New York State Testing Program

Mathematics Test
Book 1

Grade 5

March 2–6, 2009

21313

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Book 1

Tips for taking the test

Here are some suggestions to help you do your best:

- Be sure to read carefully all the directions in the test book.
- Read each question carefully and think about the answer before choosing your response.

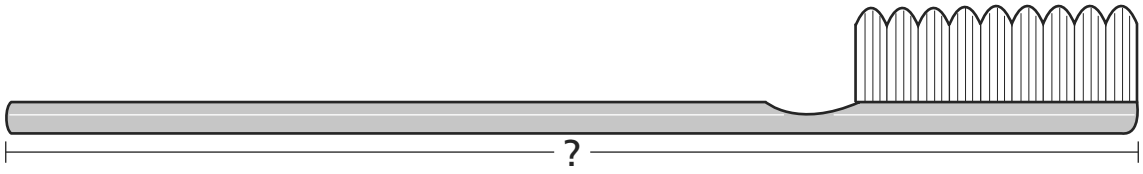
This picture means that you will use your ruler.

This picture means that you will use your protractor.

Sample A

Use your ruler to help you solve this problem.

How many centimeters long is the toothbrush shown below?



A 12

B 13

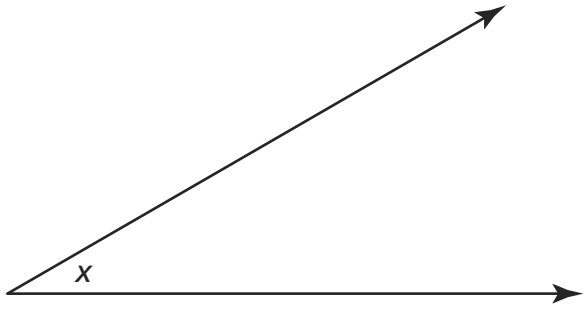
C 14

D 15

Sample B

Use your protractor to help you solve this problem.

What is the measure of angle *x* shown below?



A 30°

B 45°

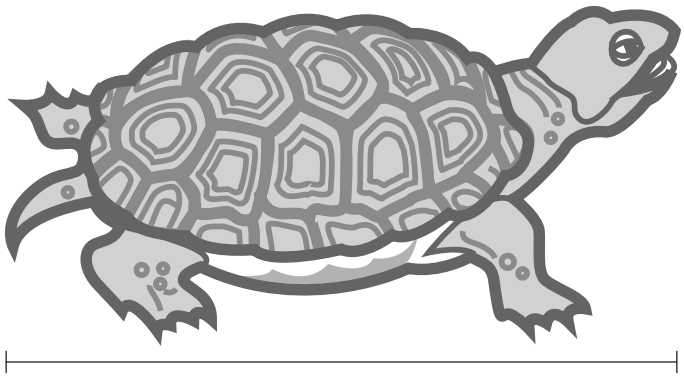
C 90°

D 150°

STOP

1 Use your ruler to help you solve this problem.

How long, in inches, is the turtle shown below?



A 3

B 4

C $3\frac{3}{8}$

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

2 Which number represents four hundred twenty-eight thousand six hundred eight?

A 4,268

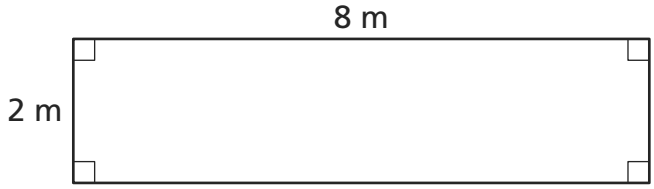
B 42,868

C 428,608

D 428,680

Go On

3 What is the perimeter of the rectangle shown below?



[not drawn to scale]

A 8 meters

B 10 meters

C 16 meters

D 20 meters

4 Which inequality below shows the decimals in order from **greatest** to **least**?

A $7.4 > 6.5 > 4.2$

B $4.2 > 6.5 > 7.4$

C $7.4 < 4.2 < 6.5$

D $4.2 < 7.4 < 6.5$

5 Kay won a race by seven thousandths of a second. Which number below represents seven thousandths?

A 0.7

B 0.07

C 0.007

D 7,000

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6 Which figure below correctly shows all the possible lines of symmetry for a square?

