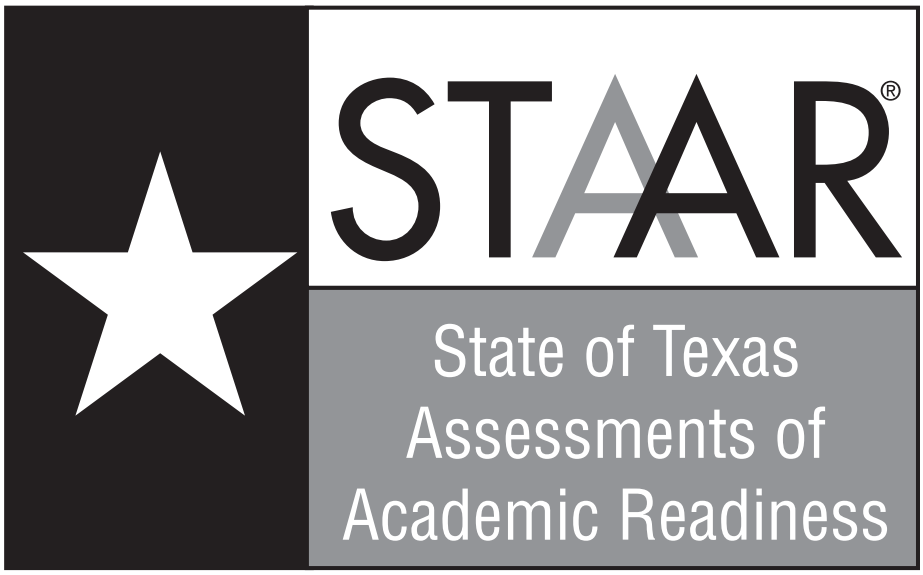

GRADE 3

Mathematics

Administered May 2019

RELEASED

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STAAR GRADE 3 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

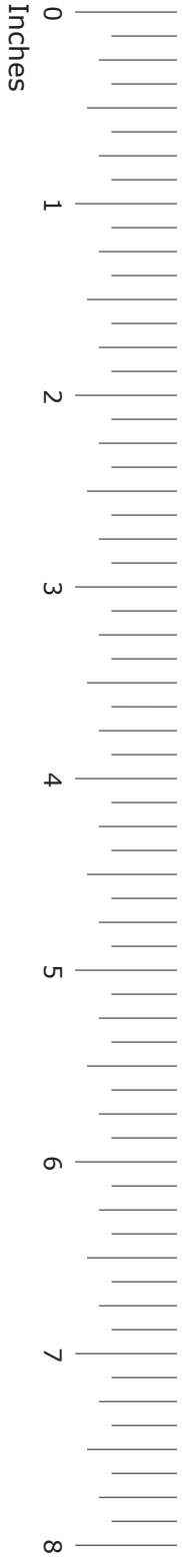
1 year = 52 weeks

1 week = 7 days

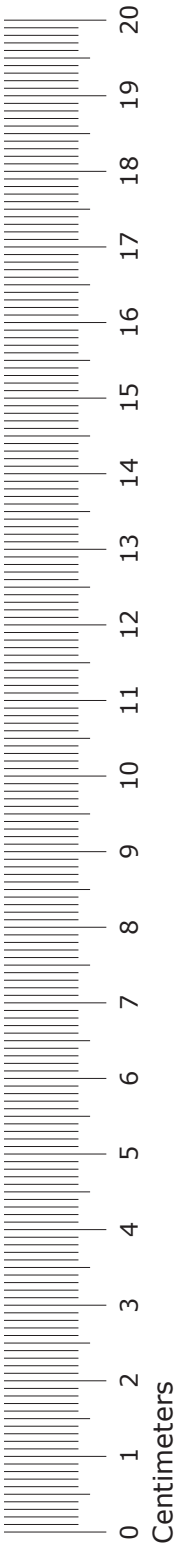
1 day = 24 hours

1 hour = 60 minutes

1 minute = 60 seconds



STAAR GRADE 3 MATHEMATICS REFERENCE MATERIALS



This page shows only the metric ruler.

