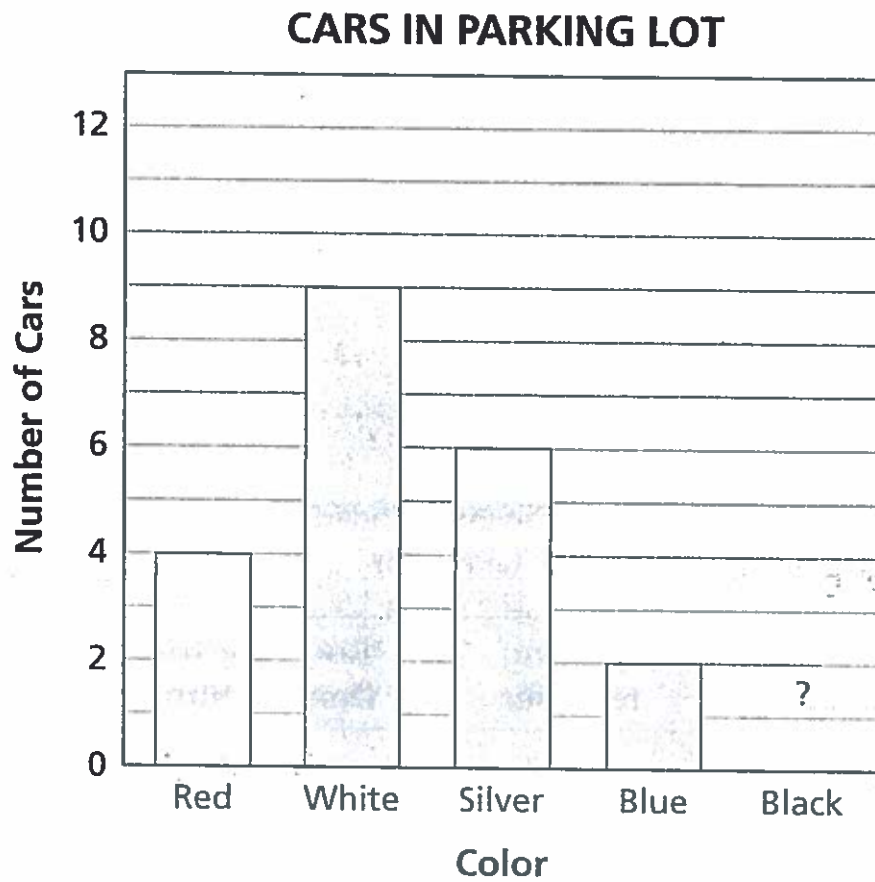


Math

5

The bar graph shows the numbers and colors of cars in a parking lot.



The total number of silver and black cars equals the total number of red, white, and blue cars. How many black cars are in the parking lot?

- A 9
- B 10
- C 15
- D 30

GO ON

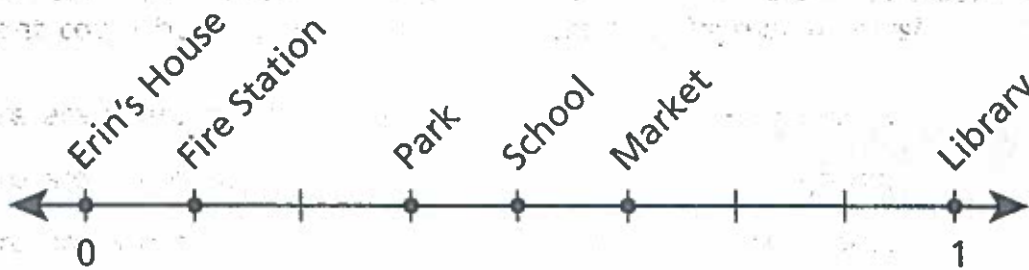
8

Tayshawn sorts 56 marbles into equal groups with no marbles left over. Which statement could be true of the groups of marbles Tayshawn sorts?

- A There are 6 groups of marbles with 8 marbles in each group.
- B There are 7 groups of marbles with 7 marbles in each group.
- C There are 8 groups of marbles with 7 marbles in each group.
- D There are 9 groups of marbles with 6 marbles in each group.

9

Erin walked 1 mile from her house to the library. Along the way, she passed several places shown on the number line below.



