STAAR® Modified

State of Texas Assessments of Academic Readiness — Modified —

GRADE 4

Mathematics

Modified

Administered April 2014

RELEASED

Copyright © 2014, Texas Education Agency. All rights reserved. Reproduction of all or portions of this work is prohibited without express written permission from the Texas Education Agency.

STAAR GRADE 4 MATHEMATICS REFERENCE MATERIALS

LENGTH

Customary	Metric
1 mile (mi) = 1,760 yards (yd)	1 kilometer (km) = 1,000 meters (m)
1 yard (yd) = 3 feet (ft)	1 meter (m) = 100 centimeters (cm)
1 foot (ft) = 12 inches (in.)	1 centimeter (cm) = 10 millimeters (mm)

VOLUME AND CAPACITY

Customary	Metric
1 gallon (gal) = 4 quarts (qt)	1 liter (L) = 1,000 milliliters (mL)
1 quart (qt) = 2 pints (pt)	
1 pint (pt) = 2 cups (c)	
1 cup (c) = 8 fluid ounces (fl oz)	

WEIGHT AND MASS

Customary	Metric
1 ton (T) = 2,000 pounds (lb)	1 kilogram (kg) = 1,000 grams (g)
1 pound (lb) = 16 ounces (oz)	1 gram (g) = 1,000 milligrams (mg)

TIME

1 year = 12 months

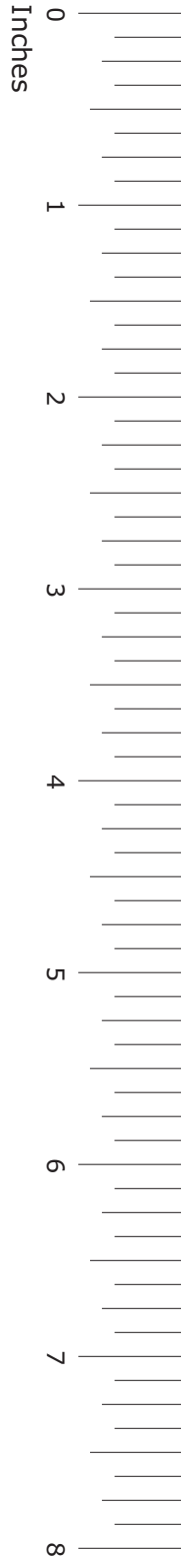
1 year = 52 weeks

1 week = 7 days

1 day = 24 hours

1 hour = 60 minutes

1 minute = 60 seconds



STAAR GRADE 4 MATHEMATICS REFERENCE MATERIALS

This page shows only the metric ruler.

MATHEMATICS

DIRECTIONS

Read each question. For a multiple-choice question, choose the best answer from the three choices provided and fill it in on your answer document. For a griddable question, fill in your answer in the grid on the answer document.

1 Look at the models of two fractions below.

The models are shaded to show that —

A $\frac{3}{4}$ is equal to $\frac{6}{8}$

B $\frac{1}{4}$ is equal to $\frac{2}{6}$

C $\frac{3}{4}$ is equal to $\frac{2}{6}$

GO ON

2 Which number sentence is in the same fact family as 21 ÷ ☐ = 3?

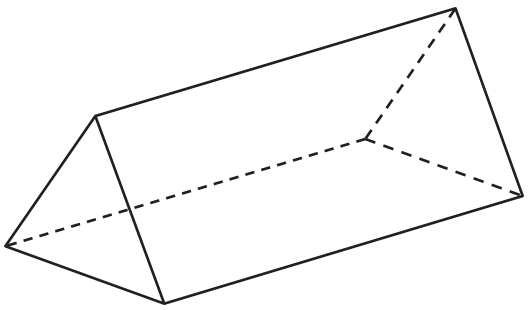
F ☐ + 3 = 21

G 3 × 21 = ☐

H 3 × ☐ = 21

---

3 Look at the figure below.



Which of these best describes this figure?