MATHEMATICS

DIRECTIONS

Read each question carefully. For a multiple-choice question, determine the best answer to the question from the four answer choices provided. For a griddable question, determine the best answer to the question. Then fill in the answer on your answer document.

1 Which list shows the numbers in order from greatest to least value?

A 38,945 9,052 9,181

B 6,912 29,013 34,987

C 58,702 50,716 581

D 6,092 60,019 5,005

---

2 Gerardo bought 3 packages of mint gum and 2 packages of bubble gum. Each package had 8 pieces of gum.

How many pieces of gum did Gerardo buy?

F 26

G 40

H 12

J 48

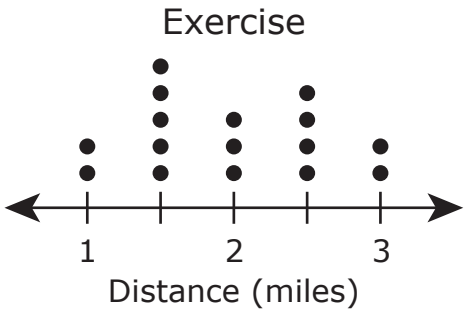
3 Alberto ran for exercise every day for 16 days. The table shows how many days he ran each distance.

Exercise

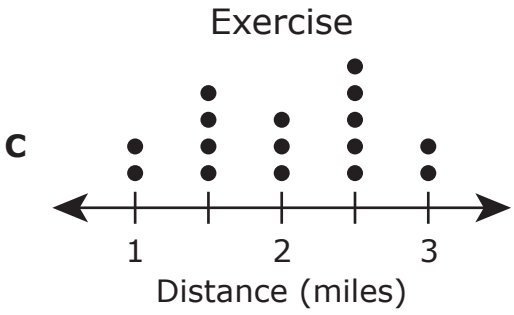
Distance (miles)	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Number of Days	||	~~||||~~	|||	||||	||

Which dot plot represents these data?

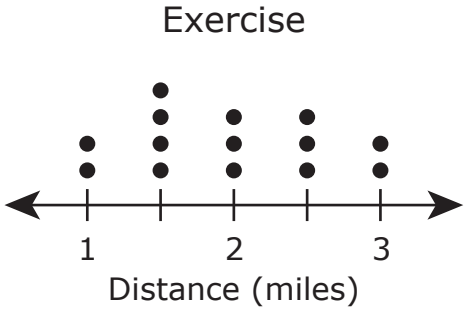
A



C



B



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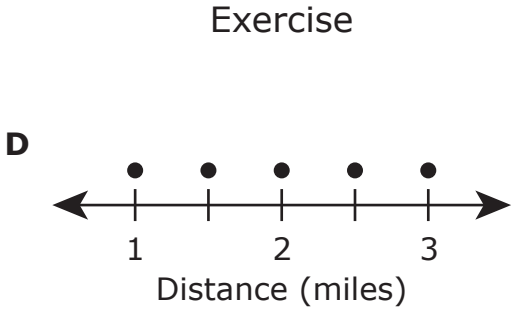


GO ON

4 The expanded form of a number is shown.

$$90{,}000 + 200 + 40 + 1$$

What is the standard form of this number?

F 9,241

G 92,041

H 90,241

J 90,421

---

5 Serafina put a total of 42 cupcakes into packages. She put 6 cupcakes into each package.

What is the total number of packages Serafina used for these cupcakes?

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

6 Which number is odd?

F 205

G 350

H 168

J 514

---

7 Freddie had $256 in his bank account.

- On Monday he put $50 more into his account.
- On Tuesday he took out $87 to buy a bicycle.

Which equation can be used to find the amount of money Freddie had in his bank account after he took out money on Tuesday?

