



**NEW ENGLAND
COMMON ASSESSMENT PROGRAM**

**Released Items
2011**

**Grade 4
Mathematics**

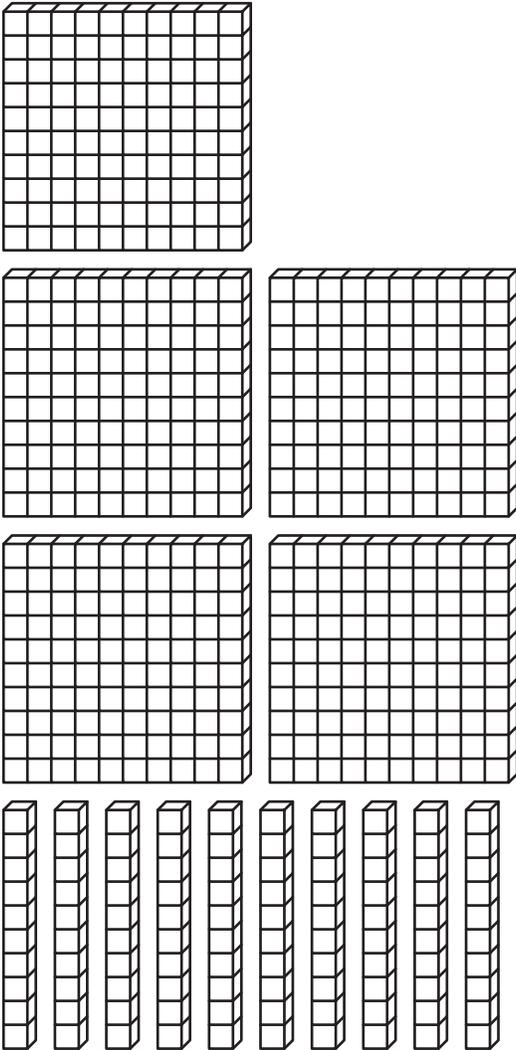
Mathematics



Items with this symbol were selected from Session One—no calculators or other mathematics tools allowed.



1 Look at these blocks.



Key

 represents 1000

 represents 100

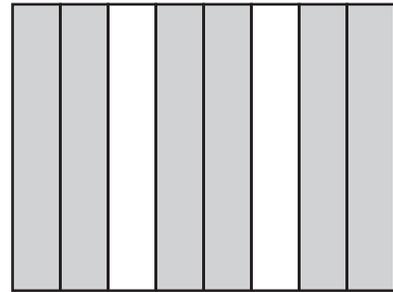
 represents 10

 represents 1

What is the total value of the blocks?

- A. 593
- B. 603
- C. 5103
- D. 6103

2 Look at this rug.



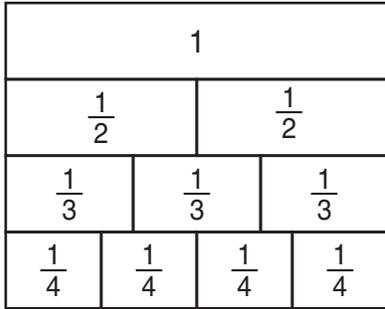
What fraction of the rug is gray?

- A. $\frac{2}{6}$
- B. $\frac{1}{2}$
- C. $\frac{2}{3}$
- D. $\frac{6}{8}$

Question #1 is continued in next column.*

* Item appeared differently in test booklet.

- 3 You may use this model to answer this question.



Kendra lives $\frac{1}{3}$ mile from school.

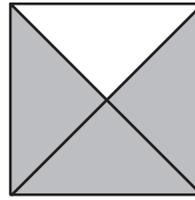
Bonita lives $\frac{3}{4}$ mile from school.

Stefan lives $\frac{1}{2}$ mile from school.

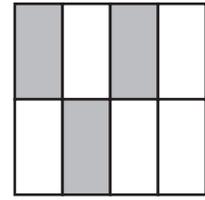
Which list shows the students in order from **the shortest to the greatest** distance between home and school?

- A. Kendra, Stefan, Bonita
- B. Kendra, Bonita, Stefan
- C. Stefan, Kendra, Bonita
- D. Bonita, Kendra, Stefan

- 4 Four students each shaded part of a square gray to show fractions of a whole.



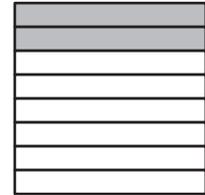
Dale



Gina



Maci



Rick

Which two students showed equivalent fractions?

- A. Maci and Gina
- B. Gina and Dale
- C. Maci and Rick
- D. Rick and Dale



- 5 Wally solved this problem.

$$\begin{array}{r} 75 \\ -20 \\ \hline 55 \end{array}$$

Which number sentence could Wally use to check his answer?