A 5 faces and 9 edges

B 6 faces and 9 edges

C 5 faces and 6 edges

GO ON

4 Ravi bought 7 computer games. Each game cost $36. How much money did Ravi spend on these computer games?

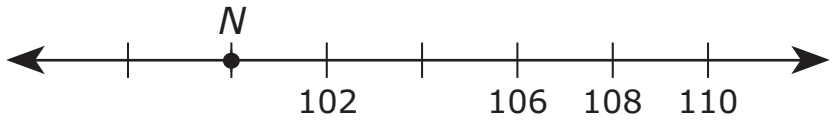
F $63

G $252

H $210

GO ON

5 Look at the number line below. Which number on the number line does point *N* best represent?



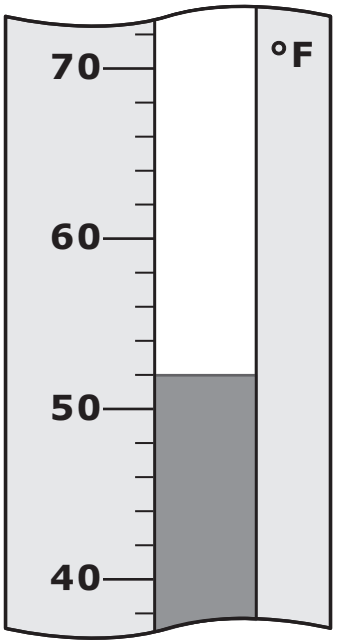
A 100

B 101

C 99

GO ON

6 The thermometer below shows the high temperature one day in Amarillo, Texas.



The high temperature in Houston, Texas, on the same day was 10°F warmer. What was the high temperature in Houston?

F 61°F

G 56°F

H 62°F

GO ON

7 Look at the table below. It shows the number of batteries needed for different numbers of flashlights.

Flashlight Batteries

Number of Flashlights	1	5	7	12
Number of Batteries	4	20	28	48

Which statement describes the relationship in this table?

A Number of flashlights + 4 = number of batteries

B Number of flashlights ÷ 5 = number of batteries

C Number of flashlights × 4 = number of batteries

GO ON

8 Petra bought carnival tickets for her children.

- She bought a total of 40 tickets.
- She used 10 tickets to buy food.
- She split the rest of the tickets equally among her 5 children.

How many tickets did Petra give each child?

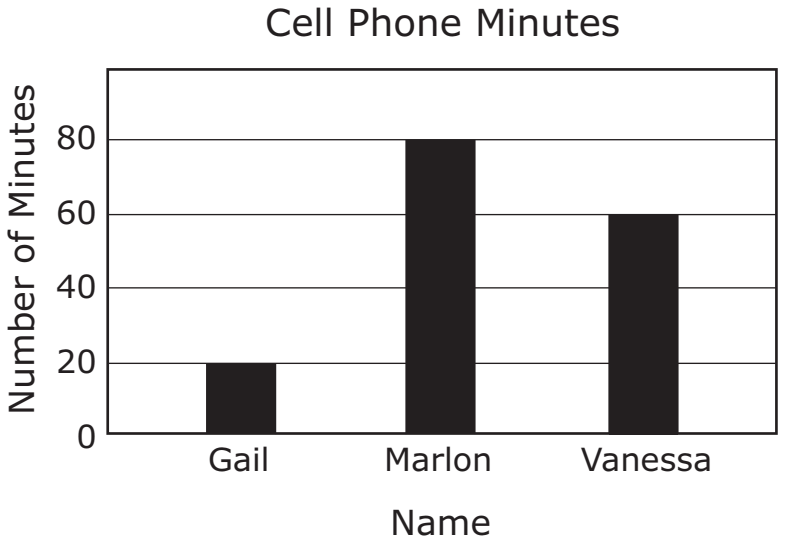
F 4

G 6

H 8

GO ON

9 The graph below shows the number of cell phone minutes used by 3 people last week.



Based on the graph, how many more minutes did Vanessa use than Gail?

