

Mathematics Test
Book 1


March 3-7, 2008

## CTB

Hidiw McGraw-Hill
Developed and published by CTB/McGraw-Hill LLC, a subsidiary of The McGraw-Hill Companies, Inc., 20 Ryan Ranch Road, Monterey, California $93940-5703$. Copyright © 2008 by New York State Education Department. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of New York State Education Department.

## 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.

## Sample A

$$
\begin{array}{r}
227 \\
+\quad 14
\end{array}
$$

A 311
B 241
C 231
D 232

## Sample B



What number will be served next？


A


B


C


D

## Sample C



Use your ruler to help you solve this problem.
How many inches long is the toothbrush shown below?


A $4 \frac{1}{2}$
B 5
C $5 \frac{1}{2}$
D 6

1 During the year, one thousand eight hundred four books were checked out of the school library. What is another way to write this number?

A 184
B 1,084
C 1,804
D 1,840

2 Use your ruler to help you solve this problem.
How many centimeters long is the string bean shown below?


A 8
B 9
C $\quad 10$
D 11

3 Maple Elementary School has 183 school days each year. What is 183 rounded to the nearest ten?

A 180
B 190
C 200
D 210

4 Kayla must read an 80-page book in 10 days. Kayla reads the same number of pages each day. How many pages does Kayla read each day?

A 8
B 9
C 70
D 90

5 Lisa covered the top of a box with square stickers, as shown below.

## BOX TOP



What is the area, in square units, of the top of the box?
A 32
B 36
C 60
D 80

6 The Medford Star newspaper has 8,062 readers. What is another way to write this number?

A eight hundred sixty-two
B eight thousand sixty-two
C eighty thousand sixty-two
D eight thousand six hundred two

7 Which number when multiplied by any odd number always results in an even number?

A 1
B 5
C 6
D 9

8 Ms. Lane buys 8 packages of logs to burn in her wood stove. There are 8 logs in each package. How many logs does Ms. Lane buy in all?

A 16
B 48
C 64
D 72

9 There are 8 tables in Christy's Coffee Shop. Each table has 6 chairs around it. How many chairs are around the 8 tables?

A 42
B 48
C 54
D 56

10 Brian wrote the riddle below.
I have 5 sides.
I have 5 angles.
What am I?
What shape does the riddle describe?
A hexagon
B octagon
C pentagon
D rhombus

11 Anna wants to check that she correctly solved the number sentence below.

$$
32 \div 8=4
$$

Which number sentence could Anna use to check to see if her answer is correct?
A $\quad 4 \times 8=\square$
B $\quad 8 \div 4=\square$
C $4 \times 32=\square$
D $32 \times 8=\square$

12 The number of bicycles in a bicycle rack is shown in the bar graph below.


Based on the information in the bar graph, which statement is true?
A Exactly half of all the bicycles are red.
B Fewer than half of all the bicycles are red.
C Exactly half of all the bicycles are yellow.
D More than half of all the bicycles are yellow.

13 Matthew plays his favorite video game and earns a score of 47,675 .
The highest score he has ever earned for this video game is 57,675 . What is the difference between 47,675 and 57,675 ?

A 10 hundreds
B 50 hundreds
C 10 thousands
D 50 thousands

14 Darryl wrote the number sentence below.

$$
107<
$$

Which number can Darryl write on the line to make the number sentence correct?

A 101
B 106
C 107
D 109

15 Which expression is equal to $(31 \times 65) \times 47$ ?
A $(31+65)+47$
B $\quad(31+65) \times 47$
C $31 \times(65+47)$
D $31 \times(65 \times 47)$

16 Ms. Spencer puts two packets of sugar in her cup of coffee. Which unit of measure is best for measuring how much each packet of sugar weighs?

