



New York State Testing Program

Mathematics Book 2

Grade **6**

Sample Test 2005

Name _____

TIPS FOR TAKING THE SAMPLE 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 writing your response.
- Be sure to show your work when asked. You may receive partial credit if you have shown your work.



This picture means that you will use your ruler.



This picture means that you will use your protractor.

26

On Friday and Saturday, there were a total of 200 cars in the parking lot of a movie theater. On Friday, 120 cars were in the parking lot.

Part A

What percent of the total number of cars were in the parking lot on Friday?

Show your work.

Answer _____ %

Part B

What percent of the total number of cars were in the parking lot on Saturday?

Show your work.

Answer _____ %

Go On

27

Barry is training to be a gymnast. He increases the number of push-ups he does each week by following a number pattern. The number of push-ups Barry does for 5 weeks is shown in the table below.

BARRY'S PUSH-UPS

Week	Number of Push-ups
1	16
2	19
3	22
4	25
5	28

Part A

If Barry continues to do push-ups according to the number pattern, how many push-ups will he do during the 10th week?

Show your work.

Answer _____ push-ups

Part B

Anne predicts that Barry will do 59 push-ups during the 15th week. On the lines below, use words, symbols, or numbers to explain whether Anne's prediction is correct.

Go On

Mr. Roberts asked his students to solve the three equations below.

$784 \div 2 = \square$

A

$125 \times 6 = \square$

B

$14 \times 28 = \square$

C

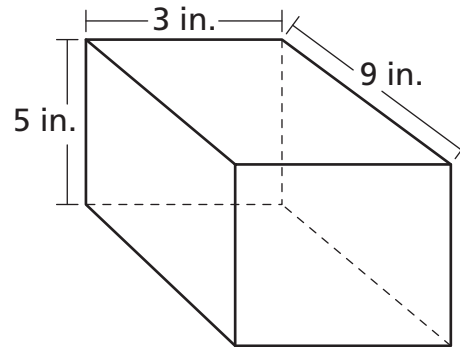
Which equations have the same solution? Write the letters of the equations that have the same solution.

Show your work.

Answer _____

29

Charles stores his baseball cards in a container like the one shown below.



[not drawn to scale]

What is the volume, in cubic inches, of the container?

$$V = lwh$$

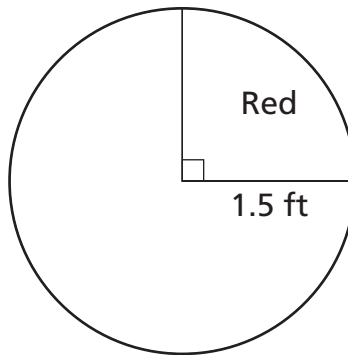
Show your work.

Answer _____ cubic inches

Go On

30

Janice is painting a circular table top, as shown below.



[not drawn to scale]

Janice needs to find the area of the red section of the circular table top in order to buy the right amount of paint. What is the area of the **red** section of the circular table top? Round your answer to the nearest hundredths place.

Leave your answer in terms of π .

$$A = \pi r^2$$

Show your work.

Answer _____ square feet

31 Simplify the expression below.

$$6 \times 4 \div 2 + 3^3$$

Show your work.

Answer _____

Go On

Nancy is studying wildflowers for a science project. She counts the number of wildflowers in a field. She also records their color and height. Her results are shown in the tally chart below.

WILDFLOWERS

	Purple	Yellow
Tall	 	
Short		

Part A

What fraction of the wildflowers are **yellow**? Write your fraction in lowest terms.

Show your work.

Answer _____

Part B

What fraction of the wildflowers are **tall** and **purple**? Write your fraction in lowest terms.

Show your work.

Answer _____

33

Christina scored a certain number of goals, g , during a soccer season. Sarah scored twice as many goals during the same season.

Write an expression for the number of goals Sarah scored.

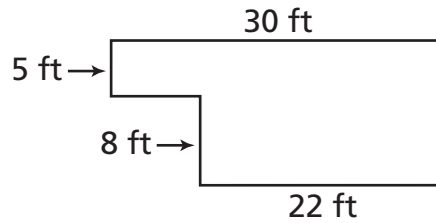
Expression _____

On the lines below, explain how you determined your expression.

Go On

34

Jeremy wants to determine the area of his school's library. A diagram of the library is shown below.



[not drawn to scale]

What is the area, in square feet, of the library?

Show your work.

Answer _____ square feet

On the lines below, explain how you determined the area.

Jordan has a bag that contains 246 marbles. There are 51 brown marbles and 195 gray marbles.

Part A

Estimate the percent of brown marbles in the bag.

Estimate _____ %

On the lines below, use words, symbols, or numbers to explain how to estimate the percent of brown marbles in the bag.

Part B

Jordan adds 12 red marbles to the bag. **Estimate** the percent of marbles in the bag that are red.

Show your work.

Estimate _____ %



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