2 to choose the best answers to the questions.

**4. What is the central idea of this story?**

- (F) Sometimes you have to cheat to bring about a fair outcome.
- (G) Kindness works better than trickery for getting what you want.
- (H) It is always best to follow local customs.
- (J) You might have to cheat to beat a trickster at his own game.

**5. What does Iktomi regret at the end of the story?**

- (A) not dropping the stone sooner
- (B) challenging Muskrat to a race
- (C) not inviting Muskrat to share his meal
- (D) not understanding the local customs

**6. When does Muskrat probably decide to trick Iktomi?**

- (F) when he first sees Iktomi with the kettle of soup
- (G) when Iktomi declines to share his soup
- (H) when Iktomi challenges him to a race
- (J) when Iktomi drops the stone

**7. Which words best describe Iktomi at the beginning of the story?**

- (A) annoyed, wily
- (B) surprised, swift
- (C) handsome, sweaty
- (D) neighborly, mischievous

**8. Which words best describe Iktomi at the end of the story?**

- (F) victorious, cheated
- (G) hungry, regretful
- (H) revengeful, neighborly
- (J) generous, deceitful

**9. Which words could take the place of the underlined words?**

Those who admired his handsome jacket soon went away sick of his vain words and heartless laughter.

- (A) pretty, cold
- (B) disgusting, vicious
- (C) bigheaded, cruel
- (D) selfish, well-intentioned



**COMMON CORE ENGLISH LANGUAGE ARTS****● Part 1: Reading Literature (cont.)**

**Directions:** Use the story you read on pages 1–2 to choose the best answer for each question.

**10.** Muskrat says that Iktomi is *as nimble as a deer*. This is an example of which type of figurative language?

- (F) metaphor
- (G) hyperbole
- (H) personification
- (J) simile

**11.** When Muskrat says, “*Iktomi, I cannot run against you! I am not swift, but you are as nimble as a deer,*” he is most likely

- (A) scared of racing Iktomi.
- (B) ashamed of his own slowness.
- (C) being overly humble.
- (D) flattering Iktomi.

**12.** Who explains the spider fairy’s characteristics at the beginning of the story?

- (F) Muskrat
- (G) the narrator
- (H) Iktomi
- (J) the plains people

**13.** *Iktomi and Muskrat* is a trickster tale. In trickster tales, personified animals are used to help people understand human nature and good behavior. Spiders are often tricksters. Which animal is not often used as a trickster character?

- (A) a fox
- (B) a deer
- (C) a coyote
- (D) a rabbit

**14.** Iktomi carries a heavy stone to slacken his pace. In this story, *slacken* means

- (F) loosen.
- (G) slow.
- (H) weigh down.
- (J) stop.

**15.** Which character might say, “Your soup was delicious. Next time, remember that sharing with a friend is much better than choking on a bone”?

- (A) Iktomi
- (B) the narrator
- (C) the water-man
- (D) the spider-fairy



**COMMON CORE ENGLISH LANGUAGE ARTS****● Part 2: Reading Informational Text**

**Directions:** Read the article, and then answer the questions that follow.

## *Yakyu*

What could be more American than baseball? It was one of the earliest sports played in the United States, created during the mid-1800s. But, did you know that the Japanese have been playing for nearly as long? In fact, baseball's popularity in Japan rivals its popularity here in the U.S.

In the early 1870s, Horace Wilson, an American professor living in Tokyo, introduced baseball to his students. They loved it, calling the game *yakyu*, which means “field ball.” It quickly caught on with students all over the country. Japanese leaders also embraced baseball because they believed it contained elements that were already part of Japanese culture. For instance, baseball's focus on the mental competition between pitcher and hitter was similar to the one-on-one competitions of martial arts.

By the early 1900s, amateur baseball leagues had been established in secondary schools and colleges throughout Japan. To this day, the enthusiasm for college baseball in Japan is equivalent to the excitement people have for college football or college basketball's March Madness in the United States.

To make baseball even more popular, American teams regularly toured Japan in the early 1900s and played exhibition games. Top American baseball stars like Babe Ruth and Lou Gehrig came to Japan in the 1930s and played against the top Japanese college teams. The Americans won all 17 games they played, but baseball fever swept the whole country. A professional Japanese baseball league was formed in 1936. The Great Japan Tokyo Baseball Club—known today as the Yomiuri Giants—was the first team, but it was soon joined by six others.

As it did to so many other activities around the world, World War II interrupted Japanese baseball when almost all of the players became soldiers. After the war, the United States occupied Japan. The military commanders who were in charge recognized that baseball was an important part of Japanese culture, so they encouraged the professional teams to reform and continue playing. By 1955, with the help of television, professional baseball in Japan became bigger than ever.

The Yomiuri Giants are not just the oldest pro team in Japan; they may also be the greatest. From 1965 through 1973, the Giants won nine consecutive national championships partly because of the legendary player Sadaharu Oh. The surname *Oh* means “king,” and he certainly was the king of baseball in Japan. Among his many incredible statistics, Oh holds the world record for career home runs—868!



**COMMON CORE ENGLISH LANGUAGE ARTS**

**● Part 2: Reading Informational Text (cont.)**

Japanese professional players have also come to the United States and played in Major League Baseball, setting more records. In 2004, Ichiro Suzuki, playing for the Seattle Mariners, broke a baseball record for hitting that had stood for more than 80 years! Kazuhiro Sasaki, who also played for the Mariners, was named the American League Rookie of the Year in 2000, and Hideo Nomo of the Los Angeles Dodgers was MLB’s 1995 Rookie of the Year.