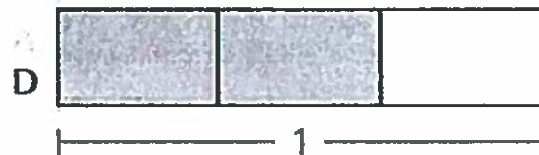
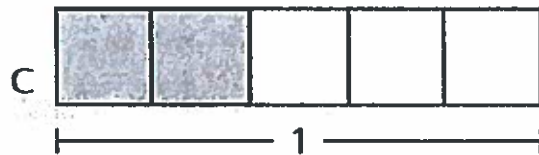
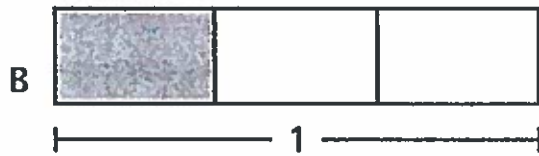
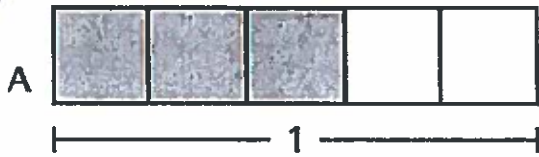
Which place is $\frac{4}{8}$ mile from Erin's house?

- A the fire station
- B the park
- C the school
- D the market

GO ON

16

Which of these is shaded to represent $\frac{2}{3}$?



17

Carmen saved 592 pennies. Her sister saved 128 pennies. Together, they put 250 pennies in wrappers and took them to the bank. What is the total number of pennies, rounded to the nearest hundred, Carmen and her sister have left?

- A 300
- B 500
- C 700
- D 1,000

GO ON

22

Which fraction is equal to $\frac{2}{8}$?

A $\frac{8}{2}$

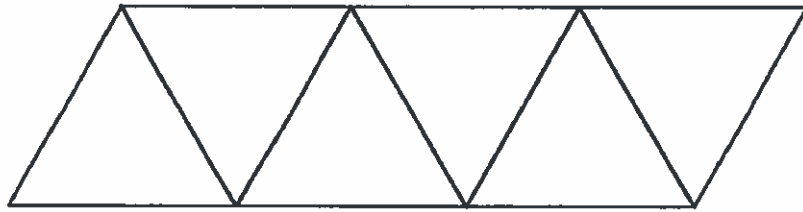
B $\frac{1}{2}$

C $\frac{2}{4}$

D $\frac{1}{4}$

STOP

- 25 The figure below is divided into equal-sized parts.



Which fraction is represented by the shaded parts of the figure?

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

26

There are 12 students in Ms. Miller's class. She needs 24 juice boxes for a class party. The juice boxes come in packages of 6 juice boxes each. Which expression represents the number of packages of juice boxes Ms. Miller needs to buy for the class party?

- A $24 + 12$
- B $36 \div 6$
- C 12×6
- D $24 \div 6$

29

Which expression is equivalent to 5×9 ?

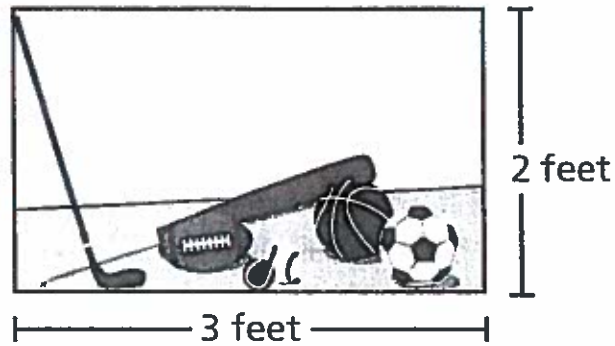
- A $(5 \times 4) \times (5 \times 5)$
- B $(5 \times 5) + (5 \times 4)$
- C $(5 \times 5) + (5 \times 9)$
- D $(5 \times 9) \times (5 \times 9)$

30

A coach rounded the number of runners at a track meet to the nearest 10. The rounded number of runners is 400. Which number could be the actual number of runners at the track meet?

- A 382
- B 397
- C 406
- D 447

- 39 Kelly has a rectangular poster in her room. The poster is shown below.



What is the area, in square feet, of Kelly's poster?

- A 5
- B 6
- C 10
- D 12



Ms. Perez drove a total of 40 miles in 5 days. She drove the same number of miles each day. How many miles did Ms. Perez drive each day?

- A 5
- B 7
- C 8
- D 9

GO ON

45

Write a fraction that is less than $\frac{1}{3}$ using 1 as the numerator.

Answer _____

Explain why the answer you chose is less than $\frac{1}{3}$.

Answer

GO ON



46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

Show your work.

40 marbles x 3 grams = 120 grams

Answer _____ grams



49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

What is the total number of balloons Mrs. Ruiz bought?

Show your work.

Answer _____ balloons

GO ON



A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

Show your work.

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

Explain your answer.

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

Show your work.

Difference in cost \$ _____

STOP

6

Juan makes 7 grab bags to sell at a card show. He places 3 baseball cards and 2 football cards in each bag. What is the total number of cards Juan used in his grab bags?

