New York State Testing Program

Mathematics Test
Book 1

Grade **4**

May 5–7, 2010

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.

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Book 1

Page 1

Sample A

227
+ 14
<hr>

A   311

B   241

C   231

D   232

Sample B

NOW SERVING

3 7 9

What number will be served next?
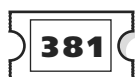
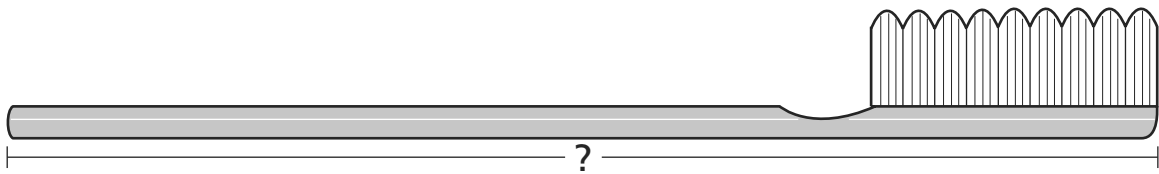| 389	381	479	380
A	**B**	**C**	**D**

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

STOP

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Book 1

Page **3**

1 Use your ruler to help you solve this problem.

What is the length, in inches, of the toy truck shown below?
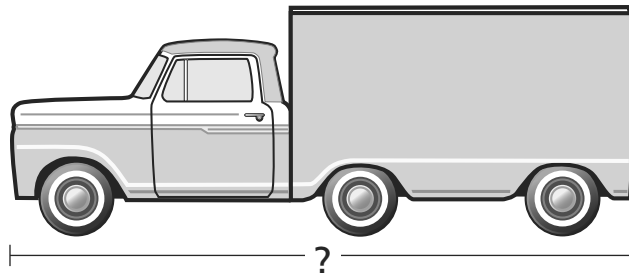
A 3

B $3\frac{1}{4}$

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

D $4\frac{1}{4}$

2 The first explorers to reach the South Pole returned to their base camp after traveling 1,860 miles. What is 1,860 written in words?

A eighteen thousand sixty

B eighteen thousand six hundred

C one thousand eight hundred six
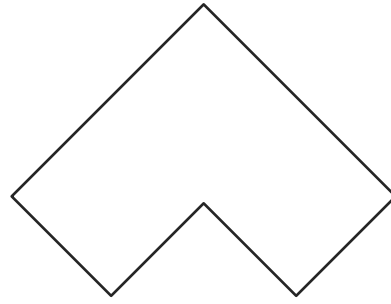
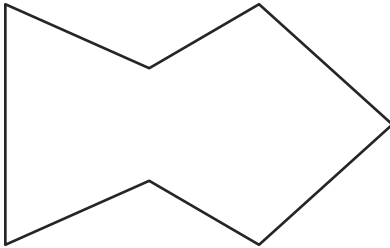**D** one thousand eight hundred sixty

Go On

3 For a class mural, Amber drew a figure with 6 line segments. Which of these figures could Amber have drawn?
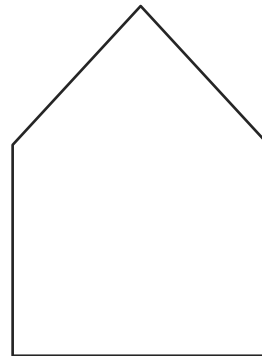
A

B

C

D

4 The distance from Gayle's house to three cities is shown in the table below.

DISTANCE FROM GAYLE'S HOUSE

City	Distance (in miles)
City X	250
City Y	139
City Z	167

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

A 250 miles, 139 miles, 167 miles

B 167 miles, 139 miles, 250 miles

C 139 miles, 250 miles, 167 miles

D 139 miles, 167 miles, 250 miles

5 A clothing store had 274 customers in one day. What is 274 rounded to the nearest ten?

A 200

B 270
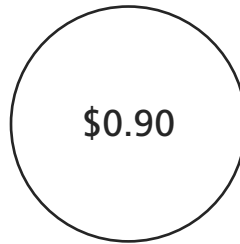
C 280

D 300

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6 Which statement is true about the amounts in the circles below?

$0.88

Circle A

$0.70

Circle B

$0.90
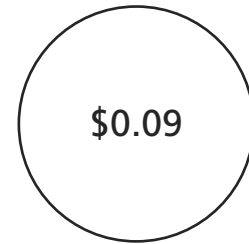
Circle C

$0.09

Circle D

A The greatest amount is shown in Circle A.