A 40 min

B 60 min

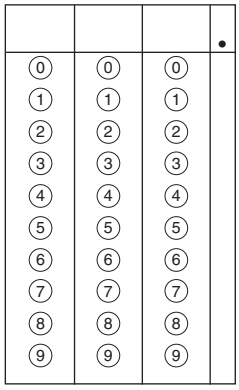
C 80 min

GO ON

10 Ericka took 3 boxes of cookies to a picnic. Each box had 12 cookies.

What is the total number of cookies Ericka took to the picnic?

You may practice recording your answer in the grid below.

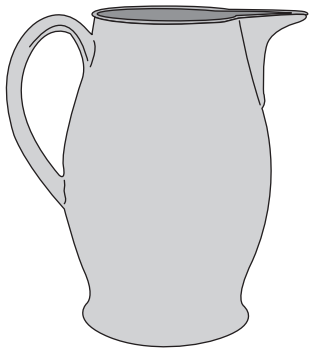


Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

GO ON

11 Look at the 2 pitchers below.

Red pitcher



Blue pitcher

If the red pitcher has a capacity of 2 pints, which measurement could be the capacity of the blue pitcher?

A 1 pint

B 5 pints

C 10 pints

GO ON

12 Look at the figures below.

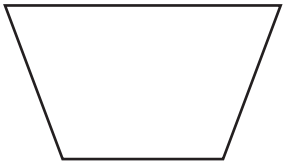


Figure *W*

Figure *X*

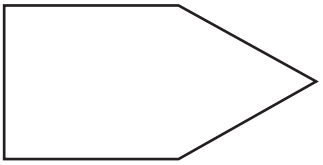


Figure *Y*

Which figure has only right angles?

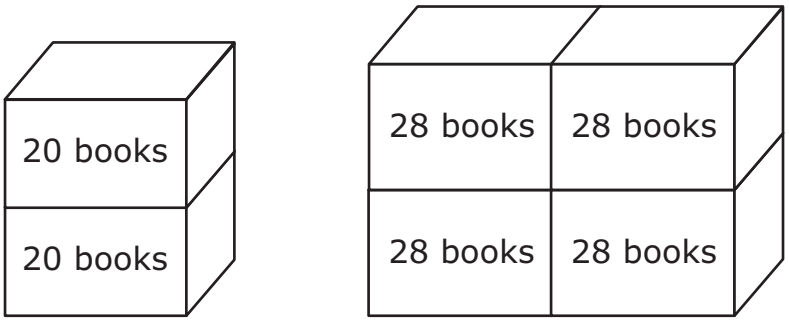
F Figure *W*

G Figure *X*

H Figure *Y*

GO ON

13 A school librarian received 6 boxes of books, as shown below.



How many books were in the 6 boxes altogether?

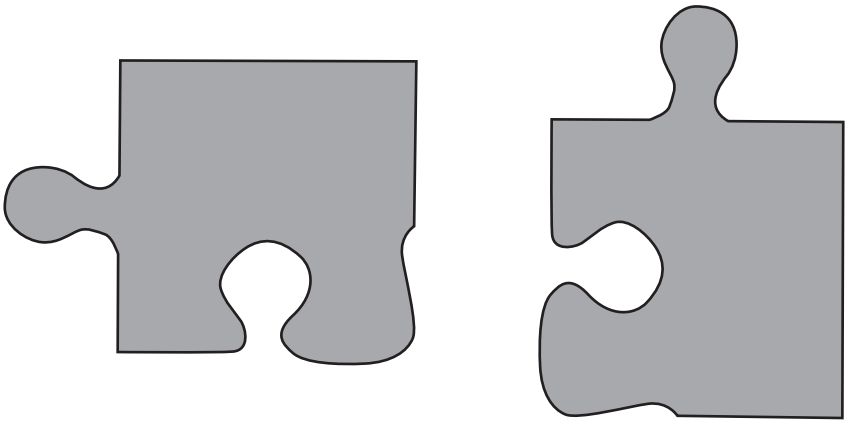
A 152

B 112

C 288

GO ON

14 Which single transformation is shown below?



F Translation

G Rotation

H Reflection

---

15 In which number below does the digit 7 represent seven thousand?

A 874,200

B 751,054

C 487,002

GO ON

16 Look at the table below. It shows the numbers Jennifer put into a number machine and the numbers that came out of the machine.