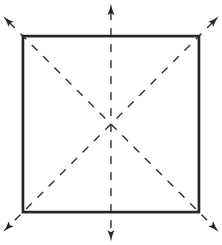


Figure 1

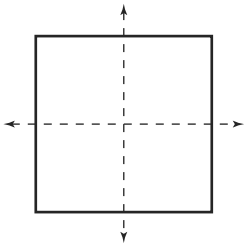


Figure 2

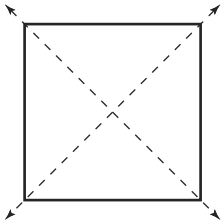


Figure 3

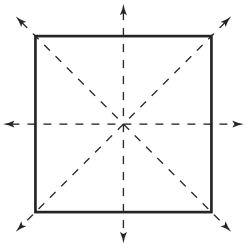


Figure 4

A Figure 1

B Figure 2

C Figure 3

D Figure 4

7 Which statement is **false**?

A $\frac{1}{5} = \frac{2}{10}$

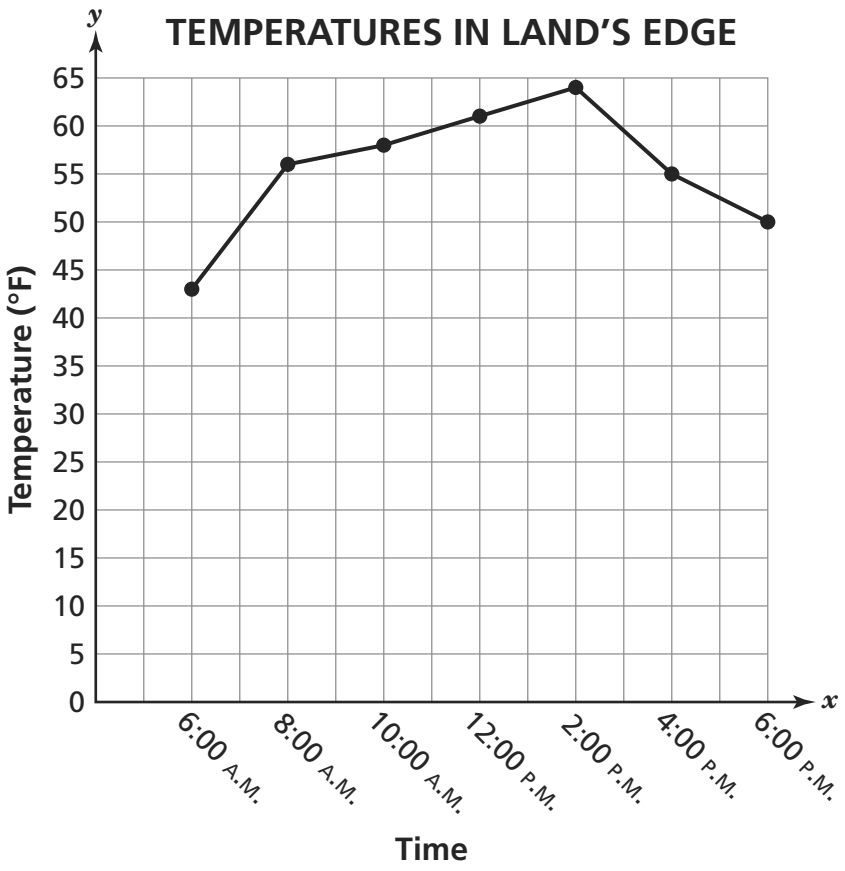
B $\frac{1}{3} = \frac{3}{9}$

C $\frac{1}{5} = \frac{5}{25}$

D $\frac{1}{3} = \frac{4}{9}$

Go On

8 Vito recorded the temperatures in Land's Edge during a twelve-hour period. He entered the data on the line graph below.



Based on the data in the graph, which statement below is true?

A The lowest recorded temperature was at 2:00 P.M.

B The highest recorded temperature of the day was at 2:00 P.M.

C The change in temperature from 6:00 A.M. to 8:00 A.M. was 10 degrees.