B The greatest amount is shown in Circle B.

C The smallest amount is shown in Circle C.

D The smallest amount is shown in Circle D.

7 Trent wants to complete the number sentence below.

$$245 > \underline{\ \ ?\ \ }$$

Which number can Trent write on the line to make the number sentence true?
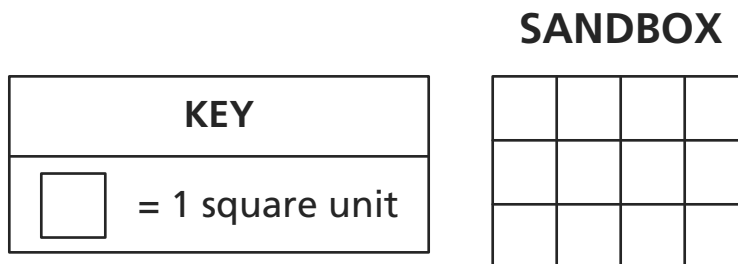
A 235

B 245

C 250

D 254

8 Ms. Clark has a total of 42 bananas. There are 6 bananas in each bunch. Which step can be used to find how many bunches of bananas Ms. Clark has?

A Add 6 and 42.

B Divide 42 by 6.

C Multiply 42 by 6.

D Subtract 6 from 42.

9 The diagram below shows the area of the sandbox Mr. Mathews built in his backyard.
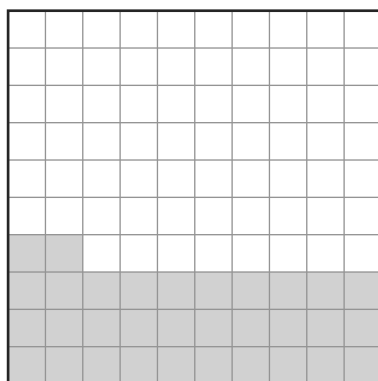
SANDBOX

KEY
☐ = 1 square unit

What is the area, in square units, of the sandbox?

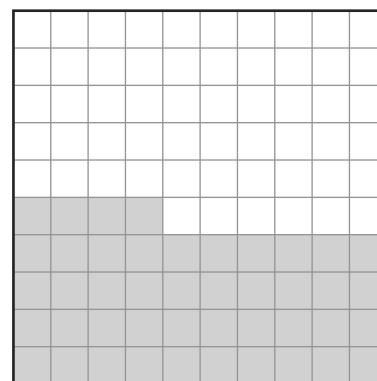**A** 7

B 10

C 12

D 14

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10 The shaded portions of the tables below represent the amounts of money counted by Sean and Trey.

KEY
☐ = $0.01

Sean

Trey

Mary counts her own money and finds that her amount of money is **greater** than Sean's but **less** than Trey's. Which amount of money could Mary have?
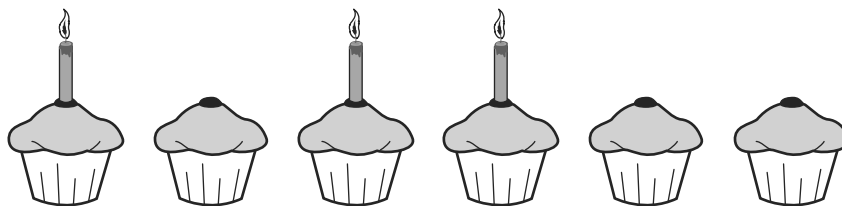
A $0.32

B $0.39

C $0.44

D $0.47

11 Mr. Wright has three large rocks in his garden. The rocks weigh 79 pounds, 72 pounds, and 203 pounds. What is the **best estimation** of the total weight of the rocks?

    A 340 pounds

    B 350 pounds

    C 360 pounds

    D 370 pounds

12 Anna placed candles on $\frac{3}{6}$ of the set of cupcakes shown below.

Which fraction is equivalent to $\frac{3}{6}$?

    A $\frac{1}{9}$

    B $\frac{1}{4}$

    C $\frac{1}{3}$

    D $\frac{1}{2}$

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13 Brian used the same rule on each Input number to create the Output numbers in the table below.

BRIAN'S INPUT-OUTPUT TABLE

Input	Output
30	20
60	50
20	10
40	30

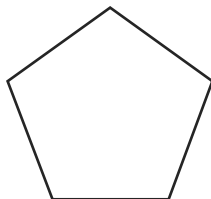Which rule could Brian have used?

A Add 10.

B Add 30.