Sadaharu Oh	
<b>Born:</b>	May 20, 1940
<b>Batted:</b>	Left
<b>Threw:</b>	Left
<b>Professional debut:</b>	April 11, 1959 for the Yomiuri Giants
<b>Last professional appearance:</b>	October 12, 1980 for the Yomiuri Giants
<b>Career statistics:</b>	
Batting average	.301
Home runs	868
Hits	2,786
RBI	2,170

Hank Aaron	
<b>Born:</b>	February 5, 1934
<b>Batted:</b>	Right
<b>Threw:</b>	Right
<b>Professional debut:</b>	April 13, 1954 for the Milwaukee Braves
<b>Last professional appearance:</b>	October 3, 1976 for the Milwaukee Brewers
<b>Career statistics:</b>	
Batting average	.305
Home runs	755
Hits	3,771
RBI	2,297

- The article relates that baseball appealed to the Japanese because**
  - (A) it was an easy game to learn.
  - (B) the Japanese are natural athletes.
  - (C) it focuses on the mental competition between pitcher and hitter.
  - (D) it originated in America.
- Which sentence from the text tells that the Japanese teams weren’t very good at playing in the beginning?**
  - (F) It quickly caught on with students all over the country.
  - (G) Japanese leaders also embraced baseball.
  - (H) The Americans won all 17 games they played.
  - (J) A professional Japanese league formed in 1936.

- The main idea of this article is**
  - (A) why the Japanese people love baseball.
  - (B) how WWII influenced baseball.
  - (C) that American players have better statistics than Japanese players.
  - (D) that baseball is just as popular in Japan as it is in the U.S.
- The main purpose of this article is**
  - (F) to show that two cultures can enjoy the same sport.
  - (G) to show that Japanese players are better than American players.
  - (H) to tell the history of the Yomiuri Giants.
  - (J) to explain the meaning of *baseball fever*.





**COMMON CORE ENGLISH LANGUAGE ARTS****● Part 2: Reading Informational Text (cont.)**

**Directions:** Use the text you read on pages 5–6 to choose the best answer for each question.

5. In the article, the reader learns that Sadaharu Oh is ranked as an extraordinary baseball player because
- (A) he holds the world record for home runs.
  - (B) he played for the Yomiuri Giants.
  - (C) his surname means “king.”
  - (D) he is a legendary player.
6. The article states that the Yomiuri Giants are the greatest Japanese baseball team ever because
- (F) they were the first Japanese baseball team.
  - (G) their star player was Sadaharu Oh.
  - (H) they won nine consecutive national championships.
  - (J) their name used to be the Great Japan Tokyo Baseball Club.
7. The article states that *Japanese leaders also embraced baseball*. In this sentence, *embraced* means
- (A) hugged.
  - (B) ignored.
  - (C) adopted.
  - (D) disliked.
8. The sentence *baseball fever swept the whole country* is a way of saying
- (F) a number of fans became ill at baseball games.
  - (G) no one liked baseball any better than catching an illness.
  - (H) most of the people in Japan really enjoyed baseball.
  - (J) baseball swept all the other sports out of people’s minds.
9. The Japanese believed that baseball contained elements that were already part of their culture. This is important because
- (A) baseball was an American game.
  - (B) it was easier for the Japanese to understand baseball.
  - (C) balls were never used in Japan.
  - (D) the Japanese language makes it difficult to play baseball.
10. The sentence *The Great Japan Tokyo Baseball Club—known today as the Yomiuri Giants—was the first team, but it was soon joined by six others*, indicates that
- (F) the Japanese are very competitive.
  - (G) baseball quickly became very popular in Japan.
  - (H) more baseball fields were needed.
  - (J) Americans were going to play in Japan.





**COMMON CORE ENGLISH LANGUAGE ARTS****● Part 2: Reading Informational Text (cont.)**

**Directions:** Use the text you read on pages 5–6 to choose the best answer for each question.

11. The author believes that the United States military commanders helped baseball regain popularity in Japan after World War II because

- (A) they offered to play games with the Japanese.
- (B) they made soldiers into baseball players.
- (C) they encouraged the professional teams to form again.
- (D) they wanted something to entertain the soldiers.

12. The author likely wrote this article to show that

- (F) two very different cultures can share a love of the same sport.
- (G) baseball teams should not draft players from other countries.
- (H) American baseball players are the best.
- (J) baseball and *yakuyu* are not really the same sport.

13. Using the two baseball cards, the reader can find statistics to show that

- (A) Hank Aaron had more runs batted in than Sadaharu Oh.
- (B) Hank Aaron was younger than Sadaharu Oh.
- (C) Hank Aaron hit more home runs than Sadaharu Oh.
- (D) Hank Aaron had a lower batting average than Sadaharu Oh.

14. Using information from both the baseball cards and the article, the reader knows that

- (F) Sadaharu Oh had over 3,000 hits in his career.
- (G) Sadaharu Oh was a left-handed hitter for the team once known as the Great Japan Tokyo Baseball Club.
- (H) Sadaharu Oh was a soldier during World War II.
- (J) Sadaharu Oh is the king of Japanese baseball.

15. Which statement does not support the claim that baseball is loved in Japan?

- (A) Baseball's popularity in Japan rivals its popularity in the U.S.
- (B) Enthusiasm for college baseball in Japan is equivalent to the excitement over college football in the U.S.
- (C) Horace Wilson, an American professor, introduced baseball to his students.
- (D) With the help of television, professional baseball in Japan became bigger than ever.

16. This article traces the development of baseball in Japan from

- (F) its introduction by an American professor.
- (G) the end of World War II.
- (H) the career of Sadaharu Oh.
- (J) "field ball" to baseball.



**COMMON CORE ENGLISH LANGUAGE ARTS**

**● Part 3: Writing**

**Directions:** On a separate sheet of paper, write a response to each prompt. Include all the parts in the checklists.

**1. Write an Argument**

Write an essay to tell whether you think it is important to wear a helmet when biking, skating, or skateboarding.

**Checklist:**

Read what you wrote. Did you remember to do the following?

	Yes	No
Make a claim to state your opinion.	<input type="checkbox"/>	<input type="checkbox"/>
Support your claim with reasons and evidence.	<input type="checkbox"/>	<input type="checkbox"/>
Organize your reasons and evidence.	<input type="checkbox"/>	<input type="checkbox"/>
Use words such as <i>because, since, therefore, so, and then</i> to join claims and reasons.	<input type="checkbox"/>	<input type="checkbox"/>
Write a conclusion that makes your argument.	<input type="checkbox"/>	<input type="checkbox"/>

**2. Write to Inform**

Write an article that compares and contrasts moths and butterflies or two other similar things.

**Checklist:**

Read what you wrote. Did you remember to do the following?