- A 14
- B 21
- C 28
- D 35

7

Ed is reading a book that has 8 chapters with a total of 75 pages. The first 7 chapters each have the same number of pages, but the eighth chapter is only 5 pages long. What is the number of pages in each of the first 7 chapters?

- A 5
- B 7
- C 9
- D 10

GO ON

8

A number line is shown below.



Which fraction can be placed on one of the tick marks on this number line?

- A $\frac{7}{8}$
- B $\frac{5}{9}$
- C $\frac{2}{3}$
- D $\frac{1}{6}$

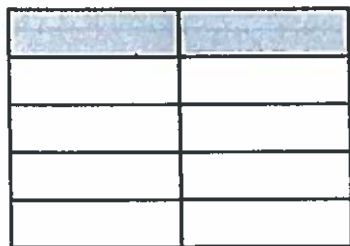
9

Cai made 42 bracelets to be shared by 3 friends. Cai placed an equal number of bracelets in each of 6 bags. If each friend got the same number of bags, how many bracelets did each friend get?

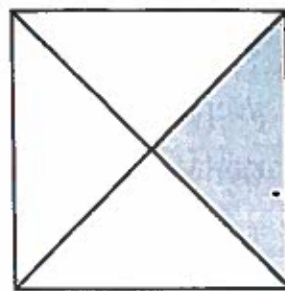
- A 14
- B 7
- C 6
- D 3

10

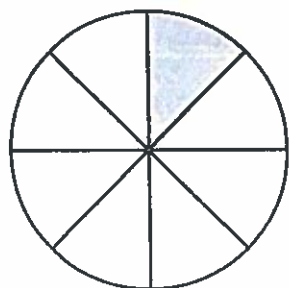
In which figure is $\frac{1}{8}$ of the total area shaded?



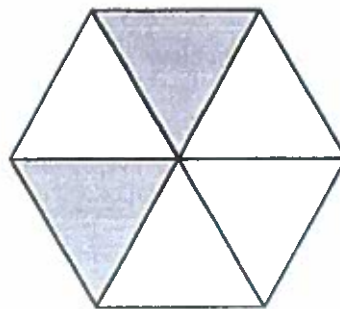
A



C



B



D

GO ON

11

Wendy stacks all of her coins in 6 stacks with 8 coins in each stack. Dennis stacks all of his coins in 8 stacks with 6 coins in each stack. Who has more coins?

- A** Dennis has more coins because he has more stacks.
- B** Wendy has more coins because there are more coins in each of her stacks.
- C** Dennis has more coins because 8×6 is greater than 6×8 .
- D** They each have the same number of coins because $6 \times 8 = 8 \times 6$.

12

Which fraction is equal to a whole number?

- A** $\frac{8}{8}$
- B** $\frac{7}{8}$
- C** $\frac{3}{4}$
- D** $\frac{1}{4}$

13

In a 2-on-2 basketball league, each team has 2 starting players and 1 substitute player. The table below shows the total numbers of players in the league when there are different numbers of teams.

Number of Teams	Total Number of Players
1	3
2	6
3	9

Which explains why the total number of players is sometimes an odd number and sometimes an even number?

- A** When you multiply an even number by an odd number the product is always odd, and when you multiply an odd number by an odd number the product is always even.
- B** When you multiply an even number by an odd number the product is always even, and when you multiply an odd number by an odd number the product is always odd.
- C** When you add an odd number to an even number the sum will always be even, and when you add an even number to an odd number the sum will always be odd.
- D** When you add an odd number to an odd number the sum will always be odd, and when you add an odd number to an even number the sum will always be even.

GO ON

14

Felix paid a total of \$18 for a glass pitcher and 6 pounds of lemons. The price of the lemons was \$2 per pound. What is the price of the glass pitcher?

- A \$6
- B \$10
- C \$14
- D \$16

15

Which equation can be used to find the missing number?

$$\square \times 7 = 56$$

- A $7 + 56 = 63$
- B $56 \div 7 = 8$
- C $56 - 7 = 49$
- D $7 \times 5 = 35$

16

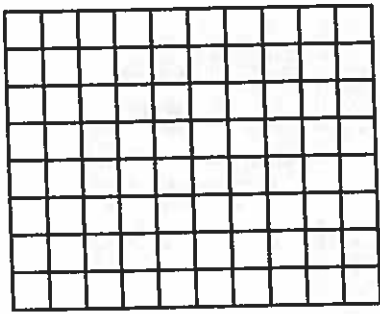
For a snack, Lali ate $\frac{2}{4}$ of an apple, and Maeko ate $\frac{3}{4}$ of a peanut butter sandwich. Which girl ate more?