C Subtract 10.
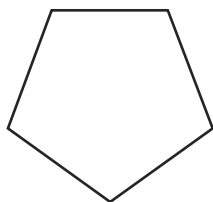
D Subtract 20.

14 Tina and Carl are traveling to New York City. Tina's plane arrives at 8:00 A.M. Carl's plane arrives 2 hours and 30 minutes later. What time does Carl's plane arrive?

A 8:30 A.M.

B 9:30 A.M.

C 10:30 A.M.

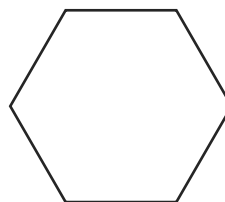**D** 11:30 A.M.

15 Denise drew the figure below.

Which figure is congruent to the figure Denise drew?

A

C
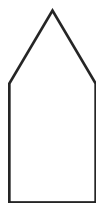
B
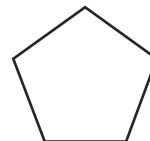
D

16 Which value is the same as 2 hundreds?

   A   2 ones

   B   20 ones

   C   20 tens

   D   200 tens

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17 Which statement is always true?

A even number $\times$ 2 = even number

B odd number $\times$ 2 = odd number

C even number $\times$ 3 = odd number

D odd number $\times$ 3 = even number

18 David multiplies 19 by 21 and gets 399. Which of these estimations could be used to check whether David's answer is reasonable?

A 10×20

B 10×30

C 20×20

D 20×30

19 Which unit of measure is **best** for measuring the amount of water in a large fish tank?

A liter

B meter

C milliliter

D millimeter

20   A reading contest in the library begins on July 6. The contest ends exactly
2 weeks later.

JULY

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

On what day will the reading contest end?

A   July 13

B   July 20

C   July 21

D   July 27

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21 The diagram below shows a rectangle divided into equal sections. What fraction of the rectangle is shaded?
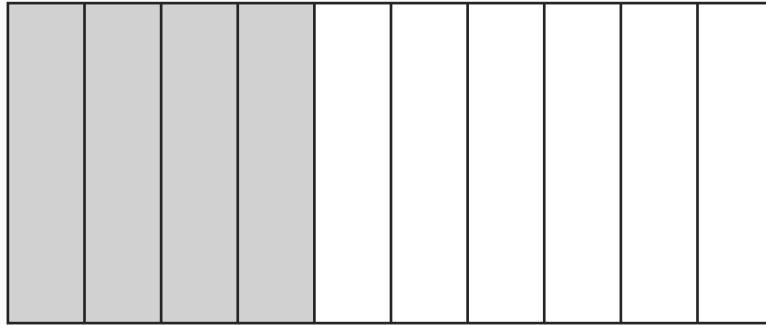
A $\frac{1}{2}$