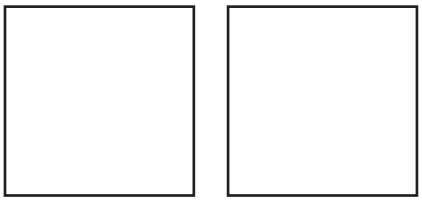
A $256 - 50 - 87 = \square$

B $256 + 50 + 87 = \square$

C $250 - 50 + 87 = \square$

D $256 + 50 - 87 = \square$

8 Brandon drew the two congruent squares shown.



- He divided one square into 2 congruent triangular parts.
- He divided the other square into 2 congruent rectangular parts.

Which statement is true?

F Each triangular part and each rectangular part represents $\frac{1}{2}$ the area of one square.

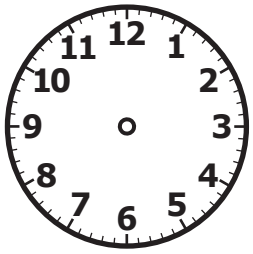
G Each triangular part has an area that is greater than the area of each rectangular part.

H Each triangular part and each rectangular part represents $\frac{1}{4}$ the area of one square.

J Each rectangular part has an area that is greater than the area of each triangular part.

9 Felix swam, rode his bike, and ran in a race.

- He spent 19 minutes swimming.
- He spent 21 minutes riding his bike.
- He spent 30 minutes running.



What was the total amount of time Felix spent swimming, riding his bike, and running in this race?

A 1 hour 20 minutes

B 40 minutes

C 1 hour 10 minutes

D 1 hour

10 There are 8 oranges in each bag for sale at a store. Which table shows the relationship between the number of bags and the number of oranges in the bags?

F

Oranges

Number of Bags	Number of Oranges
2	8
3	16
4	24
5	32

H

Oranges

Number of Bags	Number of Oranges
2	10
3	11
4	12
5	13

G

Oranges

Number of Bags	Number of Oranges
2	16
3	24
4	32
5	40

J

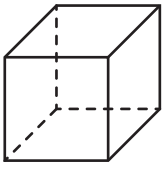
Oranges

Number of Bags	Number of Oranges
2	16
3	32
4	64
5	128

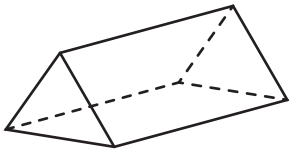
---

11 Which figure CANNOT be classified as a prism?

A



B



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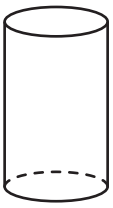
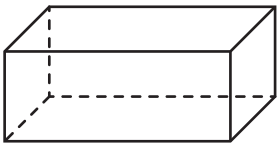


D



12 Stacy used 21 feet of ribbon to make bows. She used 3 feet of ribbon for each bow.

Which equation can be used to find the number of bows Stacy made with this ribbon?

F $21 \times 3 = 63$

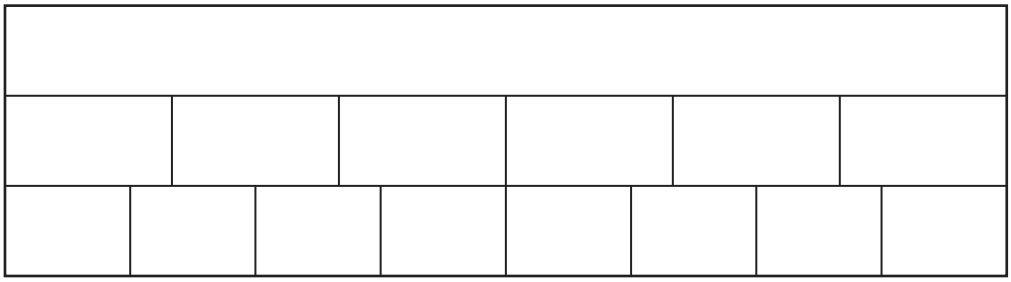
G $21 \div 3 = 7$

H $21 + 3 = 24$

J $21 - 3 = 18$

---

13 Fraction strips are shown.



Which comparison and explanation are true?