D The temperatures were all between 40 degrees and 60 degrees.

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9 The estimated population of Hong Kong in 2006 was six million nine hundred forty thousand four hundred thirty-two. What is this number in **standard form**?

A 69,432

B 694,432

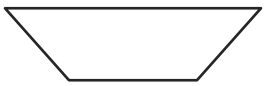
C 6,904,432

D 6,940,432

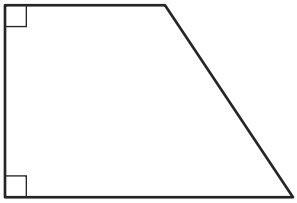
10 Read the riddle below.

I have 4 sides.
I have **only** one pair of parallel sides.
I have more than one right angle.
What shape am I?

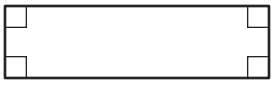
Which of these shapes is the answer to the riddle?



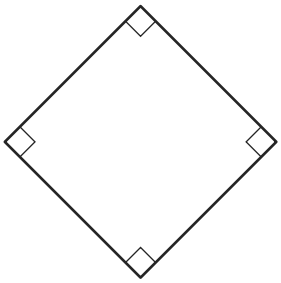
A



C



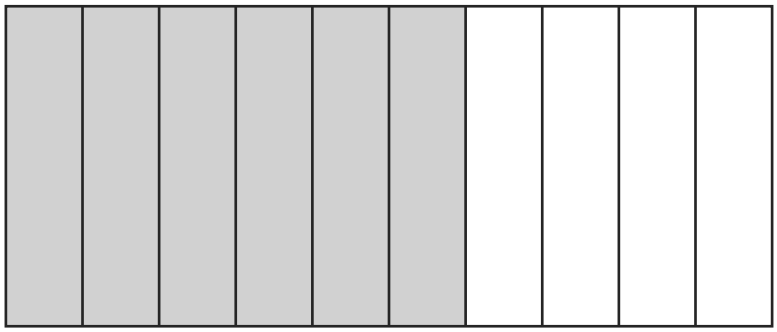
B



D

Go On

11 The diagram below shows a strip of paper divided into equal columns. The diagram represents one whole.



Which decimal is **greater than** the part of the diagram represented by the shaded columns?

A 0.7

B 0.5

C 0.4

D 0.2

12 There are 125 large bags of ice for sale at Redwood Grocery. Each bag of ice has a mass of 30 kilograms. What is the total mass of all the bags of ice?

A 365 kilograms

B 375 kilograms

C 3,650 kilograms

D 3,750 kilograms

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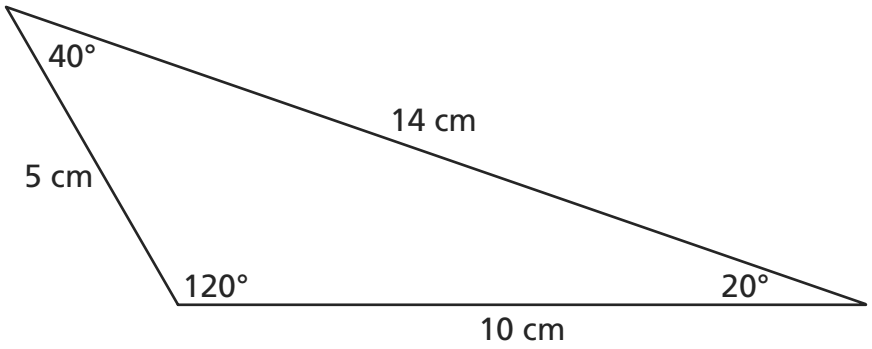
13 What type of triangle is shown below?



[not drawn to scale]

A It is a scalene triangle because all the lengths of the sides are different.

B It is an isosceles triangle because the lengths of two sides are the same.

C It is an acute triangle because each of the three angles measures less than 90 degrees.

D It is a right triangle because two of the sides are perpendicular.