	Yes	No
Introduce the two things being compared.	<input type="checkbox"/>	<input type="checkbox"/>

Give organized facts, details, and examples.

Use words such as *like, different, same, both, and too.*

Use precise terms to describe the things being compared.

Give a concluding statement.

**3. Write a Narrative**

Write a story that tells about a special time in your life.

**Checklist:**

Read what you wrote. Did you remember to do the following?

	Yes	No
Write a beginning sentence that will catch the reader's interest.	<input type="checkbox"/>	<input type="checkbox"/>
Describe the setting and characters.	<input type="checkbox"/>	<input type="checkbox"/>
Use interesting, descriptive words that reflect the five senses.	<input type="checkbox"/>	<input type="checkbox"/>
Use transition words such as <i>then, after that, later, and at the end</i> to move the story along in a logical way.	<input type="checkbox"/>	<input type="checkbox"/>
Write a good ending.	<input type="checkbox"/>	<input type="checkbox"/>



**COMMON CORE ENGLISH LANGUAGE ARTS****● Part 4: Language**

**Directions:** For each item, choose the sentence that uses pronouns and punctuation marks correctly.

1. 

(A) Juan and I mowed the grass for Mrs. Ruaz.

(B) I and Juan mowed the grass for Mrs. Ruaz.

(C) Me and Juan mowed the grass for Mrs. Ruaz.

(D) Juan and me mowed the grass for Mrs. Ruaz.
2. 

(F) After band practice, he walked home by herself.

(G) After band practice, he walked home by himself.

(H) After band practice, he walked home by himself.

(J) After band practice, he walked home by itself.
3. 

(A) Jana and Olivia went to the mall because she needed new shoes.

(B) Jana and Olivia went to the mall because they needed new shoes.

(C) Jana and Olivia went to the mall because her needed new shoes.

(D) Jana and Olivia went to the mall because them needed new shoes.
4. 

(F) If people find a prize, them can keep it.

(G) If one finds a prize, you can keep it.

(H) If people find a prize, he or she can keep it.

(J) If one finds a prize, he or she can keep it.
5. 

(A) Nobody like rain on game day.

(B) Everyone make a mistake now and then.

(C) Make sure someone closes all the windows.

(D) Everything in this pile need to be washed.
6. 

(F) My friend Brady who lives next door is having a party.

(G) My friend Brady, who lives next door is having a party.

(H) My friend Brady who lives next door, is having a party.

(J) My friend Brady, who lives next door, is having a party.



**COMMON CORE ENGLISH LANGUAGE ARTS****● Part 4: Language (cont.)****Directions:** Choose the best answer for each question.**7. Which sentence has correct spelling?**

- (A) Cynthia bought the shampoo I saw in the advertisement.
- (B) Cynthia baught the shampoo I saw in the advertisement.
- (C) Cynthia bought the shampu I saw in the advertisement.
- (D) Cynthia bought the shampoo I saw in the advertizement.

**8. Which sentence has correct spelling?**

- (F) The submarine surfaced for a few moments and then submurged.
- (G) The submurine surfaced for a few moments and then submerged.
- (H) The submarine serfaced for a few moments and then submerged.
- (J) The submarine surfaced for a few moments and then submerged.

**9. Which sentence has the clearest meaning?**

- (A) The reason why he fell down was because he tripped on something.
- (B) The reason he fell was because he tripped on something.
- (C) He fell because he tripped on that rock.
- (D) I figure the reason he fell down was because he tripped on that rock.

**10. Which sentence is the most logical?**

- (F) After the team won the game, the coach congratulated each player.
- (G) After the team won the game, the coach sadly wept in the locker room.
- (H) After the team won the game, the coach called his friend about the loss.
- (J) After the team won the game, the coach yelled at the players.

**11. *I felt so ambitious on Saturday that I washed the car and cleaned the garage.* In this sentence, the word *ambitious* means**

- (A) angry.
- (B) full of energy.
- (C) happy.
- (D) tired.

**12. *It seemed miraculous that no one was hurt in the accident.* In this sentence, the word *miraculous* means**

- (F) silly.
- (G) funny.
- (H) unbelievable.
- (J) sad.



**COMMON CORE ENGLISH LANGUAGE ARTS**

**● Part 4: Language (cont.)**

**Directions:** Choose the best answer for each question.

13. The suffix *-ous* means “full of.” Which definition of *furious* is correct?

- (A) full of fur
- (B) full of beauty
- (C) far away
- (D) full of anger

14. The prefix *il-* means “not.” Which is the correct meaning of *illegal*?

- (F) without a law
- (G) with a lawyer
- (H) unlawful
- (J) unclear

15. What does the following part of the dictionary entry tell?

\ˈnā·vē \

- (A) the spelling of the word
- (B) the pronunciation of the word
- (C) the plural of the word
- (D) the origin of the word

16. When you find a word while reading that you don’t know, which should you not do?

- (F) Look for a clue in the other words in the sentence.
- (G) Ask someone.
- (H) Look it up in the dictionary.
- (J) Skip it and read on.

17. *I was so busy that time got away from me.* This sentence means

- (A) I was early.
- (B) I forgot to check the clock.
- (C) I was too late.
- (D) I lost my clock.

18. *The river crawled along the valley until it dove over the cliff.* This sentence means that

- (F) the water in the river was moving swiftly before it fell over the cliff.
- (G) people like to dive over the cliff into the river.
- (H) the water in the river was moving slowly until it fell over the cliff.
- (J) the water in the river was full of dangerous places.

19. Which sentence is an example of cause and effect?

- (A) We saw raindrops trickle down the window.
- (B) After the storm, a beautiful rainbow appeared in the sky.
- (C) The sky was dark and threatening.
- (D) Many people gathered in the shelter house.