A gram
B kilogram
C liter
D milliliter

17 Which Input-Output table follows the rule below?

$$
\text { Input } \div 2=\text { Output }
$$

A | Input | Output |
| :---: | :---: |
| 18 | 9 |
| 22 | 11 |
| 26 | 13 |
| 30 | 15 |

C | Input | Output |
| :---: | :---: |
| 18 | 2 |
| 22 | 6 |
| 26 | 10 |
| 30 | 14 |

B | Input | Output |
| :---: | :---: |
| 18 | 36 |
| 22 | 44 |
| 26 | 52 |
| 30 | 60 |

D

| Input | Output |
| :---: | :---: |
| 18 | 9 |
| 22 | 10 |
| 26 | 11 |
| 30 | 12 |

18 Each bus at Dan's school can carry 37 students. Dan estimates that 400 students would need 12 buses to carry them. Which expression can be used to check whether Dan's estimation is reasonable?

A $30 \times 10$
B $30 \times 20$
C $\quad 40 \times 10$
D $40 \times 20$

19 Which list shows the fractions in order from least to greatest?
A $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$
B $\frac{1}{2}, \frac{1}{4}, \frac{1}{3}$
C $\frac{1}{4}, \frac{1}{2}, \frac{1}{3}$
D $\frac{1}{4}, \frac{1}{3}, \frac{1}{2}$

20 Terrell wants to measure the length of the school hallway. Which unit of measure is best for Terrell to use?

A inch
B meter
C kilometer
D centimeter

21 The two statements below describe the number of cats, dogs, and rabbits living in Lauren's house.
number of cats $>$ number of rabbits
number of dogs $<$ number of rabbits
Which could be the number of cats, dogs, and rabbits living in Lauren's house?
A 4 cats, 3 dogs, 2 rabbits
B 4 cats, 2 dogs, 3 rabbits
C 2 cats, 3 dogs, 4 rabbits
D 2 cats, 4 dogs, 3 rabbits

22 Which pair of figures are congruent?
A


B

C

D


23 At Mr. Clarke's store, $\frac{2}{8}$ of the set of glasses for sale are sunglasses.


Which fraction is equivalent to $\frac{2}{8}$ ?
A $\quad \frac{1}{2}$
B $\quad \frac{1}{3}$
C $\quad \frac{1}{4}$
D $\quad \frac{1}{6}$

24 Marta went to her grandmother's house. She arrived at 2:30 p.м. and left at 6:00 p.м. How long was Marta at her grandmother's house?

A 3 hours
B 3 hours 30 minutes
C 4 hours
D 4 hours 30 minutes

25 Brittany opens a 20 -ounce can of chocolate sauce. She pours 3 ounces of the sauce on each of 6 bowls of ice cream. How many ounces of chocolate sauce are left in the can?

A 1
B 2
C 3
D 6

26 Four students have savings accounts. Every month, the students add the same number of dollars to their savings accounts as the month before. The table below shows the total amount of money each student has at the end of each month.

SAVINGS ACCOUNTS

| Month | Total Savings (in dollars) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Kelly | Shawn | Jack | Emily |
| 1 | 48 | 44 | 42 | 45 |
| 2 | 51 | 48 | 48 | 50 |
| 3 | 54 | 52 | 54 | 55 |

If the students continue saving the same number of dollars each month, who will have the most money at the end of Month 5 ?

A Kelly
B Shawn
C Jack
D Emily

27 Frank can do 3 times as many pull-ups as James. James can do 2 fewer pull-ups than Stephanie. Stephanie can do 12 pull-ups. How many pull-ups can Frank do?

A 30
B 34
C 36
D 38

28 A diagram of a field is shown below. Part of the field is covered with dirt, and part of the field is covered with grass.


What fraction of the field is covered with dirt?

A $\frac{1}{2}$
B $\frac{1}{3}$
C $\frac{1}{4}$
D $\frac{1}{6}$

29 Mandy wrote the open sentences below.


$$
\hat{y}>0
$$

If both of Mandy's open sentences are true, which open sentence is also true?

A $\bigcirc<\triangle$
B $\quad \tilde{y}<0$
C $\bigcirc>\triangle$
D $\hat{H}>\Delta$

30 Leslie's homework includes drawing an octagon. Leslie draws the 2 line segments shown below before her pencil breaks.


How many more line segments must Leslie draw to complete the octagon?
A 2
B 3
C 4
D 6


Grade 4

