

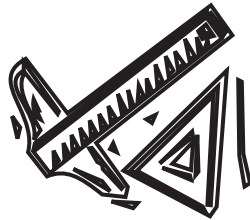


# ***New York State Testing Program***

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## **Mathematics**

### **Book 2**



**May 4–6, 2004**

*Name* \_\_\_\_\_



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## TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Be sure to carefully read all the directions in the Test Book.
- Ask your teacher to explain any directions you do not understand.
- 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 a 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.

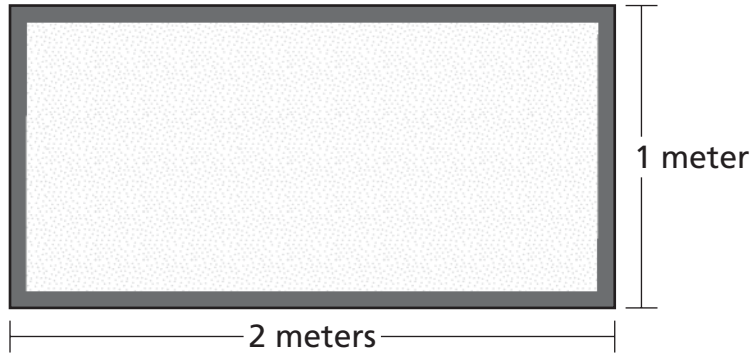


This picture means that you will use your pattern blocks.



This picture means that you will use your counters.

- 31** Julia is decorating the border of the bulletin board below.



How long, in meters, does the decoration need to be in order to make a border all the way around the bulletin board?

**Show your work.**

**Answer** \_\_\_\_\_ meters

**Go On**



Use your pattern blocks to help you solve this problem.

**Part A**

In the space below, trace around the pattern block that has *all* right angles.

**Part B**

In the space below, trace around a different pattern block that has angles that are all the same size.

- 33** Danny rolled 4 balls on the grass during a game. The distance he rolled each ball is shown in the table below.

**BALL DISTANCES**

Ball	Distance (in meters)
1	12.20
2	12.75
3	12.37
4	12.68

**Part A**

Which ball rolled the longest distance?

**Ball** \_\_\_\_\_

**Part B**

Danny was trying to roll the balls exactly 12.5 meters. Which ball came closest to rolling 12.5 meters?

**Ball** \_\_\_\_\_

**Go On**

**34** Norman went on a trip. He brought with him the 3 shirts and the 3 pairs of pants shown below.

<b>Shirts</b>	<b>Pants</b>
white (w)	black (b)
striped (s)	gray (g)
checked (c)	tan (t)

Norman wants to know how many different combinations of clothes he can wear with exactly 1 shirt and 1 pair of pants in each combination.

**Part A**

Show all the possible combinations of shirts and pants that Norman can wear below.

**Part B**

How *many* different combinations of shirts and pants can Norman wear?

**Answer** \_\_\_\_\_ combinations

- 35** Melissa scored a total of 266 points on 3 science tests. She scored 91 points on her first test. She scored 5 points *less* on her second test than on her first test.

In the table below, fill in the number of points Melissa scored on her second and third science tests.

**MELISSA'S SCIENCE TEST SCORES**

Test	Points
First	91
Second	
Third	
Total	266

***Show your work.***

***Go On***



**36** Brenda's father is 36 years old. He is 22 years older than Brenda's sister. Brenda's sister is 2 times as old as Brenda. How old is Brenda?

**Show your work.**

**Answer** \_\_\_\_\_ years old

**37** Lucy went to a shop to buy T-shirts for her school team.

**T-SHIRT PRICE LIST**

Number of Shirts	Price
2	\$24.00
4	\$48.00
6	?
8	\$96.00

**Part A**

What is the price for 6 T-shirts?

**Answer** \$ \_\_\_\_\_

**Part B**

On the lines below, describe the pattern in the T-shirt price list.