- A** Maeko ate more, because $\frac{3}{4}$ is greater than $\frac{2}{4}$.
- B** Lali ate more, because $\frac{2}{4}$ is greater than $\frac{3}{4}$.
- C** The girls ate the same amount, because $\frac{2}{4}$ is equal to $\frac{3}{4}$.
- D** The fractions cannot be compared, because they refer to different wholes.

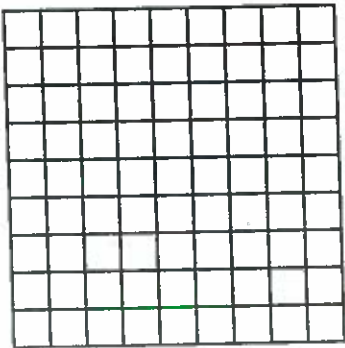
17

Each square in the figures below has an area of 1 square foot. Which figure has an area of 81 square feet?

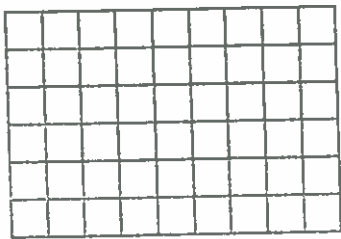
A



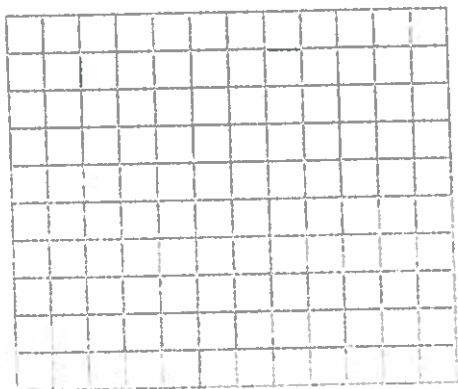
B



C

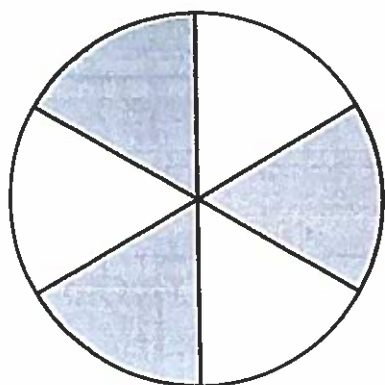
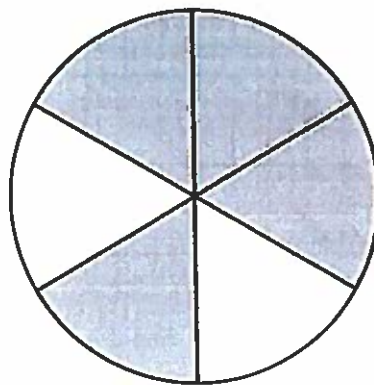
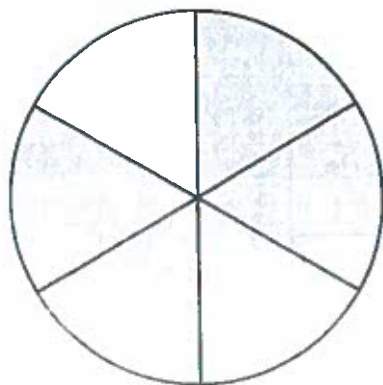
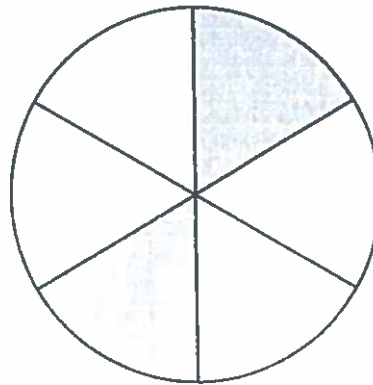


D



18

The shaded part of which model shows a fraction that is greater than $\frac{4}{6}$?

**A****C****B****D****19**

Which number makes the number sentence true?

$$40 \div \underline{\quad} = 5$$

- A 200
- B 45
- C 9
- D 8

GO ON

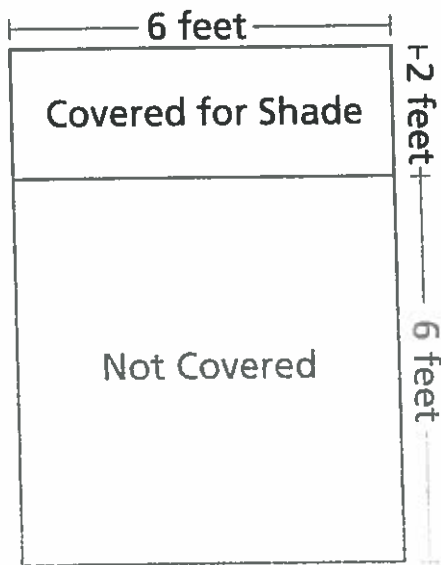
20

A garden has 4 rows of tulips with 8 tulips in each row. Which equation shows the total number of tulips in the garden?