B $\frac{1}{4}$
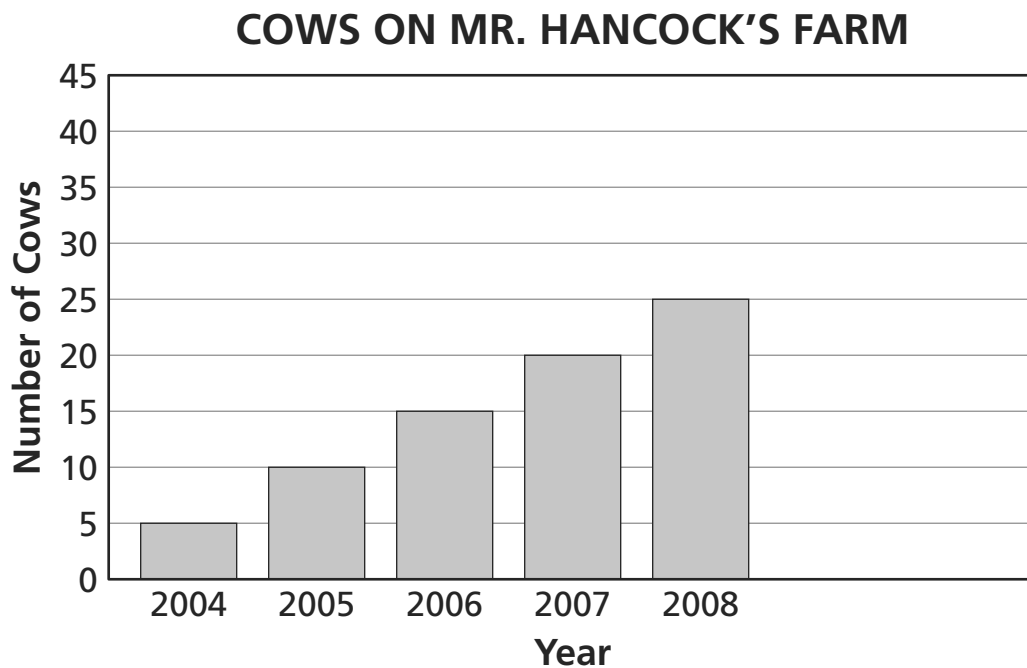
C $\frac{2}{3}$

D $\frac{2}{5}$

22 Maya wants to measure the **width** of her science book. Which measuring tool is **best** for Maya to use?

A ruler

B scale

C compass

D thermometer

23 The bar graph below shows the number of cows Mr. Hancock had on his farm during a five-year period.

COWS ON MR. HANCOCK'S FARM

If the trend in the bar graph continues for two more years, what is the best prediction of the number of cows that will be on the farm in **2010**?

A 25

B 30

C 35

D 45

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24 Which statement is true?

A $\quad \frac{1}{2} \neq \frac{4}{8}$

B $\quad \frac{1}{3} \neq \frac{4}{12}$

C $\quad \frac{1}{3} \neq \frac{4}{20}$

D $\quad \frac{1}{4} \neq \frac{4}{16}$

25 Which fraction is equivalent to 0.08?

A $\quad \frac{1}{8}$

B $\quad \frac{1}{80}$

C $\quad \frac{8}{10}$

D $\quad \frac{8}{100}$

26 Which number belongs on the line to make the number sentence true?

$$5 + \underline{\quad ? \quad} < 4 + 3$$

A $\quad$ 1

B $\quad$ 2

C $\quad$ 4

D $\quad$ 7

27 Felicia sells lemonade for five days. The pictograph below shows the number of glasses of lemonade she sells during each of the first four days.

LEMONADE SALES

KEY
🥤 = 5 glasses of lemonade

Day	Number of Glasses
1	🥤 🥤 🥤 🥤 🥤 🥤
2	🥤 🥤 🥤 🥤 🥤
3	🥤 🥤 🥤 🥤 🥤 🥤
4	🥤 🥤 🥤 🥤 🥤 🥤

Based on information in the pictograph, how many glasses of lemonade will Felicia **most likely** sell on Day 5?

A   5

B   6

C   30

D   40

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**28** In which situation would it be **best** to use estimation?

A to find the number of wheels on a bus

B to find the number of flowers in a park

C to find the number of seat belts in a car

D to find the number of strings on a guitar

29 Mr. Patel moved his chair to the other side of his living room. What measure could **most likely** be the mass of his chair?

A 5 liters

B 5 grams

C 5 kilograms

D 5 kilometers

30 Roberta is using her oven. The line graph below shows the temperature of her oven after it has been turned on for a certain amount of time and then turned off.
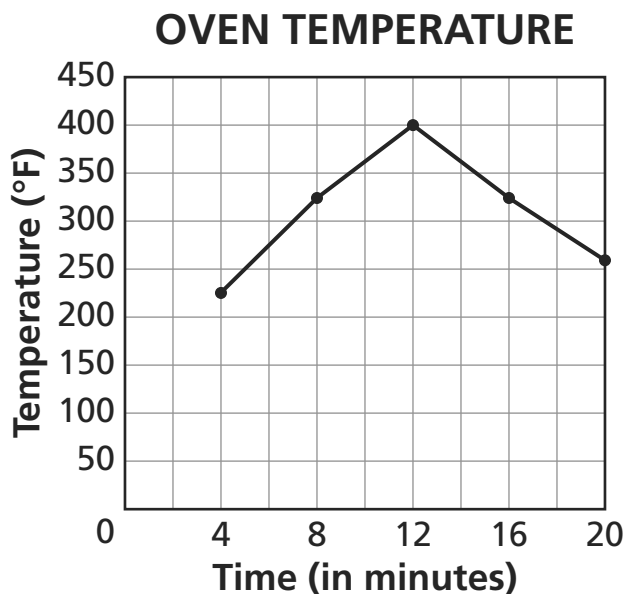
OVEN TEMPERATURE

Which statement correctly describes the data in the graph?

A The temperature at 12 minutes is 450 degrees.

B The temperature at 4 minutes is below 200 degrees.

C The temperatures at 4 minutes and at 20 minutes are exactly the same.

D The temperatures at 8 minutes and at 16 minutes are approximately the same.

STOP

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Mathematics Test
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