A $\frac{5}{6} < \frac{5}{8}$, because eighths are larger than sixths

B $\frac{5}{6} < \frac{5}{8}$, because sixths are larger than eighths

C $\frac{5}{6} > \frac{5}{8}$, because eighths are larger than sixths

D $\frac{5}{6} > \frac{5}{8}$, because sixths are larger than eighths

14 Gina's journal has a square cover with the side length shown.

What is the perimeter of the cover of Gina's journal in centimeters?

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

---

15 Roger has two boxes of nails. One box has 438 nails, and the other box has 375 nails.

How many nails does Roger have in these two boxes?

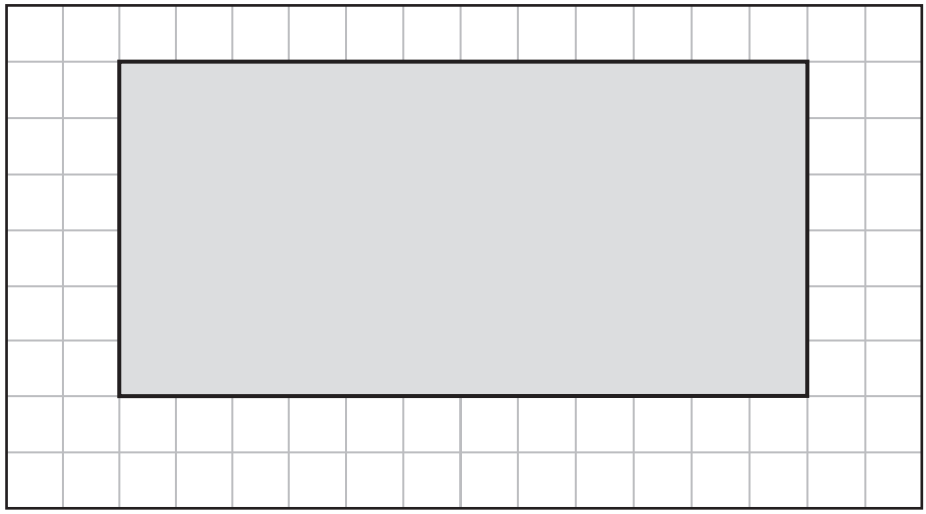
A 813

B 703

C 814

D 713

16 The shaded figure on the grid represents Erin's rectangular lawn.



= 1 square meter

What is the area in square meters of Erin's lawn?

F 18 square meters

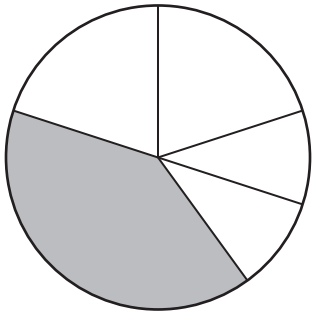
G 36 square meters

H 62 square meters

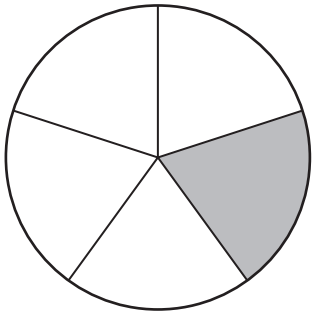
J 72 square meters

17 Models R and T are shown.

Model R



Model T



Which statement is true?