- A $4 \times 8 = 32$
- B $4 + 8 = 12$
- C $8 \div 4 = 2$
- D $8 - 4 = 4$

21

The Grants built a dog run in their backyard. Part of the dog run is covered to give the dogs shade. Mr. Grant drew the picture below to show the area of the dog run.

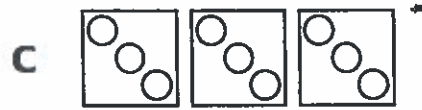
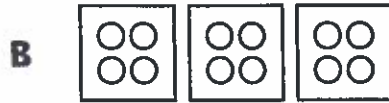
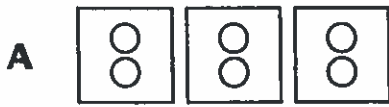


What is the total area of the dog run?

- A 28 square feet
- B 36 square feet
- C 48 square feet
- D 72 square feet

22

Marco is planning a camping trip. There are 4 families, each with 3 people going on the trip. They will be taking 3 cars. Each car will carry the same number of people. Which diagram shows the number of people that will ride in each car?

**STOP**

23

Kalina bought a cake for a party and cut it into 8 equal pieces. Kalina and some friends ate part of the cake. Kalina ate 2 pieces, Antonio ate 1 piece, and Rhonda and Michael each ate 1 piece. What fractional part of the cake was eaten by Kalina and her friends?

A $\frac{1}{8}$

B $\frac{2}{8}$

C $\frac{3}{8}$

D $\frac{5}{8}$

24

$18 \div t = 6$ and $6 \times t = 18$. What is t ?

A 18

B 12

C 6

D 3

25

Jaime uses the expression $(4 \times 3) + (4 \times 2)$ to find the total number of desks in her classroom. If the desks are arranged in groups of 4, how many groups are there?

- A 2
- B 3
- C 5
- D 6

26

As a part of the recycling drive at their school, Zafir, Brear, Michelle, and Carlos collected 23, 45, 40, and 31 cans. What is the total number of cans collected by the four students, rounded to the nearest ten?

- A 100
- B 139
- C 140
- D 150

GO ON

27

A photo album is filled with photos. Each page has 3 rows of photos with 3 photos in each row. If the photo album contains 72 photos, how many pages are filled with photos?

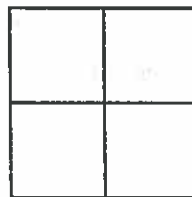
- A** 8
- B** 9
- C** 12
- D** 24

28

How many sections of Model B would need to be shaded to show a fraction equivalent to the fraction shown by Model A?



Model A

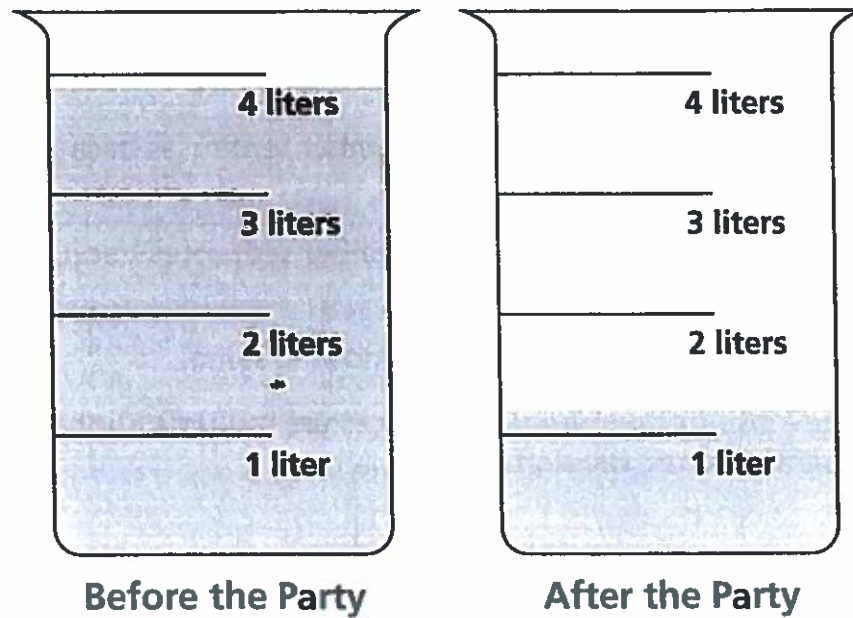


Model B

- A** 1
- B** 2
- C** 3
- D** 4

29

Mrs. Smith made lemonade for a birthday party. The diagrams show how much lemonade there was before the party and after the party.



