



New York State Testing Program

Mathematics Test Book 2

Grade **6**

March 6–12, 2008

Name _____



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TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

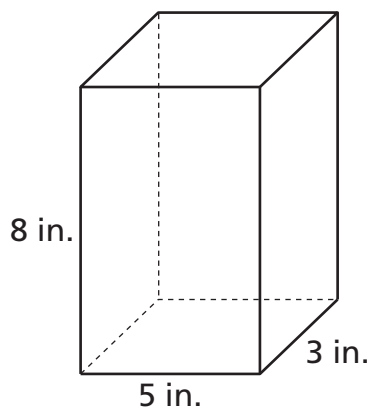
- Be sure to read carefully all the directions in the test book.
- Read each question carefully and think about the answer before writing your response.
- Be sure to show your work when asked. You may receive partial credit if you have shown your work.



This picture means that you will use your ruler.

26

What is the volume, in cubic inches, of the rectangular prism below?



[not drawn to scale]

$$V = lwh$$

Show your work.

Answer _____ cubic inches

Go On

27

A sixth-grade class is having a book sale. The students earn \$6 for each book they sell. To determine how many books they need to sell to reach their goal of \$144, they use the equation below where b represents a certain number of books.

$$6b = 144$$

Part A

What is the value of b in the equation?

Show your work.

Answer _____

Part B

The classroom teacher wrote the equation shown below for his students to solve to find the number of kickballs, k , they could buy with the \$144, if each kickball cost \$9.

$$\frac{144}{k} = 9$$

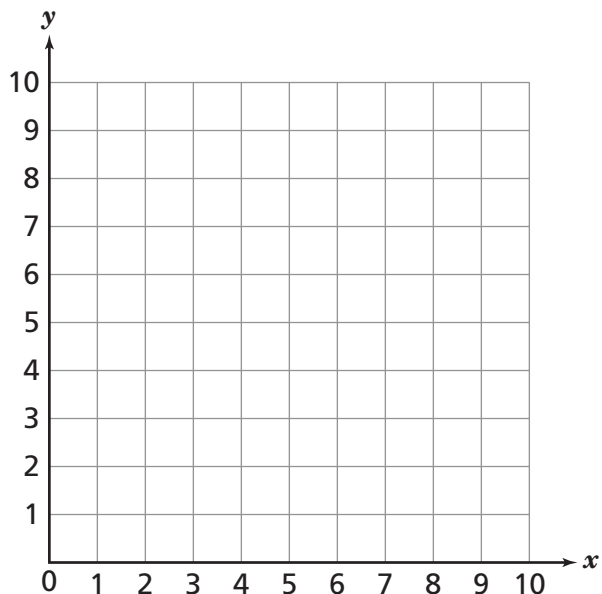
What is the value of k in the equation?

Answer _____

28

On the grid below

- plot and label the points: A (1, 5), B (3, 2), C (6, 2), D (8, 5)
- connect the points in order, starting with point A, to draw a quadrilateral



What type of quadrilateral is formed by connecting points A, B, C, and D?

Answer _____

On the lines below, explain how you determined the type of quadrilateral plotted on the grid.

Go On

A science class rolled a model car down a hill and measured the distance the car traveled. The class rolled the car 30 times and recorded the results in the table below.

MODEL CAR DISTANCES

Distance Traveled	Number of Times
8.0 feet to 8.9 feet	6
9.0 feet to 9.9 feet	11
10.0 feet to 10.9 feet	3
11.0 feet to 11.9 feet	6
12.0 feet to 12.9 feet	4

The class rolls the car one more time. Based on the data in the table, what is the probability that the car will travel 10 feet or more?

Probability _____

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

30

A theater club sold 300 tickets for a school play.

Part A

On the first day, 60% of the 300 tickets were sold. How many tickets were sold the first day?

Answer _____ tickets

Part B

Of the 300 tickets, 240 were sold to sixth-grade students. What percent of the total number of tickets sold were sold to sixth-grade students?