**COMMON CORE ENGLISH LANGUAGE ARTS**

**● Part 4: Language (cont.)**

**Directions:** Choose the best word to complete each sentence in numbers 20–25.

20. Nearly one hundred athletes \_\_\_\_\_ to complete the triathlon.

- (F) played
- (G) exercised
- (H) moved
- (J) raced

21. Speed and stealth are important to the lion because it is a \_\_\_\_\_ and the zebra is one of its prey.

- (A) big cat
- (B) predator
- (C) land animal
- (D) mammal

22. Many California store owners became \_\_\_\_\_ during the gold rush by selling supplies to miners.

- (F) disappointed
- (G) homesick
- (H) prosperous
- (J) nervous

23. Life in ancient Egypt was based on the \_\_\_\_\_ of crops in the Nile Delta.

- (A) flight
- (B) abdomens
- (C) grasp
- (D) cultivation

24. The invention of the \_\_\_\_\_ made it possible for scientists to study distant objects in the sky.

- (F) telescope
- (G) telegraph
- (H) microscope
- (J) computer

25. My grandmother has been alive for six \_\_\_\_\_.

- (A) months
- (B) millennia
- (C) decades
- (D) centuries

**Directions:** For numbers 26–27, choose the word that would not be used to complete the sentence.

26. The \_\_\_\_\_ crowd cheered as the athletes crossed the finish line.

- (F) enthusiastic
- (G) happy
- (H) excited
- (J) courageous

27. The \_\_\_\_\_ children ran toward the carnival games.

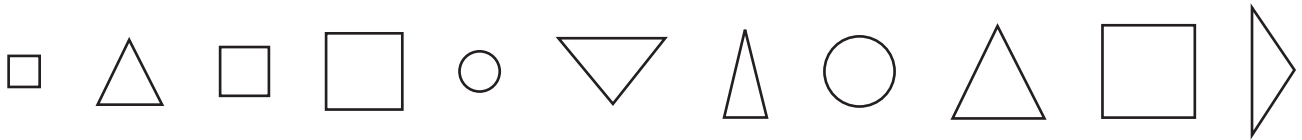
- (A) eager
- (B) anxious
- (C) unruly
- (D) energetic



**MATHEMATICS**

**● Part 1: Ratios and Proportional Relationships**

**Directions:** For numbers 1–3, use the diagram to answer the questions.



1. What is the ratio of squares to total shapes?

- (A) 4:7
- (B) 7:4
- (C) 4 to 11
- (D)  $\frac{11}{4}$

2. What is the ratio of triangles to circles?

- (F) 2:11
- (G)  $\frac{2}{5}$
- (H)  $\frac{4}{2}$
- (J) 5:2

3. Three of these statements are true. Which statement is false?

- (A) The ratio of triangles to circles is 5 to 11.
- (B) For every 1 circle, there are 2 squares.
- (C) The ratio of triangles to squares can be written as 5 to 4, 5:4, and  $\frac{5}{4}$ .
- (D) For every 2 circles, there are 9 shapes that are not circles.

**Directions:** For numbers 4–6, choose the best answer for each question.

4. To make 24 muffins, Max’s recipe calls for 2 cups of flour and 3 cups of bran cereal. He plans to use 3 cups of flour instead.

How many cups of bran cereal should Max use?

- (F)  $4\frac{1}{2}$  cups
- (G) 6 cups
- (H) 8 cups
- (J) 9 cups

5. Use the story about Max. How many muffins can Max make?

- (A) 8
- (B) 12
- (C) 36
- (D) 48

6. Dante has read 180 pages of a book. This is 40% of the book. How many pages are in the book?

- (F) 72
- (G) 108
- (H) 300
- (J) 450





**MATHEMATICS**

**● Part 1: Ratios and Proportional Relationships (cont.)**

**Directions:** Choose the best answer for each question.

7. Mrs. Womack uses 21 apples to make 3 pies. Which table shows the relationship between apples and pies?

(A)

Apples	19	20	21	22	23	24
Pies	1	2	3	4	5	6

(B)

Apples	1	2	3	4	5	6
Pies	11	16	21	26	31	36

(C)

Apples	3	6	21	12	15	18
Pies	1	2	3	4	5	6

(D)

Apples	7	14	21	28	35	42
Pies	1	2	3	4	5	6

8. Arianna reads 4 pages in 6 minutes. What are two unit rates she can write with this information?

Pages						
Minutes						

- (F) 4 pages:6 minutes and 6 minutes:4 pages
- (G) 2 pages:3 minutes and 3 minutes:2 pages
- (H)  $\frac{2}{3}$  page / 1 minute and  $1\frac{1}{2}$  minutes / 1 page
- (J)  $\frac{2}{3}$  minute / 1 page and  $1\frac{1}{2}$  pages / 1 minute

9. In the sixth grade, 135 students participate in after-school activities. This is 60% of the total number of students. How many students are in the sixth grade?

- (A) 54  
(B) 81  
(C) 225  
(D) 810

10. It is 420 miles to Abbie’s grandparents’ house. Her dad drove the first 180 miles in 3 hours. At that rate of speed, how much longer will it take to get there?

- (F) 3 hours  
(G) 4 hours  
(H) 6 hours  
(J) 7 hours

11. Two friends bought tickets for rides at the carnival. Gavin bought 12 tickets for \$18. Wyatt only has \$12 to spend. How many tickets can he buy?

- (A) 6 tickets  
(B) 8 tickets  
(C) 12 tickets  
(D) 18 tickets

12. At Newton Middle School, 32% of the 675 students walk to school. How many students walk to school?

- (F) 216  
(G) 320  
(H) 459  
(J) 643



**MATHEMATICS**

**● Part 1: Ratios and Proportional Relationships (cont.)**

**Directions:** Choose the best answer for each question.

13. Mr. Ngyuen can buy 4 hamburgers for \$7.00, 8 hot dogs for \$10.00, or 6 tacos for \$9.00. Which shows the choices for one of each item from least expensive to most expensive?