Jennifer's Numbers

In	Out
19	5
27	13
20	6

Based on the information in the table, what happened to each number Jennifer put into this number machine?

F Each number had 24 added to it.

G Each number had 14 subtracted from it.

H Each number had 14 added to it.

GO ON

17 The figures in each group below have something in common.

Group 1	Group 2
Pentagon	Prism
Triangle	Cone
Circle	Sphere

Which figure belongs in Group 1?

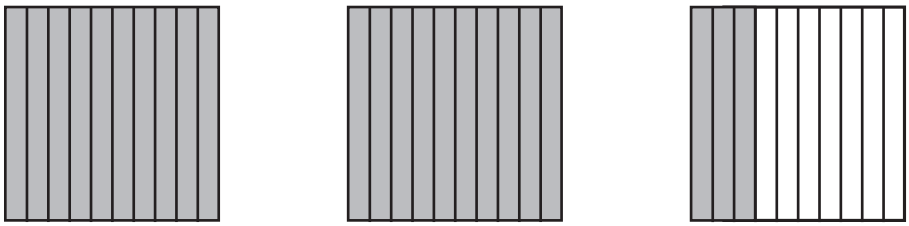
A Octagon

B Pyramid

C Cube

GO ON

18 The number 2.3 is shown by the model below.



How is the number 2.3 written in words?

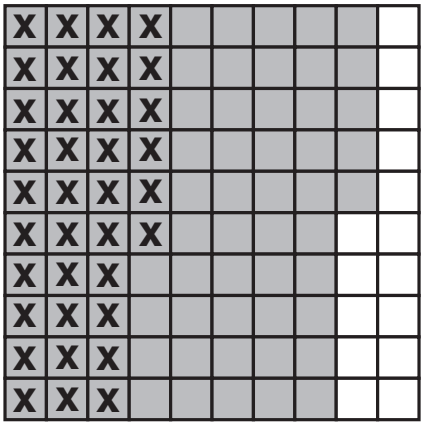
F Two and three-hundredths

G Twenty-three hundredths

H Two and three-tenths

GO ON

19 Look at the model of the expression 0.85 − 0.36 below.



What is 0.85 − 0.36?

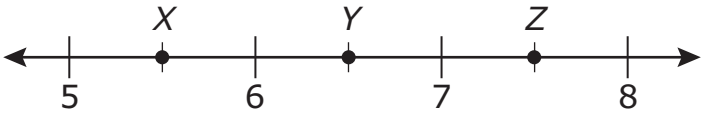
A 0.64

B 0.51

C 0.49

GO ON

20 A snake at a zoo is 6.5 meters long.



Which point on the number line best represents 6.5?

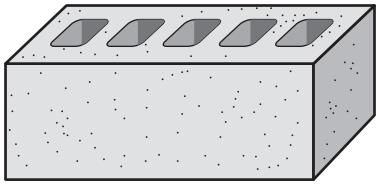
F *X*

G *Y*

H *Z*

---

21 The picture below shows a brick used in building houses.



Which measurement is the best estimate for the weight of the brick?

A 4 tons

B 4 pounds

C 4 ounces

GO ON

22 Look at the pictures below. They show 2 groups of coins.

Which number sentence correctly compares the values of the 2 groups of coins?