Show your work.

Answer _____ %

Go On

31

Kori is driving to the mountains. The table below shows the total number of miles that Kori expects to complete by the end of each hour of his trip.

TRAVEL TIME

Hour	Number of Miles
1	65
2	130
3	195
4	260
5	325

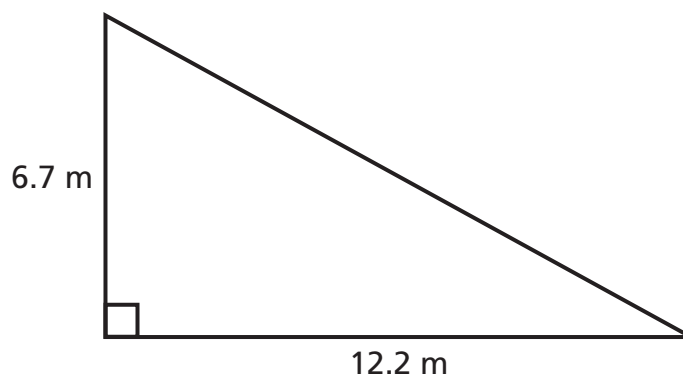
If the pattern in the table continues, predict how many hours it will take Kori to drive a total of 455 miles.

Answer _____ hours

On the lines below, explain how you made your prediction.

32

Roberto drew a diagram of his triangular garden, as shown below.



[not drawn to scale]

$$A = \frac{1}{2}bh$$

Estimate the area, in square meters, of Roberto's garden.

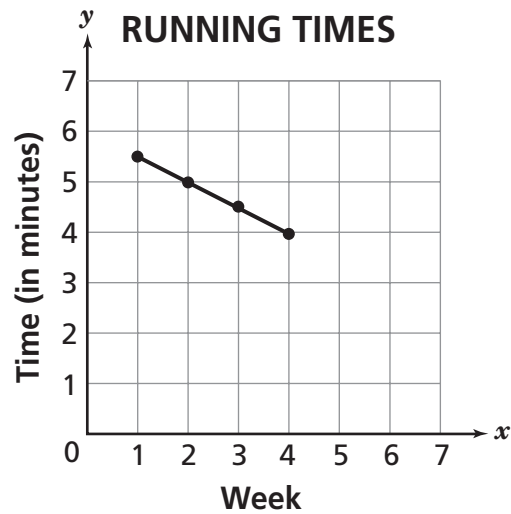
Estimation _____ square meters

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

Go On

33

Once a week, Ana runs along a path around City Park. For 4 weeks, she recorded her running times. Ana plotted the data on the graph below.

**Part A**

How many minutes did it take Ana to run around the park in Week 3?

Answer _____ minutes

Part B

If the pattern in the graph continues, predict how many minutes it will take Ana to run around the park in Week 7.

Answer _____ minutes

Part C

On the lines below, explain how you made your prediction.

Go On

34

Sonya, Darren, and Abby were on different sports teams last season. The number of wins for each team is listed below.

- Sonya's soccer team won 4 out of 5 games.
- Darren's basketball team won 12 out of 20 games.
- Abby's baseball team won 20 out of 25 games.

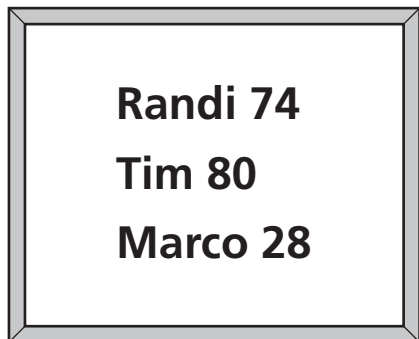
Which teams won the same proportion of their games?

Show your work.

Answer _____ and _____

35

Mr. Ward asked his students to evaluate the expression $4^3 + 2y$ when $y = 8$. Three of Mr. Ward's students wrote their answers on the board.



Which student evaluated the expression correctly?

Show your work.

Answer _____

STOP

Place Student Label Here



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