Which is the *best* estimate of how much lemonade Mrs. Smith served at the birthday party?

- A 6 liters
- B 5 liters
- C 4 liters
- D 3 liters

GO ON

Can the same whole number be used to solve each of these number sentences?

$$8 \times \square = 72$$






$$\square \times 8 = 72$$

$$72 \div \square = 8$$

$$72 \div 8 = \square$$

- A** Yes, 6 can be used to solve all of the number sentences because all of the number sentences are related.
- B** Yes, 9 can be used to solve all of the number sentences because all of the number sentences are related.
- C** No, because the number sentences are not the same.
- D** No, because two of the number sentences use multiplication and two of the number sentences use division.

The pictograph shows the number of pens sold on each of the last 5 days in a store.

Day	Number of Pens
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

KEY

 = 5 pens

How many fewer pens were sold on Monday than on Tuesday, Wednesday, and Thursday combined?

- A** 40
- B** 25
- C** 20
- D** 15

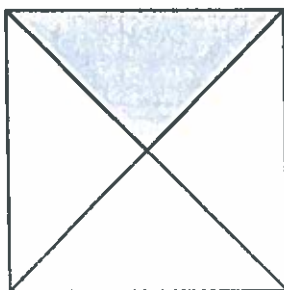
32

The multiplication expression $3 \times 5 \times 4$ represents the total number of oranges Ella used to make 4 pitchers of orange juice. The same number of oranges were used in each pitcher. How many oranges did she use to make each pitcher of juice?

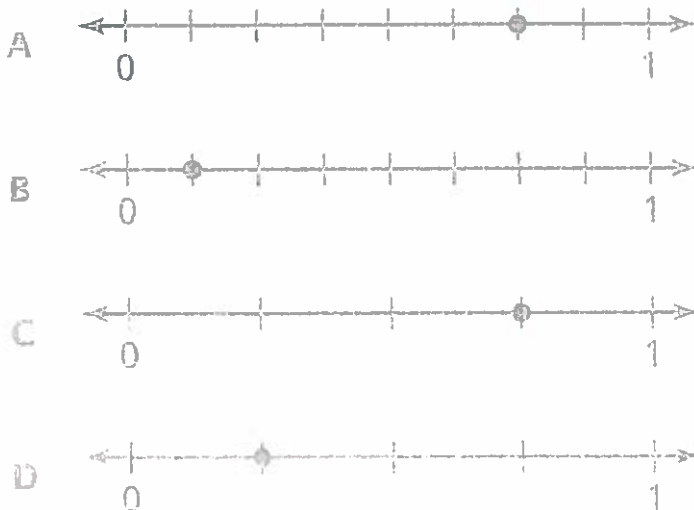
- A 15
- B 12
- C 9
- D 8

33

The shaded part of the figure below models a fraction.



Which number line shows the same fraction?

**GO ON**

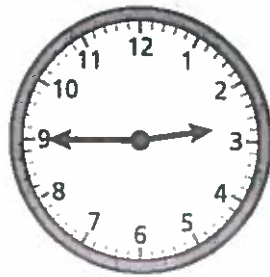
34

Amanda had 36 coins. She gave all her coins to 4 friends. She gave each friend the same number of coins. Which number sentence can Amanda use to show how many coins each friend got?

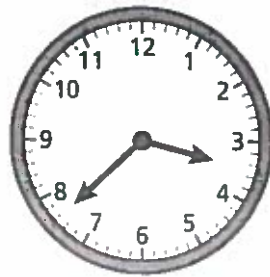
- A $36 - 4 = c$
- B $36 \div 4 = c$
- C $36 + 4 = c$
- D $36 \times 4 = c$

35

The clocks below show when Blake's soccer practice started and ended.



Start



End

How long was Blake's soccer practice?

- A 45 minutes
- B 53 minutes
- C 55 minutes
- D 58 minutes

36

Martina has 4 boxes of cards. Each box has 70 cards in it. How many cards does Martina have in all?