F $0.25 < $0.36

G $0.45 > $0.27

H $0.25 > $0.36

GO ON

23 Look at the table below. Each number in Set P is related in the same way to the number below it in Set Q.

Set P	45	27	18
Set Q	5	3	2

Which statement correctly describes the relationship between the numbers in Set P and Set Q?

A Number in Set P ÷ 5 = number in Set Q

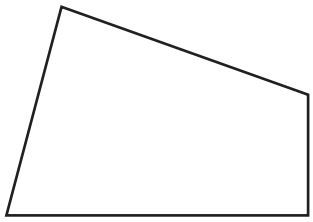
B Number in Set P ÷ 9 = number in Set Q

C Number in Set P − 18 = number in Set Q

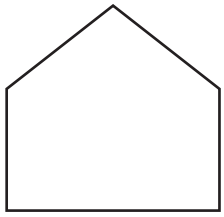
GO ON

24 Which figure appears to have more than 1 line of symmetry?

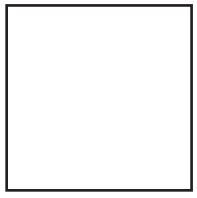
F



G



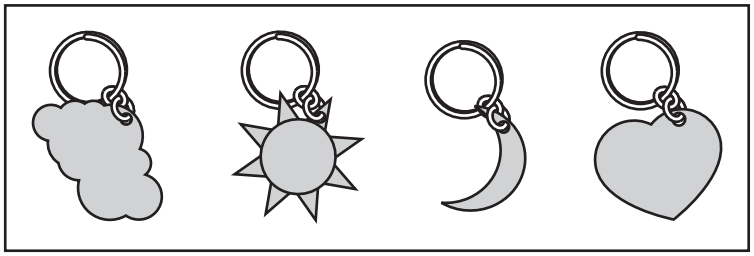
H



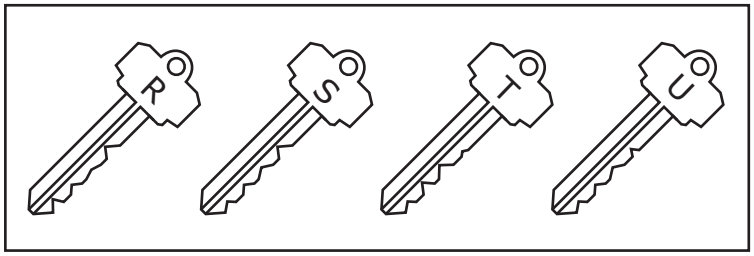
GO ON

25 Marcus has the key chains and keys shown below.

Key Chains



Keys



How many different combinations of 1 key chain and 1 key are possible?

A 20

B 16

C 4

GO ON

26 Molly went shopping.

- She bought 7 shirts.
- Each shirt cost $12.
- She also bought a pair of shoes for $18.

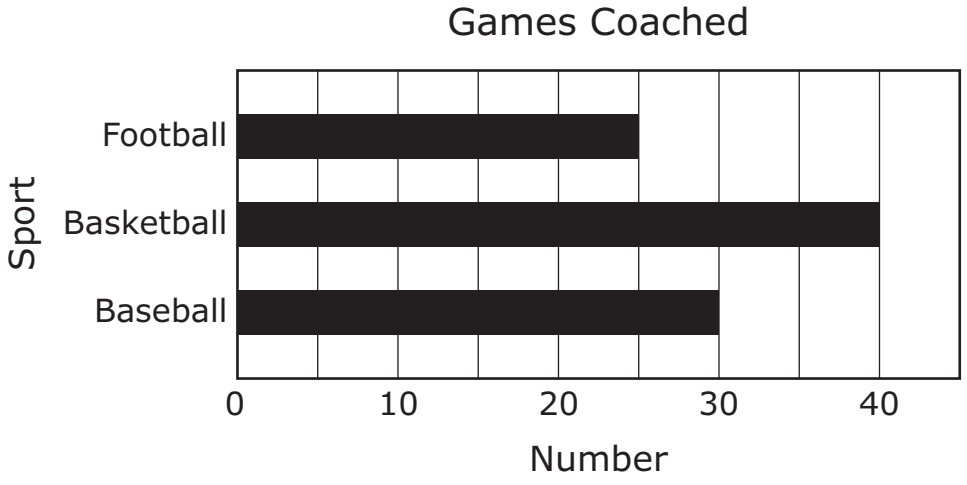
What is one way to find the total amount Molly spent?