14 The length of one sheet of Jack's art paper is 12 inches. The width of the sheet of paper is 9 inches. What is the perimeter of Jack's sheet of paper?

$$P = 2l + 2w$$

A 18 inches

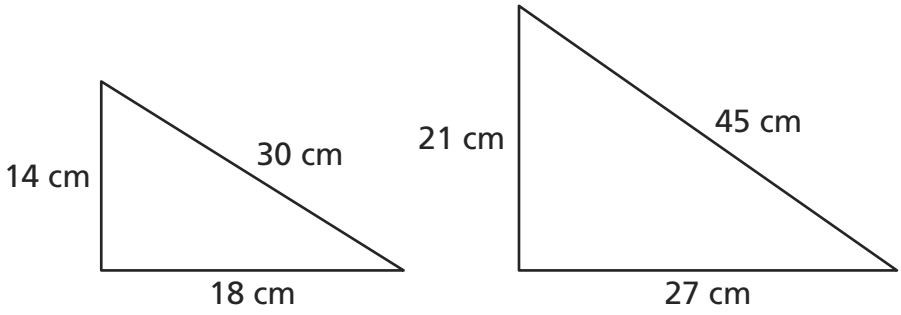
B 24 inches

C 30 inches

D 42 inches

Go On

15 The triangles below are similar.



[not drawn to scale]

Which fraction represents the ratio of the corresponding sides of the triangles?

A $\frac{14}{21}$

B $\frac{14}{27}$

C $\frac{14}{30}$

D $\frac{14}{45}$

16 Lexi hiked a 13-kilometer trail at Great Peak. How many **meters** did Lexi hike?

1 kilometer = 1,000 meters

A 0.13

B 0.013

C 1,300

D 13,000

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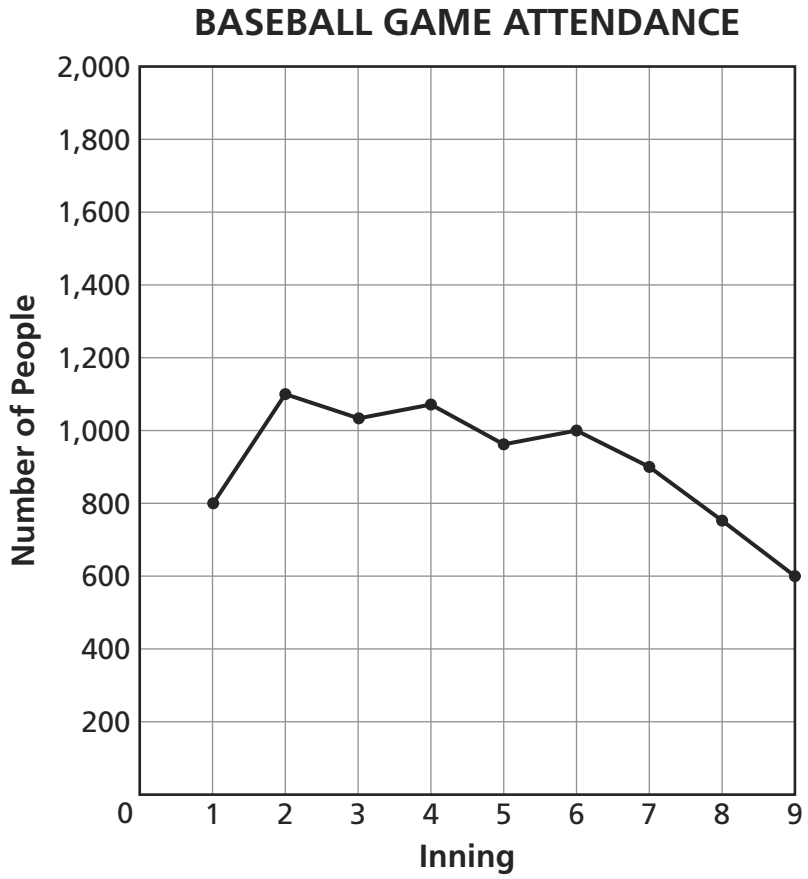
17 The line graph below shows the number of people in attendance at a baseball game at the beginning of each inning.



At the beginning of what inning were there **approximately** 900 people at the game?