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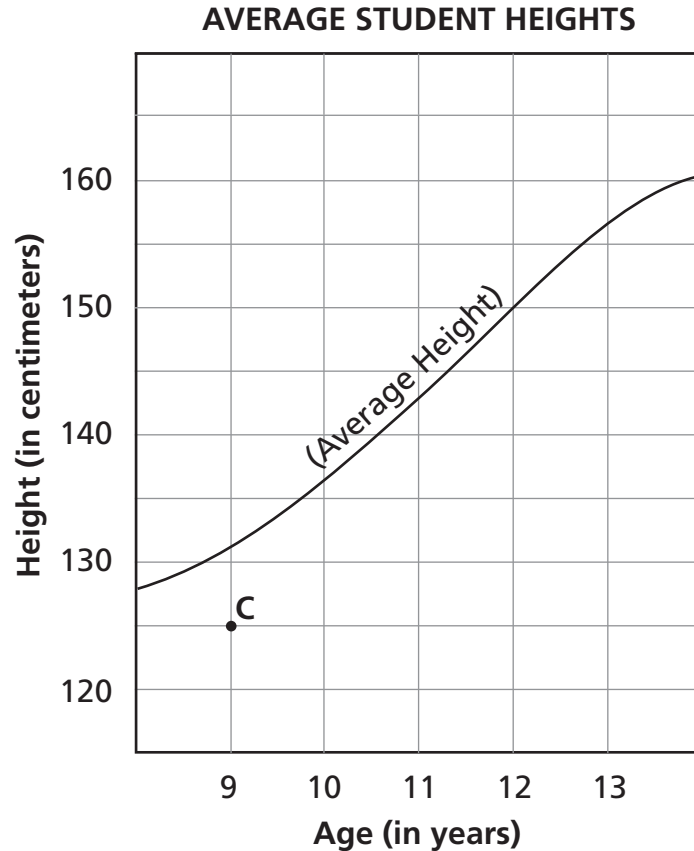
**Part C**

Lucy spent \$108.00 for the T-shirts. How many T-shirts did Lucy buy?

**Answer** \_\_\_\_\_ T-shirts

**Go On**

Cindy is studying the graph below of average student heights.



**Part A**

Cindy's height is plotted as point C on the graph. What is Cindy's age, in years, and height, in centimeters?

**Age** \_\_\_\_\_ years

**Height** \_\_\_\_\_ centimeters

**Part B**

According to the graph, what is the average height, in centimeters, of 12-year-old students?

**Answer** \_\_\_\_\_ centimeters

**Part C**

Below are the heights, in centimeters, of four students who are 10 years old.

130, 140, 145, 150

According to the graph, how many of these students are **above** the average height for students who are 10 years old?

**Answer** \_\_\_\_\_ students

**Go On**

- 39** A store was having a sale on cans of tennis balls. For every 2 cans bought, the store gives the customer 1 more can for free. There are 3 tennis balls in each can.



When Lamont came home from the store, he had 18 tennis balls in his shopping bag. How many of these tennis balls did he get for *free*?

**Show your work.**

**Answer** \_\_\_\_\_ tennis balls

**STOP**

**Do NOT turn this page until you are told to do so.**

# Session 3

- 40** Ms. Rossini's class has 27 students. Today, 3 of the 27 students are absent. Ms. Rossini placed her students into 4 equal groups today. How many students are in each group?