F Multiply 7 and 12 and then add 18

G Add 7 and 12 and then multiply by 18

H Multiply 7 and 12 and then multiply by 18

27 Look at the graph below. It shows the number of games Mr. Garza has coached in three different sports.



Based on the graph, how many games has Mr. Garza coached in all?

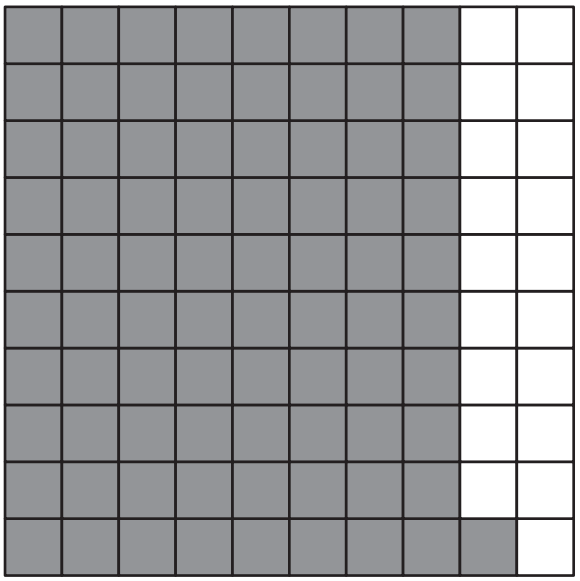
A 90

B 65

C 95

GO ON

28 Look at the model below. It is shaded to show $\frac{81}{100}$.



Which decimal is the model shaded to represent?

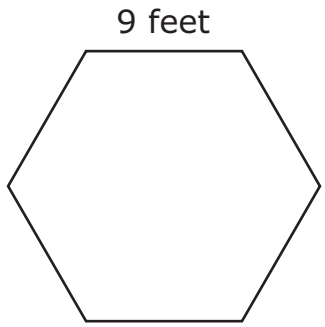
F 0.81

G 8.1

H 81.0

GO ON

29 A garden is shaped like the hexagon below.



Each side of the garden is the same length. What is the perimeter of the garden?

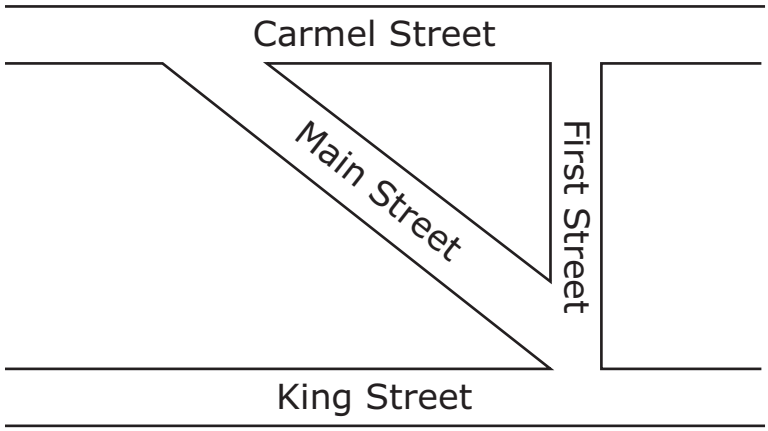
A 54 feet

B 45 feet

C 72 feet

GO ON

30 Look at the map below. It shows four streets.



According to this map, which street is parallel to Carmel Street?

