New York State Testing Program

Mathematics
Book 1

Grade **6**

March 13–17, 2006

47949

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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.
- You may use your tools to help you solve any problem on the test.
- 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

Samuel picked 150 strawberries at the strawberry patch. He gave away all the strawberries to 5 friends. If Samuel gave the same number of strawberries to each friend, how many strawberries did each friend receive?

A 30

B 50

C 145

D 155

Sample B

Kirsten read a number of books, k. Eric read 3 books fewer than Kirsten. What expression can be used to find the number of books Eric read?

F $k - 3$

G $k + 3$

H $3 - k$

J $3 \times k$

STOP

1 Which equation can be used to help solve the equation below?

$$\square \times 6 = 420$$

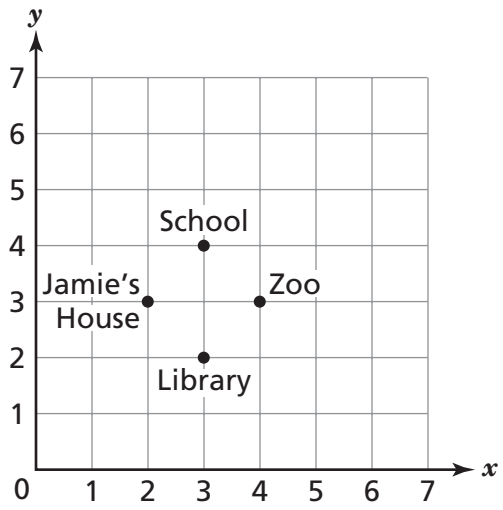
A $\square = 420 + 6$

B $\square = 420 - 6$

C $\square = 420 \times 6$

D $\square = 420 \div 6$

2 Jamie created a map for his friends. Each point on the map represents a different location.



What coordinates represent Jamie's house?

F (2, 3)

G (3, 2)

H (3, 4)

J (4, 3)

Go On

3 Giselle had 2 liters of water. She drank 750 milliliters. How many milliliters of water does Giselle have left?

1 liter = 1,000 milliliters

A 250

B 1,000

C 1,250

D 1,750

4 Jason has a jar that holds one dime, two nickels, and one quarter. He randomly removes three coins from the jar. Which combination is **not** a possible outcome?

F one dime, one nickel, and one quarter

G one quarter and two dimes

H one dime and two nickels

J two nickels and one quarter

5 Jackie wants to plant $2\frac{1}{2}$ rows of corn in her garden. She needs $3\frac{1}{4}$ ounces of seed for each row. How many total ounces of seed should Jackie buy?

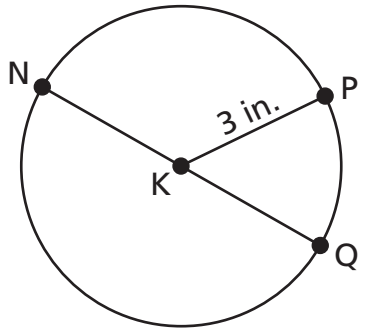
A $8\frac{1}{8}$

B $6\frac{1}{8}$

C $5\frac{3}{4}$

D $5\frac{2}{6}$

6 A circle has a diameter, $\overline{NQ}$, as shown below.



[not drawn to scale]

The radius $\overline{KP}$ is 3 inches. What is the length of $\overline{NQ}$?

F 3 inches

G 4 inches

H 6 inches

J 9 inches

7 How many cups are in 5 quarts?

1 quart = 2 pints 1 pint = 2 cups

A 10

B 20

C 30

D 40

Go On

8 At a gymnastics competition, $\frac{3}{10}$ of the gymnasts won a ribbon. What percent of the gymnasts won a ribbon?

F 3%

G 30%

H 33%

J $33\frac{1}{3}\%$

9 Which equation shows the commutative property of addition?

A $6 + 3 = 9$

B $6 + 3 = 6 + 3$

C $6 + 3 = 3 + 6$

D $6 + 3 = 5 + 4$

10 Mei wrote the expression below.

$$4n \times 2$$

If n equals 6, what is the value of the expression?

F 48

G 26

H 20

J 12

11 George has a one-gallon container of apple juice. How many cups of apple juice are in the one-gallon container?

1 gallon = 4 quarts 1 quart = 2 pints 1 pint = 2 cups

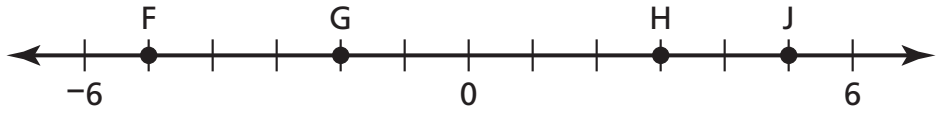
A 1

B 4

C 8

D 16

12 Which point on the number line is greater than –4 but less than 0?



F F

G G

H H

J J

Go On

13 Ben recorded the number of customers who shopped at his pet store every day for one week. The results are shown below.

42, 35, 56, 29, 42, 39, 23

What is the mean number of customers who shopped at the pet store?