- A** 66
- B** 74
- C** 240
- D** 280

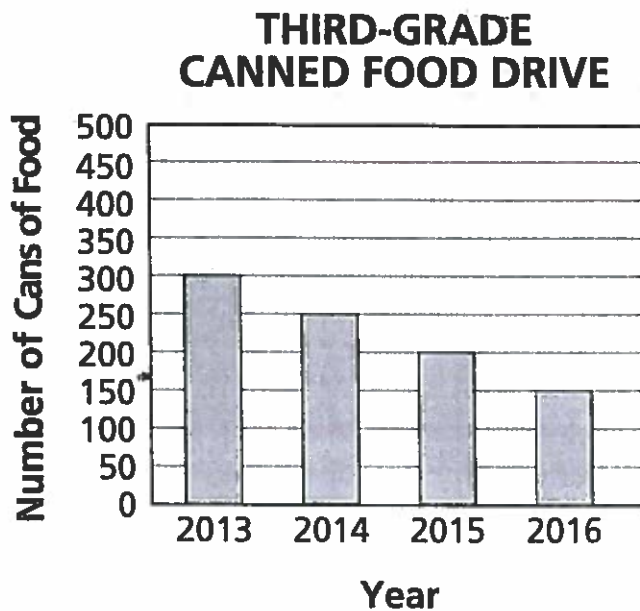
37

Jana wanted to estimate the sum of 74 and 23. She rounded each number to the nearest ten and then added the rounded number. What was Jana's estimate?

- A** 80
- B** 90
- C** 100
- D** 110

GO ON

The bar graph shows the number of cans of food collected during the third-grade canned food drive each year.



How many more cans of food were collected in 2014 than in 2016?

- A 50
- B 100
- C 150
- D 250

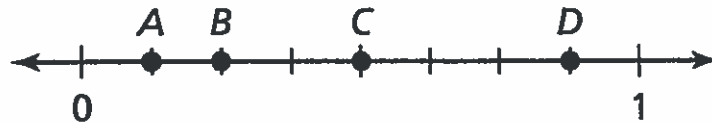
39

A square has side lengths of 1 meter. What is the area of the square?

- A 1 meter
- B 1 square meter
- C 4 meters
- D 4 square meters

40

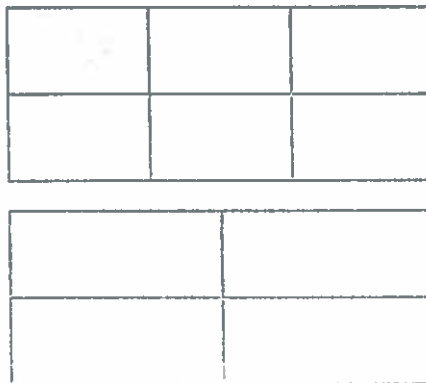
Which point on the number line shows a fraction equivalent to $\frac{1}{4}$?



- A** Point A
- B** Point B
- C** Point C
- D** Point D

41

The shaded area of each rectangle can be shown by a fraction.



Which statement correctly compares the two fractions?

- A** $\frac{1}{4} > \frac{1}{6}$
- B** $\frac{1}{4} < \frac{1}{6}$
- C** $\frac{1}{6} > \frac{1}{4}$
- D** $\frac{1}{6} < \frac{1}{4}$

GO ON

42

A store sold 130 stamps in May and 212 stamps in June. In July, the store sold 489 stamps. How many more stamps did the store sell in July than in May and June combined?

- A 407
- B 359
- C 277
- D 147

43

The table below shows how much Lisa earns while babysitting.

Number of Hours	Amount Earned
1	\$8
2	\$16
3	\$24
4	\$32

Which explains why the amount earned is always an even number?

- A When you multiply an even or an odd number by an even number the product will always be an odd number.
- B When you multiply an even or an odd number by an even number the product will always be an even number.
- C When you add an odd number to an even number the sum will always be an even number, and when you add an even number to an even number the sum will always be an odd number.
- D When you add an odd number to an even number the sum will always be an odd number, and when you add an even number to an even number the sum will always be an even number.

44

Which problem can be solved by finding 4×5 ?

- A** Harold had 5 quarters. He used 4 quarters to buy a pen. How many quarters does Harold have left?
- B** Alice bought 5 apples and 4 oranges. How many pieces of fruit did she buy?
- C** Kim bought 4 notebooks for a total of \$5. How much did each notebook cost?
- D** Kurt bought 4 books for \$5 each. How much did he pay?

STOP

Mr. Tran needs 96 tiles to cover his kitchen floor. He already has 60 tiles. Tiles come in packages of 4. What is the total number of packages he will need to buy to finish covering his kitchen floor?

Show your work.

Answer _____ packages

There were 30 students in a school chorus. The music teacher arranged the chorus into 6 equal groups. How many students were in each group?

Show your work.

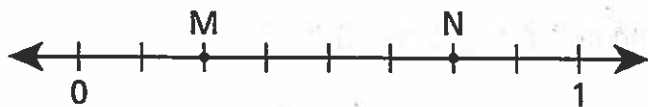
Answer _____ students

Three more students joined each of the 6 groups. How many students were in the chorus then?