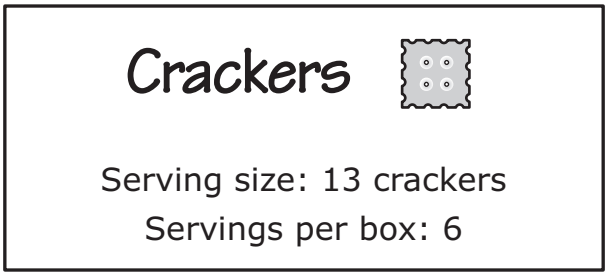
F Main Street

G First Street

H King Street

GO ON

31 Look at the following information from the side of a cracker box.



How many crackers are in this box?

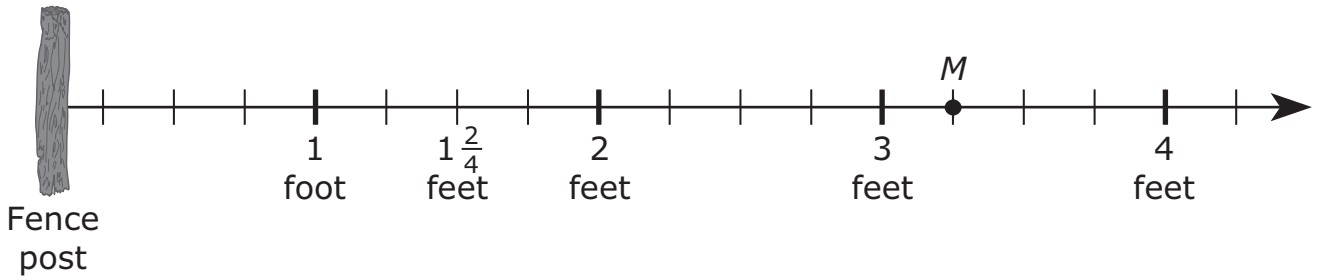
A 24

B 78

C 60

GO ON

32 Mack is building a fence, represented by the number line below. He will place a post at point *M*.



Which measurement best represents point *M* on the number line?

F $4\frac{3}{4}$ feet

G $3\frac{3}{4}$ feet

H $3\frac{1}{4}$ feet

GO ON

33 Kara walked 2 miles to the park. How many yards did Kara walk to the park?

1 mile = 1,760 yards

A 880 yards

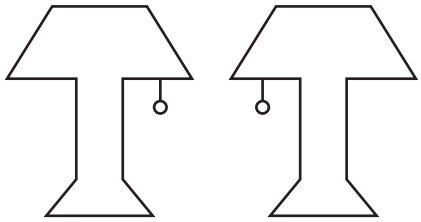
B 3,520 yards

C 2,640 yards

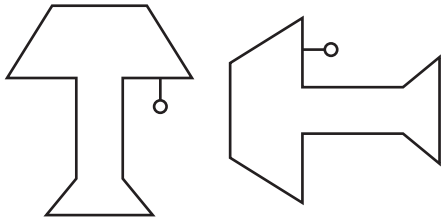
GO ON

34 Which picture shows only a reflection?

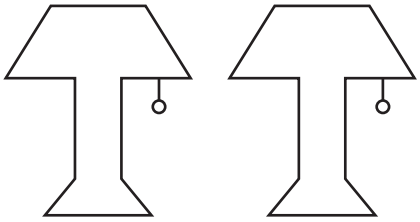
F



G

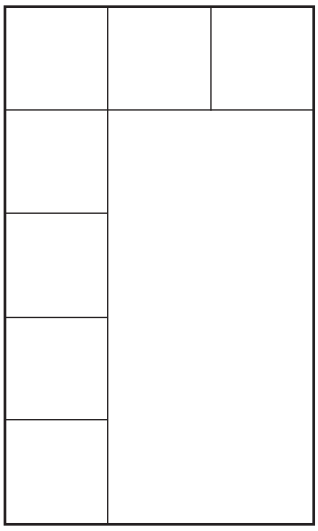


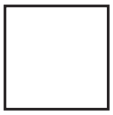
H



GO ON

35 Look at the picture below. It shows the length and width of a closet floor.



 = 1 square foot

What is the total area of the closet floor?