- (A) hamburger, taco, hot dog
- (B) taco, hot dog, hamburger
- (C) hot dog, hamburger, taco
- (D) hot dog, taco, hamburger

14. Joshua skateboards 12 blocks in 6 minutes. What is his speed in blocks per minute?



- (F)  $\frac{1}{6}$  block  
1 minute
- (G)  $\frac{1}{2}$  block  
1 minute
- (H)  $\frac{2 \text{ blocks}}{1 \text{ minute}}$
- (J)  $\frac{6 \text{ blocks}}{1 \text{ minute}}$

15. Felix makes a fruit salad using 6 bananas and 10 peaches. How many peaches does he use for each banana?

- (A)  $\frac{3}{5}$
- (B)  $1\frac{2}{3}$
- (C) 2
- (D) 10

16. Mr. Miller's car used 15 gallons of gas to travel 540 miles. What is the car's gas mileage in miles per gallon?

- (F)  $\frac{1}{36}$  miles per gallon
- (G) 36 miles per gallon
- (H) 525 miles per gallon
- (J) 8,100 miles per gallon

17. Rylee practices 20 minutes every day. How many hours does she practice in 15 days?

- (A) 5 hours
- (B) 12.5 hours
- (C) 20 hours
- (D) 300 hours

18. Each box of crackers weighs 14 ounces. How many pounds do 8 boxes weigh?

- (F) 7 pounds
- (G) 14 pounds
- (H) 28 pounds
- (J) 112 pounds



# MATHEMATICS

## ● Part 2: The Number System

**Directions:** Use the number line to answer numbers 1–4. Choose the best answer for numbers 5–6.



1. Which statement is true?

- (A)  $-4 > -2$
- (B)  $1 < -3$
- (C)  $-3 > -1$
- (D)  $-4 < 3$

2. Which points are three units to the right of 0 and three units to the left of 0?

- (F) 3, 3
- (G) 0, 3
- (H) 3, -3
- (J) 1.5, -1.5

3. Three of these statements are true. Which is false?

- (A)  $|2| = |-2|$
- (B)  $|-2| > -2$
- (C)  $|2| = -2$
- (D)  $2 = |-2|$

4. Which point is the opposite of -2?

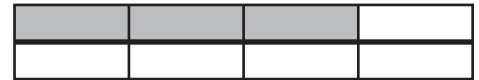
- (F) 0
- (G) 4
- (H) -2
- (J) 2

5.  $67 \overline{)37,592}$

- (A) 561 r 5
- (B) 641 r 45
- (C) 658 r 46
- (D) 5,511 r 5

6. Vanessa and Antonia have  $\frac{3}{4}$  pound of peanuts that they want to share evenly. Which diagram illustrates the amount each will get?

(F) Each will receive  $\frac{3}{8}$  pound.



(G) Each will receive  $\frac{6}{8}$  pound.



(H) Each will receive  $\frac{1}{4}$  pounds.



(J) Each will receive  $1\frac{3}{4}$  pounds.



**MATHEMATICS****● Part 2: The Number System (cont.)****Directions:** Choose the best answer for each question.

7. Adam has  $3\frac{1}{2}$  yards of cord. Each key chain that he makes uses  $\frac{3}{4}$  yard of cord. How many key chains can he complete?

(A)  $3\frac{1}{4}$   
 (B) 4  
 (C)  $4\frac{2}{3}$   
 (D) 5

8.  $0.16 \times 0.205 = \square$

(F) 0.00328  
 (G) 0.0328  
 (H) 0.328  
 (J) 3.28

9. Three of these would be described by  $-5$ . Which one would not?

(A)  $5^\circ$  below zero  
 (B) spending \$5.00  
 (C) losing 5 pounds  
 (D) scoring 5 goals in a soccer game

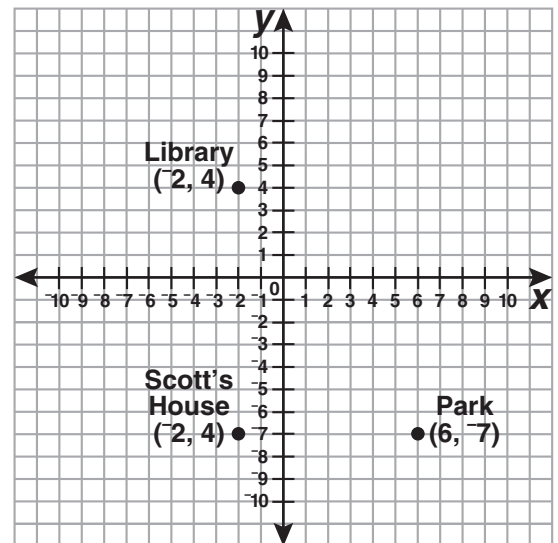
10. Mr. Larsen ran out of gas 10 kilometers from the nearest gas station. He walked 4.2 km and stopped to rest. Then, he walked 2.1 km before resting again. How much farther does he have to walk?

(F) 1.1 km  
 (G) 3.7 km  
 (H) 4.7 km  
 (J) 5.3 km

11. Three of these expressions are equivalent to 60. Which one is not?

(A)  $4(10 + 5)$   
 (B)  $12(2 + 3)$   
 (C)  $3(15 + 5)$   
 (D)  $6(6 + 5)$

12. How much farther is it from Scott's house to the library than it is from his house to the park?



$\square = 1$  block

(F) 1 block  
 (G) 3 blocks  
 (H) 5 blocks  
 (J) 7 blocks



**MATHEMATICS**

**● Part 3: Expressions and Equations**

**Directions:** Choose the best answer for each question.

1. Which expression represents the volume of a cube with a side length of 5 cm?

- (A)  $(3 \times 5)^2 \text{ cm}^2$
- (B)  $5^2 \text{ cm}^2$
- (C)  $(3 \times 5)^3 \text{ cm}^3$
- (D)  $5^3 \text{ cm}^3$

2. Three of these statements about  $6x^2$  are true. Which one is false?

- (F) The coefficient of  $x^2$  is 6.
- (G) The letter  $x$  is a variable.
- (H) The number 2 is an exponent.
- (J) The term  $6x^2$  is the sum of 6 and  $x^2$ .

3. Three of these statements will help you solve the equation below. Which one will not?

$$n - 5 = 10$$

- (A) I know that  $10 + 5 = 15$ , so  $15 - 5 = 10$ .
- (B) Adding 5 is the inverse of subtracting 5, so I would add 5 to both sides.
- (C) The  $-5$  means to subtract 5 from 10.
- (D) If I had 10 of something after I lost 5, I must have had 5 more than 10 to begin with.