Show your work.

Answer _____ students

- 49 On the number line below, the distance from 0 to 1 represents a whole.



What fraction of the whole represents the distance from point M to point N?

Answer _____

Complete the number line below so that each part represents $\frac{1}{4}$ of the distance from 0 to 1.



Primary CCLS: 3.NF.2.a

Represent a fraction $\frac{1}{b}$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $\frac{1}{b}$ and that the endpoint of the part based at 0 locates the number $\frac{1}{b}$ on the number line.

Secondary CCLS: None

Statewide Average Points Earned: 0.92 out of 2

- 52** Ryan played a computer game three times. His score on each of the first two games is shown in the table below.

COMPUTER GAME SCORES

Game	Ryan	
1	215	
2	225	
3		
	714	Total

Ryan's total score for all 3 games was 714. What was Ryan's score in game 3?

Show your work.

Answer _____

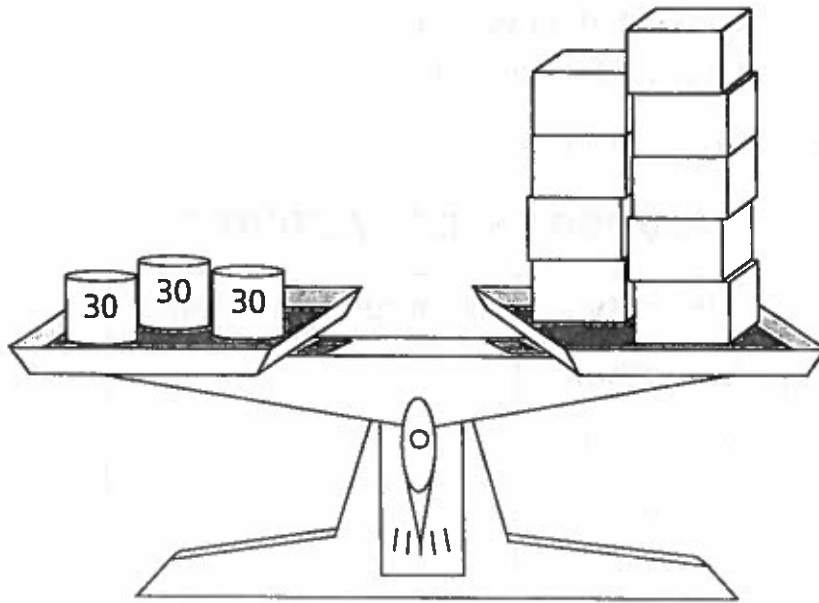
Primary CCLS: 3.OA,8

Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Secondary CCLS: None

Statewide Average Points Earned: 1.13 out of 2

- 51** The picture below shows that 3 cans have the same mass as 9 identical boxes. Each can has a mass of 30 grams.



What is the mass, in grams, of each box?

Show your work.

Answer _____ grams

Primary CCLS: 3.OA.3

Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Secondary CCLS: None

Statewide Average Points Earned: 1.01 out of 2

47 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

Activity	Number of Students
Basketball	
Volleyball	
Baseball	
Kickball	

KEY
○ = 2 students

GO ON

- 52 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 5 _____

STOP

Nick left for school at 7:50 A.M. and arrived at 8:05 A.M. How long did it take him to get to school?

Answer: _____ minutes

STOP

39

At the school bookfair, 40 fiction books and 53 nonfiction books were sold. Each fiction book costs \$10 each and each nonfiction book costs \$9. The school used \$260 to purchase new bookshelves for the library and used the rest of the money to buy a new computer. How much money did the school spend on the new computer?

Show your work.

Part 2

Answer: \$ _____

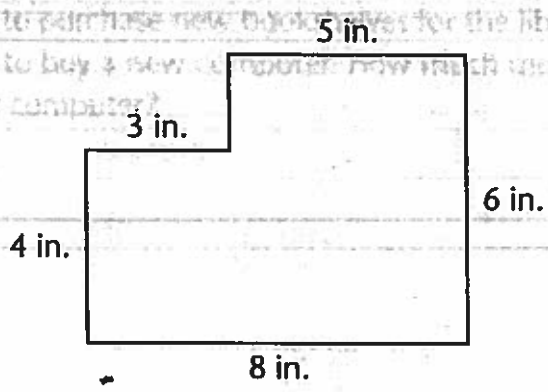
Go On

37

What is the area of the figure shown below?

Each fiction book costs \$10 each and each nonfiction book costs \$12 each. A school used \$280 to purchase new books for the library and used the rest of the money to buy a new computer. How much money did the school spend on the new computer?

Show your work.



Show your work.

Answer: _____ square inches

Go On