- A. $75 + 20 = \square$
- B. $55 - 20 = \square$
- C. $55 + 20 = \square$
- D. $20 - 75 = \square$



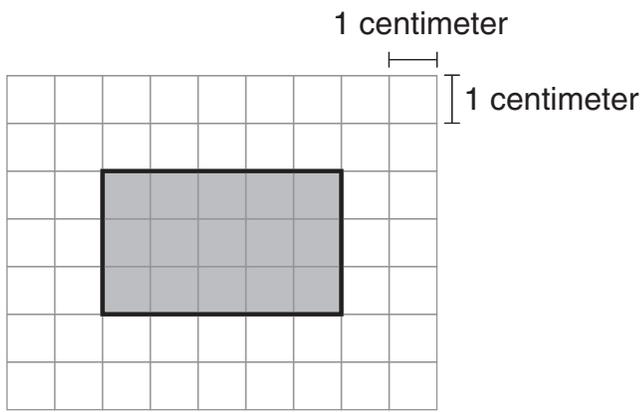
- 6 The regular price of a book is \$15.95. The sale price is \$3.25 less than the regular price. What is the sale price?

- A. \$12.00
- B. \$12.70
- C. \$12.75
- D. \$19.20

7 Which shape **always** has four sides that are the same length?

- A. rectangle
- B. rhombus
- C. trapezoid
- D. hexagon

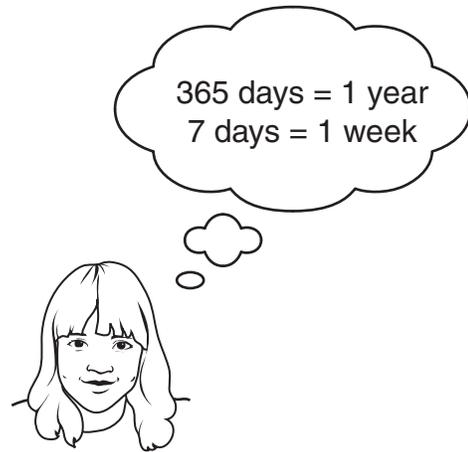
8 Look at this rectangle that is shaded gray on the grid below.



What is the perimeter of the rectangle that is shaded gray?

- A. 8 centimeters
- B. 10 centimeters
- C. 15 centimeters
- D. 16 centimeters

9 How many days are in 2 years and 3 weeks?



- A. 221 days
- B. 372 days
- C. 730 days
- D. 751 days

10 Look at this number sentence.

$$4 \times \square = 2 \times 10$$

What number makes this number sentence true?

- A. 5
- B. 8
- C. 20
- D. 80



- 11 Mrs. Perez bought 3 boxes of garbage bags. Each box has 12 garbage bags. She used 2 garbage bags. How many garbage bags does Mrs. Perez have left?



- 12 These clocks show the time art class starts and the time art class ends.



Start time



End time

How long, in minutes, is art class?

_____ minutes

- 13 A class voted to choose **two** flavors of ice cream to have at a party. This chart shows the number of votes each flavor of ice cream received.

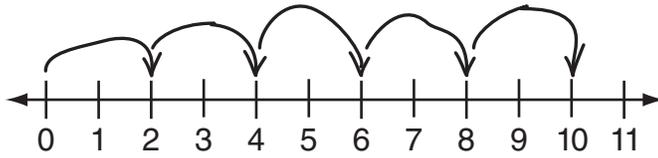
Ice-Cream Party

Flavor	Number of Votes
Chocolate	8
Vanilla	5
Strawberry	2
Peanut Butter	4
Fudge Swirl	5

Explain whether the class should vote again.



- 14 Jamie counted paper clips in groups of 2. He used this number line to show his work.



- a. Write an addition sentence Jamie could use to show his work.
-
-
-
-
-
-
-
-
-
-
- b. Write a multiplication sentence Jamie could use to show his work.

15 Jerome used number cards to make this number pattern.

6	14	22	30		
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a. On the cards, write the next two numbers in Jerome's pattern.

Katherine uses the same rule as Jerome to make a new pattern. One number in Katherine's pattern is shown on these cards.

	12		
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b. On the cards, write the missing numbers in Katherine's pattern.



- 16 Fred put red, green, and blue marbles into a bag. He put a total of 10 marbles into the bag. Fred will pick a marble from the bag without looking. He is **equally likely** to pick a red or blue marble and **more likely** to pick a green marble than a red marble.

Complete this chart to show the number of each color marble Fred could have put into the bag.

Marbles in Fred's Bag

Color	Number of Marbles
Red	
Green	
Blue	