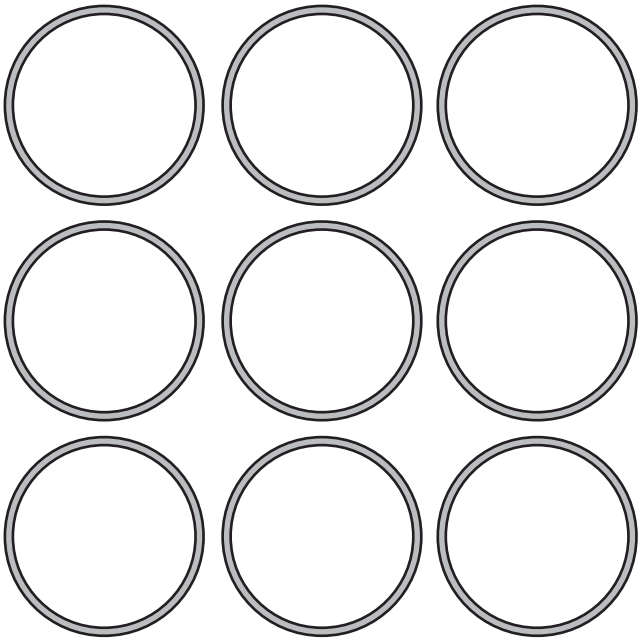
A The shaded parts of Model R and Model T are different sizes, but each model represents the same fraction of the whole.

B The shaded part of Model R cannot be written as the fraction $\frac{1}{5}$, because the parts are not all equal in size.

C The shaded part of Model T is $\frac{1}{4}$, because the parts are all equal in size.

D The total number of parts in Model R is 5, so $\frac{1}{5}$ of Model R is shaded.

18 A group of 27 students played a game with the hoops shown. An equal number of the students shared each hoop.



How many students shared each hoop?

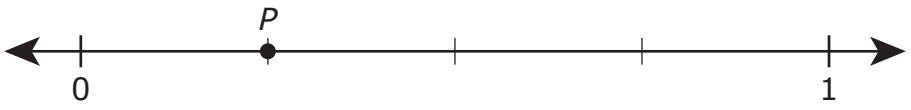
F 3

G 18

H 9

J 36

19 Point *P* on the number line represents two equivalent fractions.



Which two equivalent fractions can point *P* represent?

A $\frac{1}{4}$ and $\frac{1}{8}$

B $\frac{1}{3}$ and $\frac{2}{6}$

C $\frac{1}{4}$ and $\frac{2}{8}$

D $\frac{1}{4}$ and $\frac{3}{4}$

20 There are 6 photographs on each page of an album. One page of the album is shown.

How many photographs are on 9 pages of the album?

F 48

G 45

H 15

J 54

GO ON

21 Four people at a snack bar each bought a drink. The table shows the amount of money each person gave the cashier and the amount of money each person got back in change.

Snack-Bar Drinks

Name	Amount Given to Cashier (cents)	Amount of Change (cents)
Caleb	55	3
Andrew	60	8
Morgan	75	23
Trish	100	48

Based on the relationship shown in the table, which statement is true?

A A drink at the snack bar costs 52 cents, because the amount given to the cashier minus 52 equals the amount of change.

B A drink at the snack bar costs 52 cents, because the amount given to the cashier plus 52 equals the amount of change.

C A drink at the snack bar costs 48 cents, because the amount given to the cashier minus 48 equals the amount of change.

D A drink at the snack bar costs 48 cents, because the amount given to the cashier plus 48 equals the amount of change.

22 A school keeps boxes of paper of different colors in a room. The table shows how many boxes of each color are in the room.

Boxes of Paper

Color	Number
White	48
Yellow	24
Blue	42
Red	18

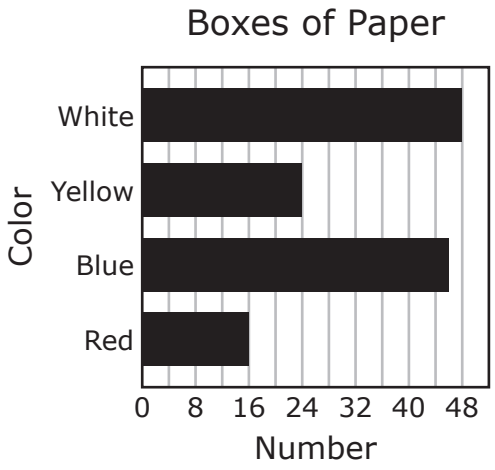
Which answer choice does NOT represent the information in the table?