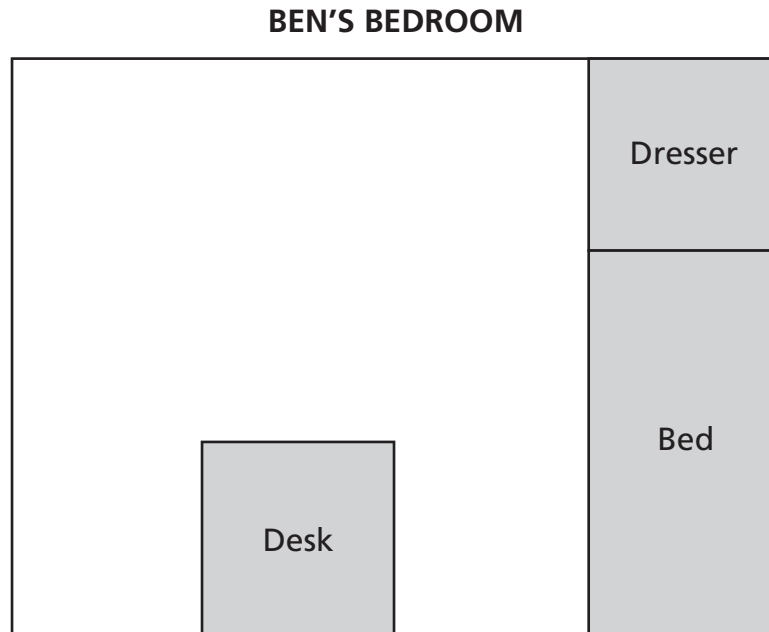
*Show your work.*

*Answer* \_\_\_\_\_ students



Use your counters to help you solve this problem.

Ben made the diagram below of his bedroom.



Ben used his counters and the diagram to measure the area of his bedroom. Each counter is equal to 1 square unit in the diagram.

**Part A**

How many square units are Ben's bed, dresser, and desk combined?

**Answer** \_\_\_\_\_ square units

**Part B**

What fractional part of the diagram is covered by Ben's bed, dresser, and desk combined?

**Answer** \_\_\_\_\_

**Go On**



**42** There are 100 students in the school gym.

**Part A**

There are 25 fourth-grade students in the gym. What percent of the students in the gym are fourth-grade students?

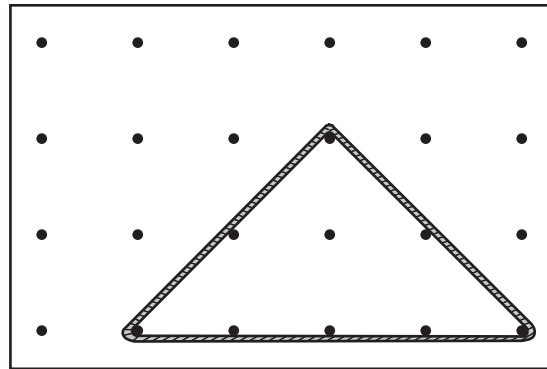
**Answer** \_\_\_\_\_ %

**Part B**

There are 30 fifth-grade students in the gym. What percent of the students in the gym are *not* fifth-grade students?

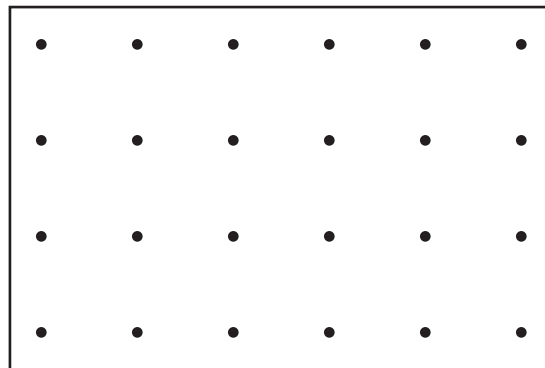
**Answer** \_\_\_\_\_ %

**43** In art class, Kayla made designs by wrapping a piece of colored yarn around pegs on a pegboard. She made the triangle below where the yarn touched exactly 8 pegs.



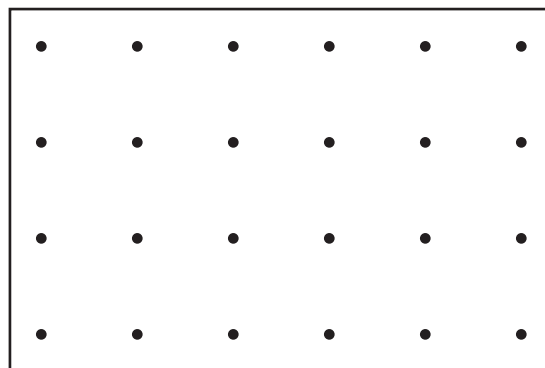
**Part A**

On the diagram of the pegboard below, draw lines to show how Kayla could have made a **square** where the yarn touches exactly 8 pegs.



