New York State Testing Program

2016 Common Core Mathematics Test
Book 2 of 3

Grade 3

April 13–15, 2016

Released Questions
23. What number makes the equation below true?

\[81 \div \_ \_ = 9\]

A. 8  
B. 9  
C. 72  
D. 90

24. Which expression is equal to 720?

A. 7 \times 20  
B. 8 \times 80  
C. 9 \times 80  
D. 9 \times 90

25. Mr. Kohlberg owns a flower shop. At the beginning of the day, he had 152 roses. Mr. Kohlberg sold 96 of the roses and then wanted to separate the rest of the roses equally among 8 vases. What will be the total number of roses in each vase?

A. 7  
B. 12  
C. 48  
D. 56
There are four shapes shown below.

![Shapes](image)

Which of the shapes is $\frac{2}{3}$ shaded?

A. shape 1
B. shape 2
C. shape 3
D. shape 4

Which situation could be represented by the expression $6 \times 2$?

A. Rocco hiked six miles each day for two days.
B. Rocco had six baseballs and gave away two of them.
C. Rocco had a total of six tennis balls in two cans.
D. Rocco biked six miles and then continued for two more miles.
Mr. Gomez built a deck. The deck had an area of 29 square meters. Which figure could represent the deck?

A

B

C

D

KEY

☐ = 1 square meter

GO ON
A number belongs in the box below. When the number is rounded to the nearest hundred, the result will be 900.

Which number belongs in the box?

A  849
B  852
C  960
D  999
Kara has a bucket of water, as shown below.

Kara wants to pour all of the water equally into 3 bowls for her dogs. How many liters of water should Kara pour into each bowl?

A 4  
B 5  
C 9  
D 15
Leroy made a game board, shown below. Each small square on the game board has the same area.

What fraction of the game board is shaded?

A $\frac{1}{9}$
B $\frac{1}{8}$
C $\frac{1}{6}$
D $\frac{1}{3}$
Tomas made a poster for his science project. The shaded part of the figure below shows the area of his poster.

Which figure has the same area as the poster?

A

8 units

3 units

C

7 units

3 units

B

6 units

6 units

D

5 units

5 units
The first number in a number pattern is 28. The pattern rule is to add 14 to get the next number in the pattern. If the pattern continues, which statement is true?

A All the numbers in the pattern can be divided equally by 10.
B All the numbers in the pattern can be divided equally by 4.
C All the numbers in the pattern can be divided equally by 8.
D All the numbers in the pattern can be divided equally by 7.

There were 6 rows of chairs set up for a meeting. Each row had 8 chairs. What was the total number of chairs set up for the meeting?

A 14
B 36
C 48
D 64

A circle is divided into parts. Each part is \( \frac{1}{4} \) of the total area of the circle. Which sentence describes the circle?

A The circle has 1 small part and 3 large parts.
B The circle has 1 small part and 4 large parts.
C The circle has 4 parts that are each the same size.
D The circle has 5 parts that are each the same size.
A baker made 232 muffins. He sent 190 of the muffins to a local hotel. He will put the rest of the muffins in boxes. Each box can hold 6 muffins. Which equation can be used to find \( b \), the number of boxes the baker will need?

A \( (232 - 190) \div 6 = b \)

B \( (232 + 190) \times 6 = b \)

C \( (232 - 190) \times 6 = b \)

D \( (232 + 190) \div 6 = b \)
TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before writing your response.
- You have been provided with a ruler to use during the test. Use the ruler whenever you think it will help you to answer the question.
- Be sure to show your work when asked.
- Plan your time.
Haley cut pieces of ribbon to make bookmarks. Each bookmark was $\frac{1}{8}$ foot long. Draw a point at $\frac{1}{8}$ on the number line below and label the point $A$.

Haley placed 5 of the bookmarks end to end.

Draw a point on the number line below to represent the total length of the 5 bookmarks. Label the point $B$. 
Katia received a sticker each time she picked up her toys. She placed some of the stickers on page 1 of her scrapbook, as shown below.

Page 1

Write numbers in the blanks below to show two multiplication facts represented by the array of stickers on page 1 of her scrapbook.

____ × ____ = ____

____ × ____ = ____

Katia placed the rest of the stickers on pages 2 and 3 of her scrapbook, as shown below.

Page 2

Page 3

Complete the expression below to represent the total number of stickers on pages 2 and 3.

____ × (____ + ____)

GO ON
Several students voted on their favorite sports activities.

- Eight students voted for basketball.
- Three students voted for volleyball.
- Seven students voted for baseball.
- Four students voted for kickball.

Complete the picture graph below to show the data.

**FAVORITE SPORT ACTIVITY**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball</td>
<td></td>
</tr>
<tr>
<td>Volleyball</td>
<td></td>
</tr>
<tr>
<td>Baseball</td>
<td></td>
</tr>
<tr>
<td>Kickball</td>
<td></td>
</tr>
</tbody>
</table>

**KEY**

○ = 2 students
Nadia had a strip of green paper that was 18 inches long. She cut the green paper into three pieces with equal lengths.

She also had a strip of red paper that was 24 inches long. She cut the red paper into pieces that were the same length as each cut piece of green paper.

When she was finished cutting, how many pieces of red and green paper did Nadia have in total?

*Show your work.*

*Answer* ___________ pieces
Mr. Nuccio's sandwich shop was 9 yards long and 7 yards wide before he added a new section. The shaded squares below show the new section.

What is the total area, in square yards, of Mr. Nuccio's sandwich shop after the new section was added?

*Show your work.*

*Answer* __________ square yards
Sharon wants to make key chains with different-colored beads, as shown below.

**KEY CHAIN**

Each key chain will look the same. Sharon will use a total of 20 green beads to make all her key chains. What is the number of red beads and the number of blue beads she will need to make all of the key chains?

*Show your work.*

Answer __________ red beads

___________ blue beads
Shade the models below to show 3 equivalent fractions and explain why they are equivalent.
There were 80 adults and 20 children at a school play. The school collected $8 for each adult's ticket and $3 for each child's ticket. The school donated $125 of the money from tickets to a local theater program and used the remaining money to buy supplies for next year's school play.

How much money does the school have to buy supplies for next year's play?

*Show your work.*

*Answer $ _____________*