F

Boxes of Paper

Color	Number
White	
Yellow	
Blue	
Red	

H



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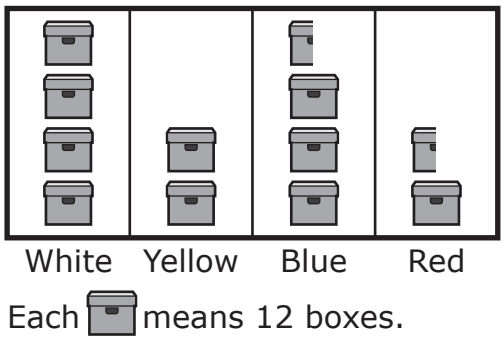

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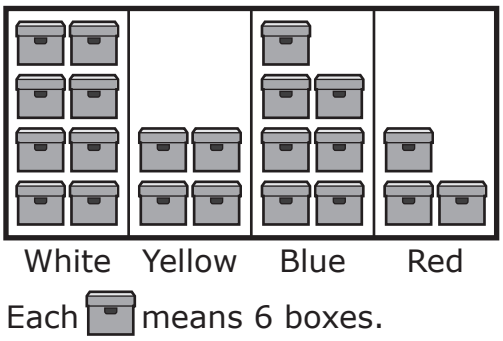


GO ON

23 Ms. Patterson works for a company. Which factor would most likely affect the amount of money Ms. Patterson gets paid by the company?

A The amount of money Ms. Patterson has to pay in bills

B The size of Ms. Patterson's family

C The amount of money Ms. Patterson saves every month

D The work experience Ms. Patterson has

---

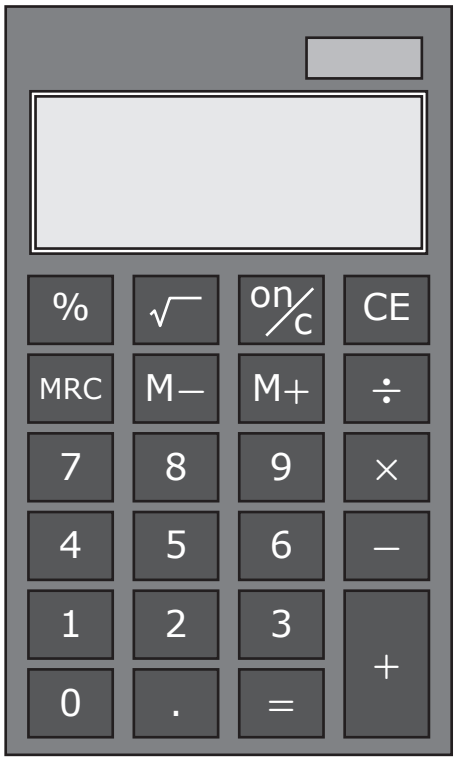
24 Samantha, Gordon, and Diego each brought an ice chest to a picnic.

- The weight of Samantha's ice chest was 83 pounds.
- The weight of Gordon's ice chest was 28 pounds.
- The weight of Diego's ice chest was 37 pounds.

What was the difference in pounds between the weight of Samantha's ice chest and the combined weight of Gordon's and Diego's ice chests?

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

25 A model of Mr. Estrada's rectangular calculator is shown. Use the ruler provided to measure the length and width of the calculator to the nearest centimeter.



Which measurement is closest to the perimeter of the calculator in centimeters?

A 10 cm

B 32 cm

C 16 cm

D 36 cm

26 There are 3 basketball teams practicing together in a gym.

- Each team has 10 players.
- All of the players are used to make 6 groups during the practice.
- There is an equal number of players in each group.

How many players are in each group?

F 180

G 6

H 24

J 5

---

27 Which answer choice does NOT describe the number 7,140?

A The sum of seven thousands and fourteen tens

B The sum of seven thousands, one hundred, and forty tens

C The sum of seven thousands, one hundred, and four tens

D The sum of seven thousands, one hundred, and forty ones

---

28 There are 18 spoons in a drawer. This expression represents the number of forks in the same drawer.

$$2 \times 18$$

Which statement is true?