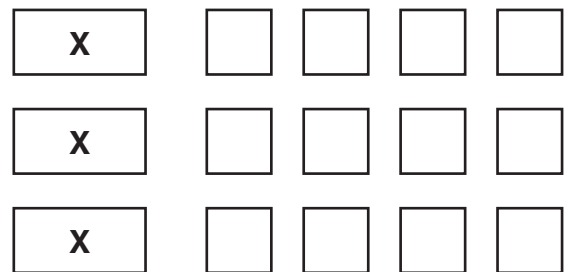
4. Nicole buys several packages of blue pens. Each package has 2 blue pens. She also buys 4 green pens. She buys 12 pens in all. Which equation could be used to find how many packages of blue pens Nicole buys?

- (F)  $2b + 4 = 12; b = 2$
- (G)  $2(b + 4) = 12; b = 2$
- (H)  $2b + 4 = 12; b = 4$
- (J)  $2(b + 4) = 12; b = 8$

5. Evaluate  $2n^2 - 4$  for  $n = 3$ .

- (A) 8
- (B) 14
- (C) 32
- (D) 426

6. Which equation describes the diagram below?



- (F)  $3(x + 4) = 3x + 4$
- (G)  $3(x + 4) = 3x + 12$
- (H)  $3x(4) = 12x$
- (J)  $3x + 4x = 12x$



**MATHEMATICS****● Part 3: Expressions and Equations (cont.)****Directions:** Choose the best answer for each question.

7. Which equation shows the correct application of the distributive property?

(A)  $5(n - 7) = -35n$   
(B)  $5(n - 7) = 5n - 2$   
(C)  $5(n - 7) = 5n - 7$   
(D)  $5(n - 7) = 5n - 35$

8. Which expression is equivalent to  $3(a - 5) - 2a$ ?

(F)  $a - 15$   
(G)  $a - 5$   
(H)  $-17a$   
(J)  $3a - 17a$

9. Which expression is equivalent to  $4(n + 3) + 2(n - 6)$ ?

(A)  $6n - 18$   
(B)  $6n - 3$   
(C)  $6n$   
(D)  $6n + 24$

10. Vans taking students on a field trip can carry at most 10 students. Which statement is true if  $x$  is the capacity of each van?

(F)  $x < 10$   
(G)  $x \leq 10$   
(H)  $x > 10$   
(J)  $x \geq 10$

11. Children must be at least 10 years old to see a scary movie. Which statement is true if  $x$  is the allowed age?

(A)  $x \leq 10$   
(B)  $x > 10$   
(C)  $x < 10$   
(D)  $x \geq 10$

12. Which of these is a correct way to read  $5 - n$ ?

(F) the product of 5 and  $n$   
(G) the quotient of 5 and  $n$   
(H) 5 less than  $n$   
(J)  $n$  less than 5



**MATHEMATICS****● Part 3: Expressions and Equations (cont.)****Directions:** Choose the best answer for each question.

13. What whole numbers could make this inequality true?

$$4n - 1 < 15$$

- (A) {0, 1, 2, 3}  
 (B) {4}  
 (C) {0, 1, 2, 3, 4}  
 (D) {5, 6, 7, 8, ...}
14. Isabel has an envelope containing several \$5 bills as well as 7 \$1 bills. Which expression represents the amount of money she has in the envelope?

- (F)  $5n + 1$   
 (G)  $5n + 7$   
 (H)  $5n + 7n$   
 (J)  $5(n + 7)$

15. Which situation could be modeled by the expression  $10 - n$ ?

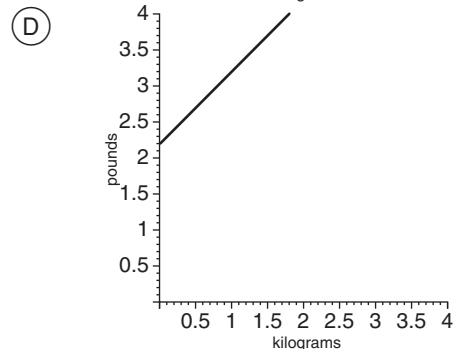
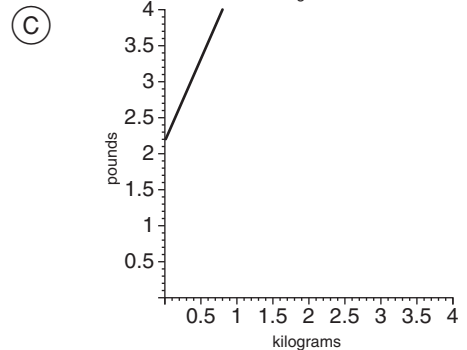
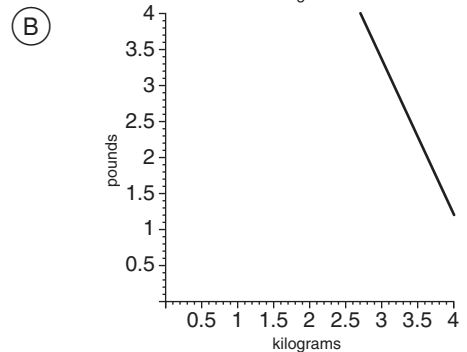
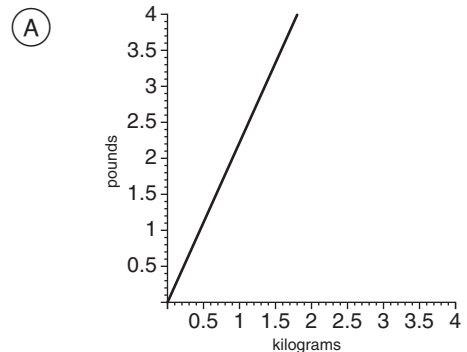
- (A) \$10 less than the amount Nathaniel has  
 (B)  $10^\circ$  less than the normal temperature  
 (C) the amount remaining from a \$10 bill after buying a notebook  
 (D) the age a 10-year-old was last year

16. Simplify the expression.

$$2 \times 3^3$$

- (F) 18  
 (G) 24  
 (H) 54  
 (J) 216

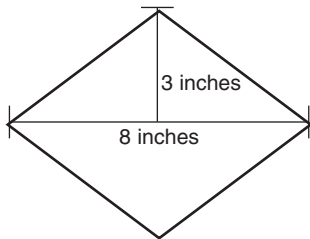
17. One kilogram is approximately equivalent to 2.2 pounds. Which graph shows the relationship between kilograms and pounds?





