## $\int$ New York State <br> Testing Program

Mathematics Test
Book 1


March 3-7, 2008

## CTB

Hidiw McGraw-Hill
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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 $\quad 13$
C 14
D $\quad 15$

## Sample B

Use your protractor to help you solve this problem.
What is the measure of angle $x$ shown below?


A $30^{\circ}$
B $45^{\circ}$
C $90^{\circ}$
D $150^{\circ}$

1 There are approximately 925,100 types of insects in the world. If one thousand more types were discovered, which digit in the number would change?

A 1
B 2
C 5
D 9

2 Which point in the diagram below can be connected to point N to form an obtuse angle with ray NJ ?


A point K
B point L
C point M
D point $P$

3 Anna has completed $87 \%$ of the Empire State car race. Which fraction represents the part of the race that Anna has completed?

A $\frac{13}{100}$
B $\frac{100}{13}$
C $\frac{87}{100}$
D $\frac{100}{87}$

4 An apple orchard has 30 rows of apple trees, and each row has 20 trees. What is the total number of apple trees in the orchard?

A 50
B 60
C 500
D 600

5 Which statement correctly compares the four decimals?
A $\quad 0.1>0.3>0.7>0.6$
B $\quad 0.7>0.6>0.1>0.3$
C $\quad 0.7<0.6<0.3<0.1$
D $\quad 0.1<0.3<0.6<0.7$

6 The list below shows the number of seconds between each spray of water from the fountain in a town square.
$25,10,30,25,40$
What is the mean (average) number of seconds between each spray of water?
A 25
B 26
C 30
D 36

7 Which diagram shows exactly $\frac{2}{3}$ of the set of hats shaded?
A

B



C

D


8 Lisa bought a bracelet for $\$ 3.25$, including tax. If she gave the cashier $\$ 5.00$, how much change did she receive?

A $\$ 1.25$
B $\quad \$ 1.75$
C $\$ 2.25$
D $\$ 2.75$

9 What is the total number of lines of symmetry that can be drawn on the trapezoid below?


A 4
B 3
C 2
D 1

10 Sara attended a dog show from 8:30 A.m. to 3:45 p.м. How long was Sara at the dog show?

A 4 hours 15 minutes
B 5 hours 15 minutes
C 6 hours 15 minutes
D 7 hours 15 minutes

11 Which pair of triangles are congruent?

A


B


C


D


12 Anthony wrote the pattern shown below.

$$
4,16,64,256, \ldots
$$

Which rule describes the pattern?
A Add 4.
B Add 12.
C Multiply by 4.
D Multiply by 8 .

13 Jolene rode her bike $1 \frac{3}{4}$ miles to a friend's house and then $3 \frac{1}{4}$ more miles to the library. What is the total distance, in miles, that Jolene rode her bike?

A 4

B 5

C $4 \frac{1}{2}$
D $\quad 5 \frac{1}{2}$

14 What is the perimeter, in centimeters, of the polygon below?

[not drawn to scale]

A 35
B 36
C 37
D 38

15 The table below shows some of the snack items sold at a football game.

| Snacks for Sale |  |
| :---: | :---: |
| Popcorn. | .. \$3.50 |
| Soda..... | . \$2.50 |
| Chips.. | ...\$1.25 |
| Ice cream | .... $\$ 0.75$ |
| Hot dog. | ....\$2.75 |

What is the order of the items in the table from the least expensive to the most expensive?

A ice cream, chips, soda, hot dog, popcorn
B popcorn, hot dog, soda, chips, ice cream
C ice cream, hot dog, chips, soda, popcorn
D popcorn, soda, chips, ice cream, hot dog

16 The length of the rectangular flag in a city park is 16 feet. The width of the flag is 12 feet. What is the perimeter of the flag?

$$
P=2 l+2 w
$$

A 24 feet
B 28 feet
C 32 feet
D 56 feet

17 What is the value of the expression $4+16 \div 4-3$ ?
A 2
B 5
C 11
D 20

18 There are four hiking trails at Water's Edge Park. The table below shows the distance, in feet, from the beginning of each trail to a waterfall.

DISTANCE TO WATERFALL

| Trail | Distance <br> (in feet) |
| :---: | :---: |
| 1 | 768 |
| 2 | 804 |
| 3 | 741 |
| 4 | 756 |

Which trail begins 268 yards from the waterfall?

$$
1 \text { yard }=3 \text { feet }
$$

A Trail 1
B Trail 2
C Trail 3
D Trail 4

19 The data below describes the number of visitors at River Run Park.

- After 2001, the number of visitors decreased each year except for 2004.
- In 2004, the greatest number of visitors was recorded.

Which line graph represents this data?


A


B


C


D

20 Which fraction belongs in the box below to make the statement true?

$$
\frac{2}{3}<\square
$$

A $\frac{3}{4}$
B $\frac{3}{10}$
C $\quad \frac{1}{6}$
D $\frac{2}{5}$

21 The highest point of Whiteface Mountain in New York is 4,867 feet. What is 4,867 rounded to the nearest thousand?

A 4,000
B 4,900
C 5,000
D 5,900

Fredo drew the equilateral triangle shown below.


Which equilateral triangle is congruent to Fredo's triangle?


A


B


C


D

Go On

23 At a restaurant, $\frac{1}{6}$ of a whole apple pie was served. What fraction of the pie was left?
A $\frac{1}{6}$
B $\frac{2}{6}$
C $\frac{4}{6}$
D $\frac{5}{6}$

24 There are four bike trails in Garland Park. The diagram below shows one of the bike trails. The sign shows the distances of all of the bike trails.


Which bike trail does the diagram show?
A Coaster
B Twister
C River Run
D Wood Way

25 What improper fraction is equivalent to $2 \frac{3}{5}$ ?
A $\frac{6}{5}$
B $\frac{13}{5}$
C $\frac{21}{5}$
D $\frac{23}{5}$

26 Use your ruler to help you solve this problem.

Use your protractor to help you solve this problem.
Which pair of triangles are similar?
A


C

B

D




Grade 5
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