F There are 2 more spoons than forks in the drawer.

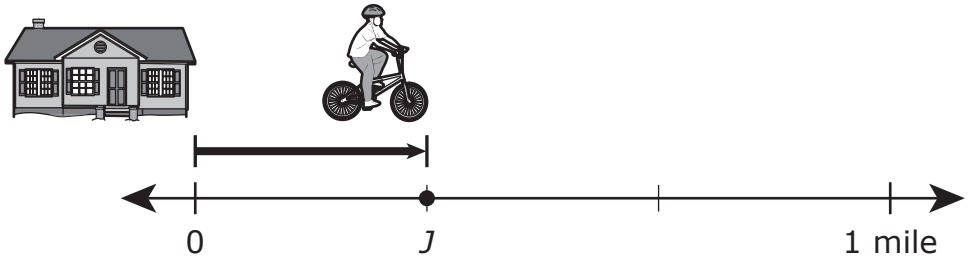
G There are 2 more forks than spoons in the drawer.

H There are 2 times as many forks as spoons in the drawer.

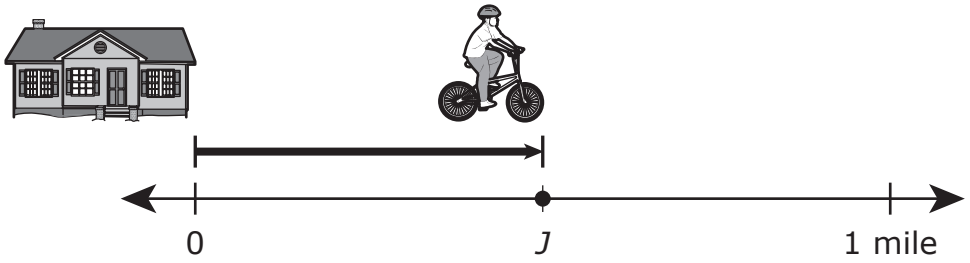
J There are 2 times as many spoons as forks in the drawer.

29 Javier rode his bike a distance of $\frac{1}{2}$ mile from his house. On which number line does point *J* represent Javier's position after riding his bike?