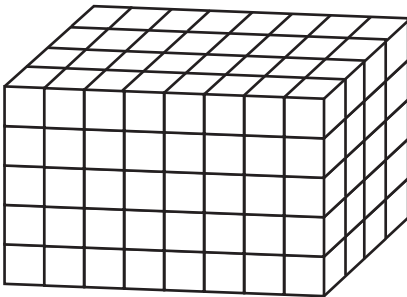
**MATHEMATICS****● Part 4: Geometry****Directions:** Choose the best answer for each question.

1. What is the area of the rhombus?



- (A) 11 in<sup>2</sup>  
 (B) 12 in<sup>2</sup>  
 (C) 24 in<sup>2</sup>  
 (D) 48 in<sup>2</sup>

2. How many cubes does it take to make this prism?



- (F) 20  
 (G) 40  
 (H) 92  
 (J) 160

3. What shapes make up the faces of a triangular prism?

- (A) 2 triangles and 3 rectangles  
 (B) 2 triangles and 4 rectangles  
 (C) 3 triangles and 2 rectangles  
 (D) 6 triangles

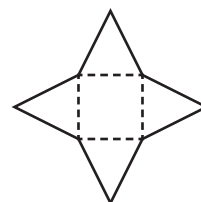
4. Cathy plans to use 40 feet of fencing to make a rectangular dog pen. She cannot decide whether to make it 6 feet wide or 8 feet wide. Which would result in a pen with the greatest area and how much more would the greater area be?

- (F) The pen that is 6 feet wide would have 2 more square feet than the other pen.  
 (G) The pen that is 8 feet wide would have 12 more square feet than the other pen.  
 (H) The pen that is 8 feet wide would have 52 more square feet than the other pen.  
 (J) The areas will be the same.

5. Judy needs a box that will hold at least 0.2 cubic meters of popcorn. The dimensions of 4 boxes are shown below. Which is the smallest box that will hold the popcorn?

- (A) 0.5 m by 0.6 m by 0.6 m  
 (B) 0.6 m by 0.8 m by 0.5 m  
 (C) 0.7 m by 0.5 m by 0.6 m  
 (D) 0.9 m by 0.4 m by 0.5 m

6. What shape does the net make?



- (F) cube  
 (G) rectangular pyramid  
 (H) triangular prism  
 (J) triangular pyramid



## MATHEMATICS

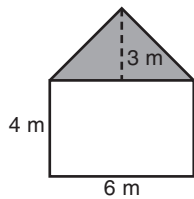
### ● Part 4: Geometry (cont.)

**Directions:** Choose the best answer for each question.

7. Mr. Weber plans to build a rectangular swimming pool that is 32 feet long and 16 feet wide. The depth of the water will be 5 feet deep for the whole pool. It takes about 7.5 gallons of water to fill each cubic foot of the pool. About how much water will it take to fill the pool?

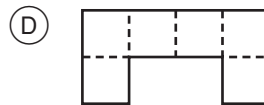
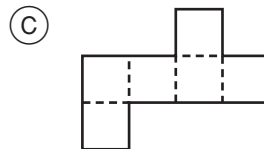
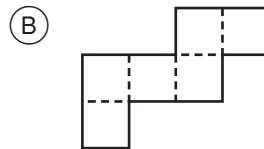
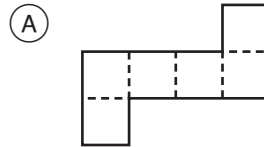
- (A) 2,560 gallons
- (B) 3,840 gallons
- (C) 11,280 gallons
- (D) 19,200 gallons

8. What is the area of the entire figure?

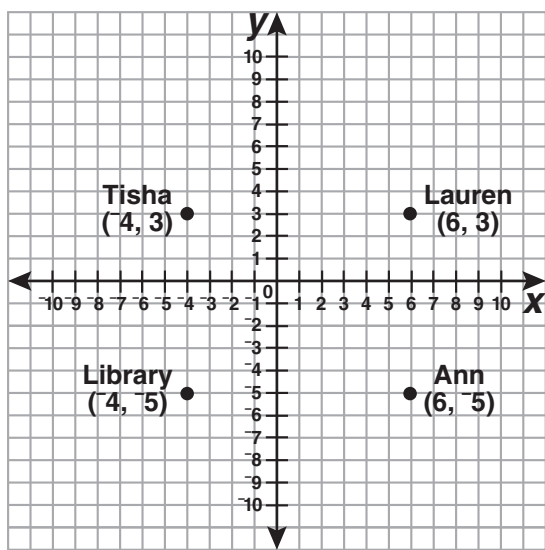


- (F) 33 m<sup>2</sup>
- (G) 36 m<sup>2</sup>
- (H) 42 m<sup>2</sup>
- (J) 45 m<sup>2</sup>

9. Three of the figures could be folded to make a cube. Which one could not?



**Directions:** Use the graph to answer numbers 10–11.



□ = 1 block

10. Tisha walked from her house to the library and then to Ann's house. How many blocks did she walk in all?

- (F) 4 blocks
- (G) 9 blocks
- (H) 10 blocks
- (J) 18 blocks

11. Does Ann or Tisha live closer to Lauren? How much closer?

- (A) Ann lives 2 blocks closer.
- (B) Ann lives 8 blocks closer.
- (C) Tisha lives 10 blocks closer.
- (D) They live the same distance from Lauren.



**MATHEMATICS****● Part 5: Statistics and Probability****Directions:** Choose the best answer for each question.

1. Students in Miss Chang's class earn up to 10 points for each homework assignment. Jasmine's homework grades are as follows: 4, 8, 9, 0, 9, 8, 7, 9, 0, 10, 8, and 9. What is the mean of Jasmine's homework grades rounded to the nearest tenth?

- (A) 6.8  
(B) 8.0  
(C) 8.1  
(D) 9.0

2. Look at Jasmine's grades from number 1. Suppose that Jasmine turns in two assignments late and the 0s are replaced with 4 points and 5 points. Which statistical measures will change?