A 12 square feet

B 15 square feet

C 8 square feet

GO ON

36 Look at the table below. It shows the cost for different numbers of math books.

Math Books

Number of Books	Cost
18	$180
24	$240
30	$300
36	

Based on the table, what would be the cost of 36 math books?

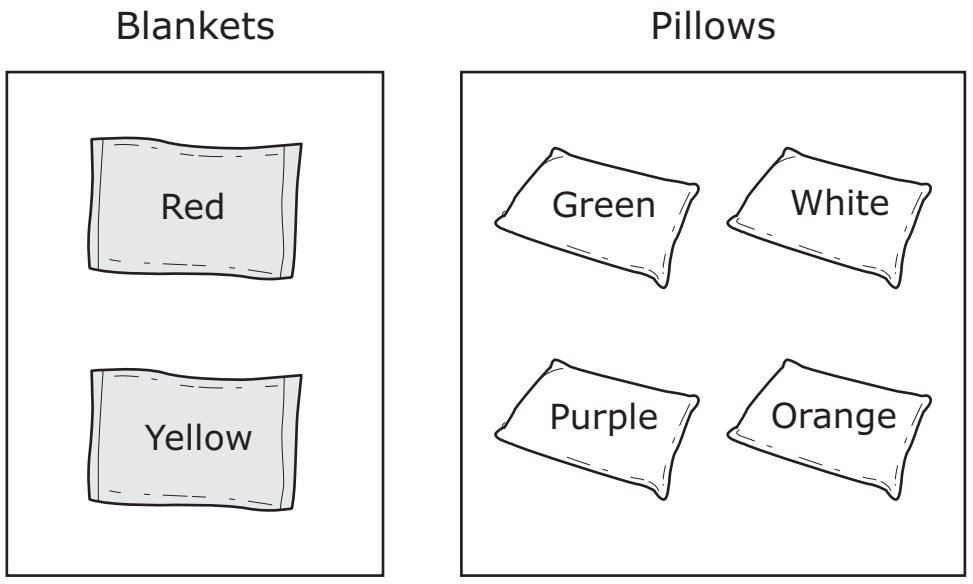
F $3,600

G $306

H $360

GO ON

37 Look at the pictures below. They show the color choices of blankets and pillows at a store.



How many color combinations of 1 blanket and 1 pillow are possible at this store?

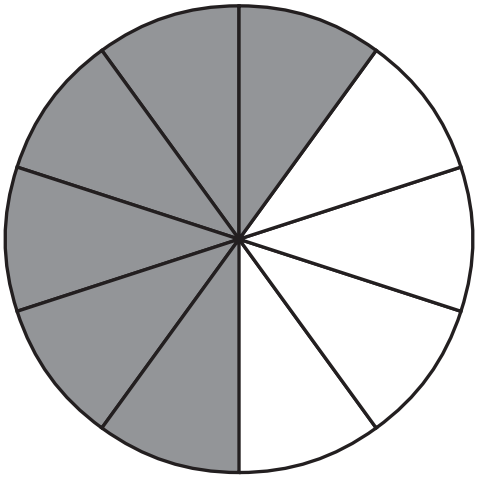
A 8

B 4

C 16

GO ON

38 The number 0.6 is represented by the model below.



Which fraction is the model shaded to represent?

F $\frac{6}{100}$

G $\frac{6}{10}$

H $\frac{4}{10}$

BE SURE YOU HAVE RECORDED ALL OF YOUR ANSWERS ON THE ANSWER DOCUMENT.

STOP

STAAR MODIFIED
GRADE 4
Mathematics
April 2014

866221 1 2 3 4 5 A B C D E Printed in the USA ISD7200