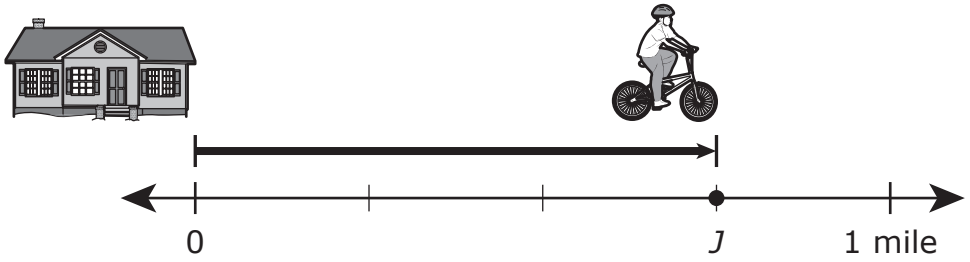
A



B



C



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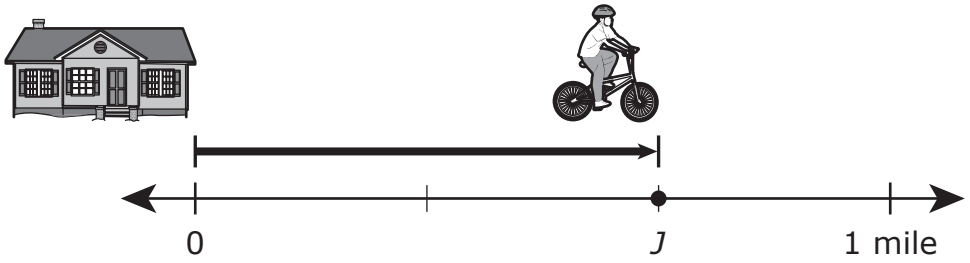
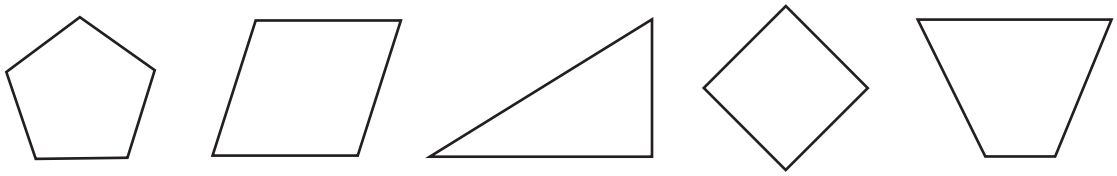


GO ON

30 The figures shown can be sorted into groups.



Which list shows a correct way to group these figures?

F 1 triangle, 3 quadrilaterals, and 1 pentagon

G 1 triangle and 4 quadrilaterals

H 1 triangle, 3 quadrilaterals, and 1 hexagon

J 1 triangle, 2 quadrilaterals, and 2 pentagons

31 Dana used the money shown to buy a snack.

What amount of money did Dana use to buy the snack?

A $1.37

B $1.32

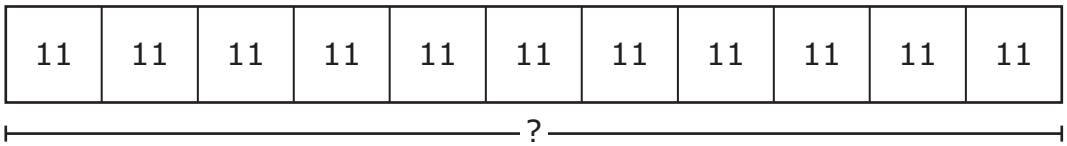
C $1.40

D $1.27

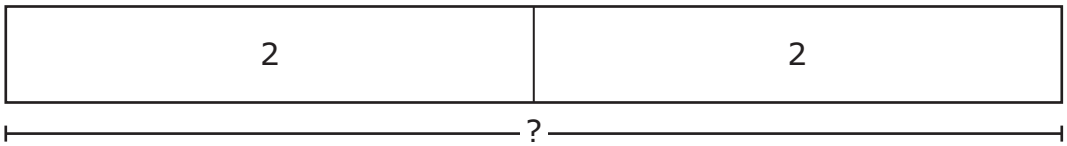
32 Yolanda made 11 sandwiches for a picnic. She used 2 pieces of bread for each sandwich.

Which strip diagram can be used to find the number of pieces of bread Yolanda used?

F



G



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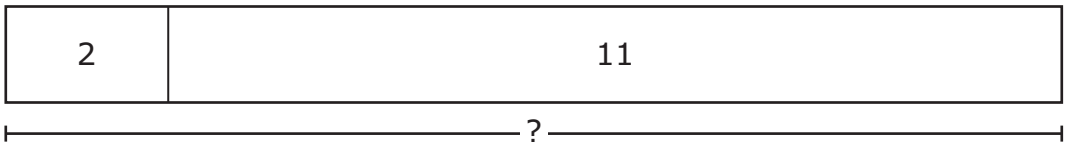
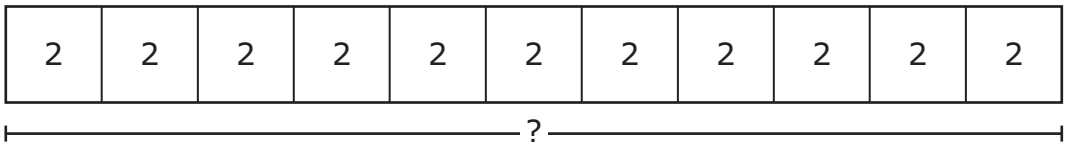


J



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

STOP

STAAR
GRADE 3
Mathematics
May 2019