A 1

B 2

C 5

D 7

Go On

18 Which list shows the fractions in order from **least** to **greatest**?

A $\frac{1}{5}, \frac{1}{4}, \frac{1}{2}$

B $\frac{1}{2}, \frac{1}{5}, \frac{1}{4}$

C $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}$

D $\frac{1}{5}, \frac{1}{2}, \frac{1}{4}$

19 Manu has run in six different races. The distance of each race is shown below.

MANU'S RACES

Race	Distance
1	1.7 miles
2	0.5 mile
3	0.9 mile
4	2.1 miles
5	0.8 mile
6	1.6 miles

What is the total distance, in miles, of all six races that Manu ran?

A 5.6

B 6.6

C 7.6

D 8.6

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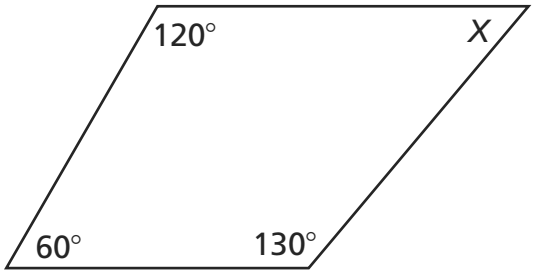
20 What is the measure of $\angle X$ in the quadrilateral below?



[not drawn to scale]

A 50°

B 60°

C 150°

D 310°

21 Tamara watched a movie that was 1 hour 45 minutes in length. If the movie started at 2:20 P.M., what time did the movie end?

A 3:00 P.M.

B 3:05 P.M.

C 4:00 P.M.

D 4:05 P.M.

Go On

22 Leo wrote $\frac{2}{10}$ of the songs for a concert. Kim wrote $\frac{3}{10}$ of the songs for the same concert. What fraction of the total number of songs for the concert did Leo and Kim write?

A $\frac{1}{2}$

B $\frac{1}{4}$

C $\frac{1}{5}$

D $\frac{1}{10}$

23 The school photographer plans to place 360 photos onto 24 pages of a school yearbook. If he places the same number of photos on each page, how many photos will the school photographer place on each page?

A 13

B 14

C 15

D 16

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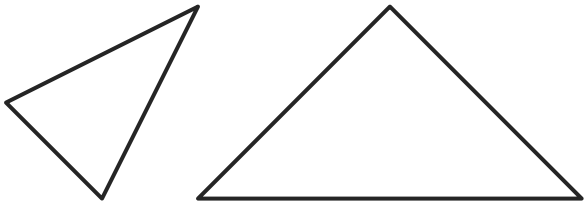
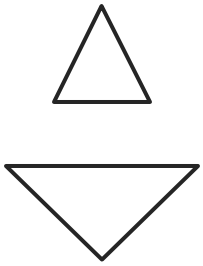
24 Use your ruler to help you solve this problem.

Which pair of triangles are congruent?

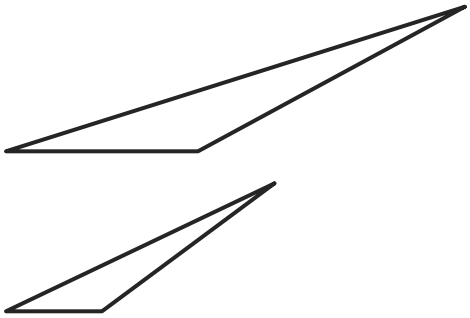
A



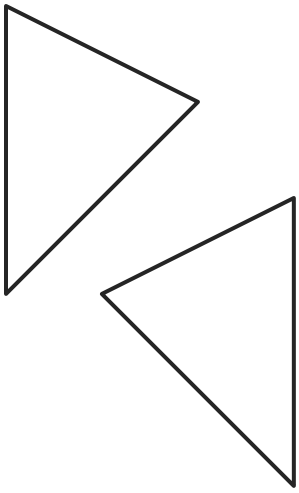
B



C



D



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25 What is the least common multiple (LCM) of 6 and 9?

A 15

B 18

C 36

D 54

26 A clerk records the number of bags of cat food sold at her shop during a five-day period. The data is recorded below.

27, 13, 26, 14, 15

What is the mean (average) number of bags of cat food sold?

A 19

B 17

C 14

D 13

STOP

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