- (F) mean and range  
(G) median and mode  
(H) median, range, and mode  
(J) mean, median, mode, and range

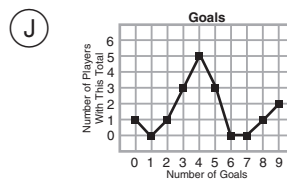
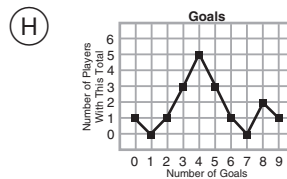
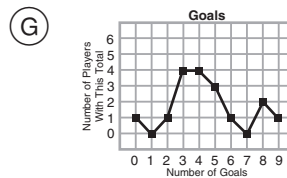
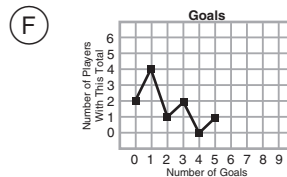
3. Which of these questions would yield the best data for a statistics project?

- (A) How did the states get their names?  
(B) Which states were in the Confederacy during the Civil War?  
(C) How many states have I been in?  
(D) How many states have each of my classmates visited?

4. The coach of the Diamonds soccer team kept track of how many goals each player scored during the season. She made a table to record the data.

Goals	0	1	2	3	4	5	6	7	8	9
Players With This Total	1	–	1	3	5	3	1	–	2	1

Which line plot represents the data?



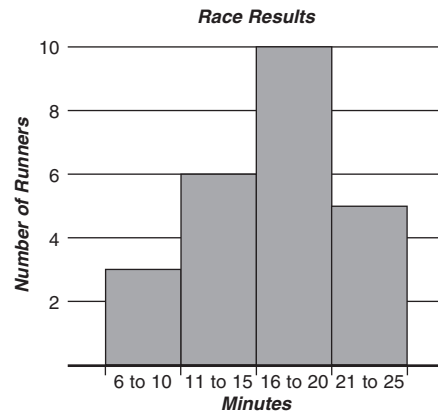
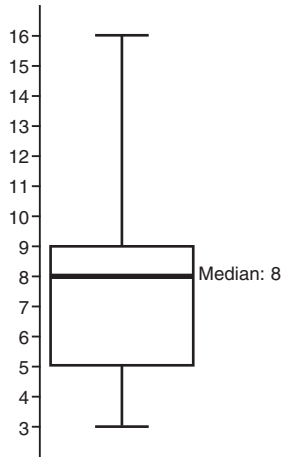
5. Use the data from number 4. Which is the best description of the data?

- (A) There is no pattern.  
(B) The number of goals players scored is between 0 and 4.  
(C) The data is symmetrical.  
(D) Clusters show most players scored about 4 goals, but a gap shows a few scored many more.



**MATHEMATICS****● Part 5: Statistics and Probability (cont.)**

**Directions:** Use the box plot to answer numbers 6–8. Use the histogram to answer numbers 9–11.



6. Mrs. Parker recorded the number of books each student read. She made the box plot above to show the results. What is the range of the number of books read?
- (F) 5  
(G) 13  
(H) 14  
(J) 16
7. Wilson read 10 books. In which quartile was his total?
- (A) 1<sup>st</sup>  
(B) 2<sup>nd</sup>  
(C) 3<sup>rd</sup>  
(D) 4<sup>th</sup>
8. Three of the intervals represent half of the students. Which interval does not?
- (F) 3 to 8 books  
(G) 5 to 9 books  
(H) 9 to 16 books  
(J) 8 to 16 books
9. How many more runners completed the race between 21 and 25 minutes than completed the race between 6 and 10 minutes?
- (A) 2  
(B) 3  
(C) 5  
(D) 8
10. Which category had half as many runners as the 16 to 20 minutes category?
- (F) 6 to 10 minutes  
(G) 6 to 15 minutes  
(H) 11 to 15 minutes  
(J) 21 to 25 minutes
11. How many runners completed the race in 15 or fewer minutes?
- (A) 6  
(B) 9  
(C) 15  
(D) 19

STOP

# ANSWER KEY

## English Language Arts

### Part 1: Reading Literature

#### • Page 2

1. B
2. J
3. C

#### • Page 3

4. G
5. C
6. G
7. A
8. G
9. C

#### • Page 4

10. J
11. D
12. G
13. B
14. G
15. C

### Part 2: Reading Informational Text

#### • Page 6

1. C
2. H
3. D
4. F

#### • Page 7

5. A
6. H
7. C
8. H
9. B
10. G

#### • Page 8

11. C
12. F
13. A
14. G
15. C
16. F

### Part 4: Language

#### • Page 10

1. A
2. H
3. B
4. J
5. C
6. J

#### • Page 11

7. A
8. J
9. C
10. F
11. B
12. H

#### • Page 12

13. D

14. H

15. B

16. J

17. B

18. H

19. B

#### • Page 13

20. J

21. B

22. H

23. D

24. F

25. C

26. J

27. C

## Mathematics

### Part 1: Ratios and Proportional

#### Relationships

#### • Page 14

1. C

2. J

3. A

4. F

5. C

6. J

#### • Page 15

7. D

8. H

9. C

10. G

11. B

12. F

#### • Page 16

13. D

14. H

15. B

16. G

17. A

18. F

### Part 2: The Number System

#### • Page 17

1. D

2. H

3. C

4. J

5. A

6. F

#### • Page 18

7. B

8. G

9. D

10. G

11. D

12. G

## Part 3: Expressions and Equations

#### • Page 19

1. D

2. J

3. C

4. H

5. B

6. G

#### • Page 20

7. D

8. F

9. C

10. G

11. D

12. J

#### • Page 21

13. A

14. G

15. C

16. H

17. A

## Part 4: Geometry

#### • Page 22

1. C

2. J

3. A

4. G

5. C

6. G

#### • Page 23

7. D

8. F

9. D

10. J

11. A

## Part 5: Statistics and Probability

#### • Page 24

1. A

2. F

3. D

4. H

5. D

#### • Page 25

6. G

7. D

8. H

9. A

10. J

11. B