# Grade 4 <br> <br> New York State <br> <br> New York State Testing Program 

 Testing Program}

## Mathematics



May 6-8, 2003

## Tips for taking the test

Here are some suggestions to help you do your best:

- Be sure to carefully read all the directions in the Test Book.
- Ask your teacher to explain any directions you do not understand.
- You may use your tools to help you solve any problem on the test.
- Read each question carefully and think about the answer before writing a response.

This picture means that you will use your ruler.


This picture means that you will use your pattern blocks.

## CTB

## Sample A

227
$\begin{array}{r}+14 \\ \hline\end{array}$
A 311
B 241
C 231
D 232

## Sample B

## NOW SERVING <br> 379

Which number will be served next?

F


Go On

## Sample C



Use your pattern blocks to help you solve this problem.
How many of the green triangles would be needed to cover exactly $\frac{2}{3}$ of the shape below?

A 1
B 3
C 6
D 9



Go On

4 Four students are buying school supplies. The amount of money each student has for supplies is shown below.

| Dominic | Ginny | Norman | Mimi |
| :---: | :---: | :---: | :---: |
| $\$ 2.25$ | $\$ 1.75$ | $\$ 1.40$ | $\$ 2.05$ |

Which list shows the students' money in order from least to greatest?
F $\$ 1.40, \$ 1.75, \$ 2.25, \$ 2.05$
G $\$ 1.40, \$ 1.75, \$ 2.05, \$ 2.25$
H $\$ 2.05, \$ 2.25, \$ 1.40, \$ 1.75$
J $\$ 2.25, \$ 2.05, \$ 1.75, \$ 1.40$

5 Denny made 48 cupcakes for the bake sale. He put an equal number of cupcakes on 6 plates. Which number sentence would be used to find the number of cupcakes on each plate?

A $48+6=$ $\square$
B $\quad 48-6=$
C $48 \times 6=$
D $48 \div 6=$ $\qquad$

6 Which measurement uses the unit of square centimeters?
F area
G length
H temperature
J volume

7 Mark has started reading a book that has 100 pages. He has read only 5 pages of the book. What percent of the book has Mark read?

A $5 \%$
B $50 \%$
C $100 \%$
D 105\%

8 Which statement describes the pattern of the shapes shown below?


F Add 1 side, then subtract 2 sides.
G Add 2 sides, then subtract 1 side.
H Subtract 1 side, then add 2 sides.
J Subtract 2 sides, then add 1 side.

9 In the year 2000, there were 4,690,107 children under the age of 18 living in New York State. What is the value of the 6 in the number 4,690,107?

A 6 thousands
B 6 ten thousands
C 6 hundred thousands
D 6 millions

10 What fraction of the figure below is shaded?


F $\frac{1}{4}$
G $\frac{2}{4}$
H $\frac{2}{6}$
J $\frac{4}{6}$

11 Annie discovered a multiplication pattern. She wrote the number sentences below to show the pattern.

$$
\begin{aligned}
40 \times 101 & =4,040 \\
71 \times 101 & =7,171 \\
59 \times 101 & =5,959 \\
\square \times 101 & =2,828
\end{aligned}
$$

What number should go in the box to complete the last number sentence?
A 22
B 28
C 82
D 88

12 Which number is located at point N on the number line below?


F 2.0
G 2.2
H 2.5
J 3.5

13 Mrs. Brown rewards her students by putting a star next to their name on the bulletin board. For every 5 stars a student earns, the student gets a prize. Brenda got 3 prizes last month. What is the least number of stars Brenda must have earned to get 3 prizes?

A 5
B 8
C 10
D 15

14 Steve and Douglas went on a bicycle trip. It took them 3 days to ride the 87 miles from Lewiston to Paragon Lake. They traveled the same number of miles each day.


About how many miles did they travel each day?
F 20
G 25
H 30
J 35

15 Mr. Wright's fourth-grade class made a graph showing the number of student birthdays in each month.

STUDENT BIRTHDAYS


Which statement about the number of student birthdays is true?
A The most birthdays are in March.
B In July, 5 students have birthdays.
C Fewer students have birthdays in October than in June.
D More students have birthdays in June than in November.

16 The weather report says there is a $40 \%$ chance of rain tomorrow. What is another way to write $40 \%$ ?

F 1 out of 40
G 4 out of 100
H 40 out of 60
J 40 out of 100

17 Lindsay is in the fourth grade. What would be the best estimate of the length of one of Lindsay's sneakers?

A 20 meters
B 20 decimeters
C 20 centimeters
D 20 millimeters

18 There are 4 baseballs, 3 baseball bats, and 1 glove in a box. What fraction of the objects in the box are baseball bats?


F $\frac{1}{8}$
G $\frac{1}{3}$
H $\frac{3}{8}$
J $\frac{3}{5}$

19 There are 6 red, 5 blue, 3 green, and 2 purple ribbons in a bag. Constance is going to pick a ribbon from the bag without looking. What is the probability that Constance will pick a green ribbon?

A $\frac{1}{16}$
B $\frac{3}{16}$
C $\frac{3}{13}$
D $\frac{1}{3}$

20 Which figure could be made if the piece of cardboard shown below is folded along the dotted lines?



F


G


H


J

21 What is the volume, in cubic meters, of the pool shown below?


$$
\text { Volume }=\text { length } \times \text { width } \times \text { height }
$$

A 10
B 16
C 20
D 32

22 Which number should be written in the box below to make the number sentence correct?

$$
20>\square+10
$$

F 5
G 10
H 15
J 20

23 Greg gave a glass of water to each person at dinner. He put more than 2 ice cubes in each glass. Each glass had the same number of ice cubes. How many ice cubes could Greg have used in all?

A 13
B 15
C 17
D 19

24 Which figure shows a line of symmetry?


25 Sheila is mowing her lawn. It has taken her 10 minutes to mow the area of her lawn shown on the diagram below.

## SHEILA'S LAWN



About how many minutes will it take Sheila to mow the rest of her lawn?
A 20 minutes
B 30 minutes
C 40 minutes
D 50 minutes

26 Barbara asked her friends to guess the number of cousins she has. She gave them the following clues:

- The number is more than 5 .
- The number is less than 15.
- When the number is divided by 2 , the answer is an odd number.
- When the number is divided by 3 , the answer is an even number.

How many cousins does Barbara have?
F 6 cousins
G 10 cousins
H 12 cousins
J 14 cousins

27 Josie arranged her dominoes to make the pattern below.


Which domino should she put next to continue her pattern?

A

B

C

D

28 Two trains leave from Camden and arrive in Rockford, as shown in the timetable below.

TRAIN TIMETABLE

| Train | Leaves Camden | Arrives Rockford |
| :---: | :---: | :---: |
| Express | 5:10 P.M. | 5:40 P.M. |
| Local | $5: 30$ P.M. | $6: 20$ P.M. |

How many more minutes does it take the Local train than the Express train to go from Camden to Rockford?

F 20
G 30
H 40
J 50

29 Which number sentence is another way to write $(15-5)+6$ ?
A $(15-6)+5$
B $\quad 15-(5+6)$
C $6+(15-5)$
D $6-(15+5)$

30 Devon, Tony, and Nate were playing a board game. Devon wins when the spinner lands on green. Nate wins when the spinner lands on blue. Tony wins when the spinner lands on red. Which spinner should be used to make the game fair?


F


G


H


STOP


Book 1
Mathematics