A 33

B 38

C 39

D 42

14 Mr. Jenkins wants to distribute 40 fliers. He has distributed 30 fliers so far. What percent of the total number of fliers has Mr. Jenkins distributed?

F 60%

G 70%

H 75%

J 80%

15 Simplify the expression below.

$$(6 + 3^2) \times 4$$

A 36

B 42

C 48

D 60

16 Keesha will paint one rectangular wall of her bedroom. The wall measures 10 feet by 8 feet. What is the area of the wall that Keesha will paint?

$A = l \times w$

F 18 square feet

G 64 square feet

H 80 square feet

J 100 square feet

17 What value for n makes the equation true?

$$3 \times n = 1$$

A –3

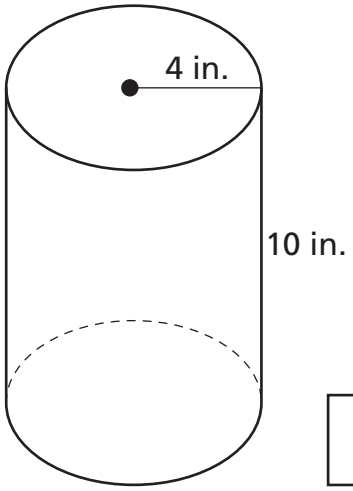
B $\frac{1}{3}$

C $\frac{2}{3}$

D 2

Go On

18 What is the volume of the cylinder below?



Volume of Cylinder = $\pi r^2 h$

[not drawn to scale]

F 80π cubic inches

G 160π cubic inches

H 400π cubic inches

J $1{,}600\pi$ cubic inches

19 Simplify the expression below.

$$3^3 + 1^2$$

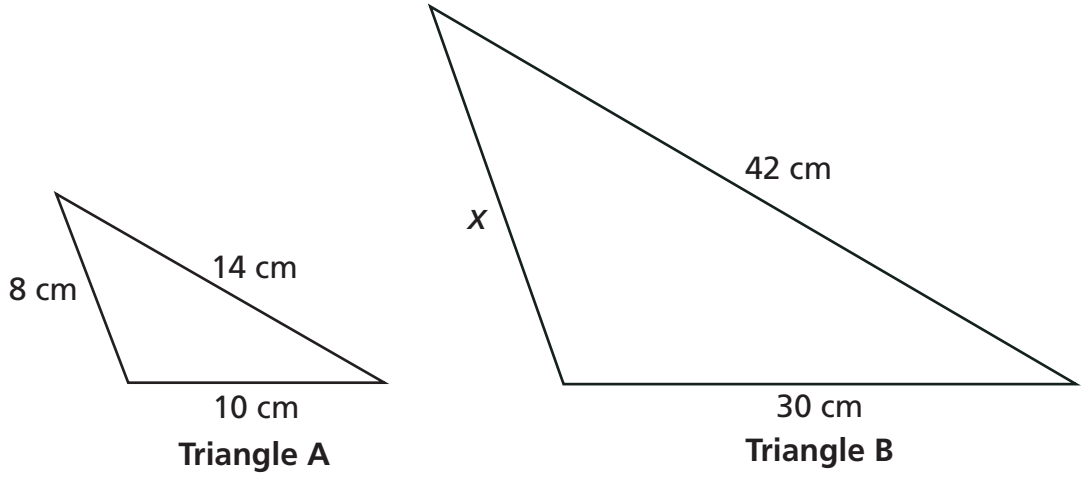
A 10

B 11

C 28

D 29

20 Two similar triangles are shown below.



[not drawn to scale]

What is the length of side *x* in Triangle B?

F 16 cm

G 20 cm

H 24 cm

J 28 cm

21 The largest pizza for sale at Shawna's Pizza Parlor has a radius of 12 inches. What is the diameter of this pizza?

A 6 inches

B 24 inches

C 36 inches

D 48 inches

22 Diane tossed a coin 20 times. She recorded whether the coin landed heads up or tails up. The results are shown in the table below.

COIN TOSSES

Position	Number of Times
Heads up	𝍸 𝍸 ||
Tails up	𝍸 |||

What fraction of the coin tosses landed tails up?

F $\frac{1}{8}$

G $\frac{2}{3}$

H $\frac{2}{5}$

J $\frac{3}{5}$

23 Which equation is true when $x = 0$?

A $6 - x + 2 = 4$

B $2 + 6 - x = 4$

C $x - 6 + 2 = 4$

D $6 + x - 2 = 4$

24 Sarah collects stamps and keeps them in envelopes. She had 9 envelopes with a certain number of stamps, *s,* in each envelope. She sells 3 of the envelopes. Which expression represents the number of stamps Sarah has left?

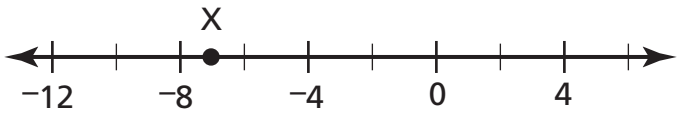
F $9s - 3$

G $(9 + 3)s$

H $9s - 3s$

J $9s - s - 3$

25 What number is represented by point X on the number line?



A –6

B –7

C –9

D –10

STOP

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