**Part B**

On the diagram of the pegboard below, draw lines to show how Kayla could have made a **rectangle** where the yarn touches exactly 8 pegs.



**Go On**

**44**

In Terrance's marble bag, he has the following marbles:

3 black marbles

5 blue marbles

2 white marbles

If Terrance chooses a marble from the bag without looking, what is the probability that he will choose a blue marble?

**Answer** \_\_\_\_\_

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

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- 46** Show 2 different ways to write the expression below. Use multiplication in each of your expressions.

$$6 + 6 + 6 + 8 + 8 + 8$$

**Expression 1** \_\_\_\_\_

**Expression 2** \_\_\_\_\_

- 47** Three neighbors, Fred, Emmy, and Tyler, all have pets. One neighbor has 3 pets, one has 4 pets, and one has 5 pets.

**Part A**

- Fred does *not* have 3 pets.
- Emmy has more pets than Fred.

How many pets does each neighbor have?

**Fred** \_\_\_\_\_ pets

**Emmy** \_\_\_\_\_ pets

**Tyler** \_\_\_\_\_ pets

**Part B**

On the lines below, explain how you found your answer.

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**Go On**

- 48** Mr. Berg's class went bird watching. The students were divided into teams. The table below shows the number of birds each team saw.

**BIRD WATCHING**

	Team A	Team B	Team C
Sparrows	2	5	3
Robins	6	3	2
Cardinals	1	3	2

**Part A**

What is the total number of sparrows that the teams saw?

**Sparrows** \_\_\_\_\_

What is the total number of robins that the teams saw?

**Robins** \_\_\_\_\_

What is the total number of cardinals that the teams saw?

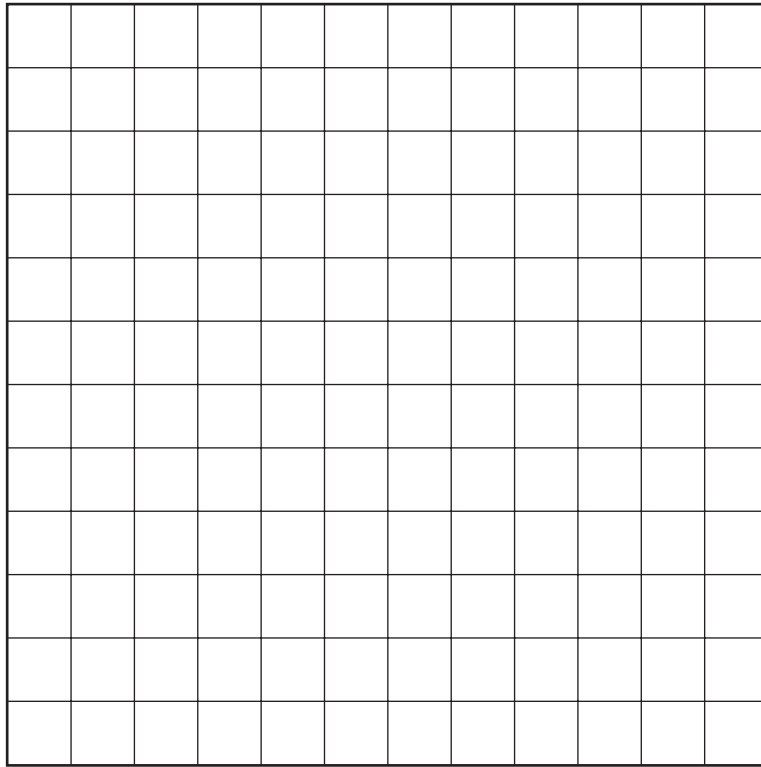
**Cardinals** \_\_\_\_\_

**Part B**

On the grid below, make a bar graph showing the total number of each type of bird that the teams saw.

Be sure to

- title the graph
- label the axes
- graph all the data
- provide the graph with a scale



**STOP**



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Place Student Label Here



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**Mathematics**  
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**May 4–6, 2004**

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