AVVY LEARNING

Math Assessment

If you see this icon, you may use paper and pencil to solve the problem.

Number Identification 1-20

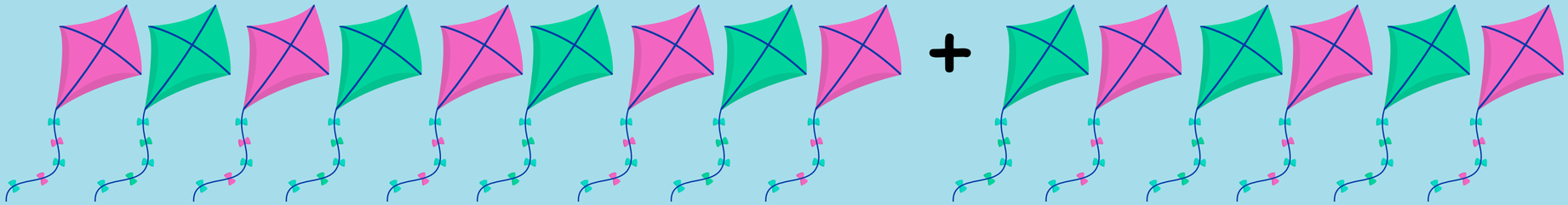
5	18	20
10	12	
7	19	

Counting up to 20

Adding up to 20

3 + 5 =

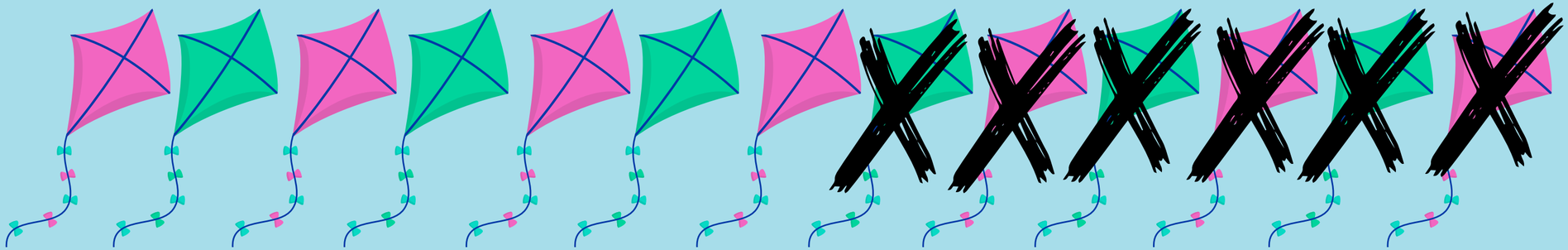
6 + 4 =



9 + 6 =

5 - 1 =

9 - 4 =

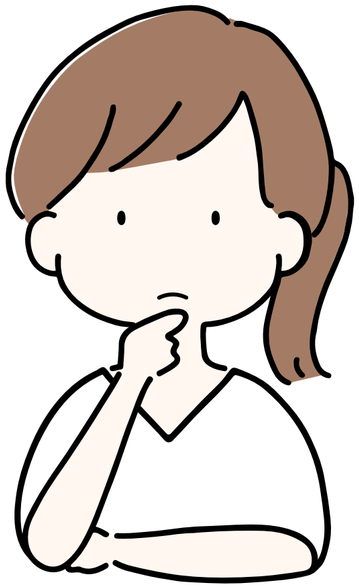


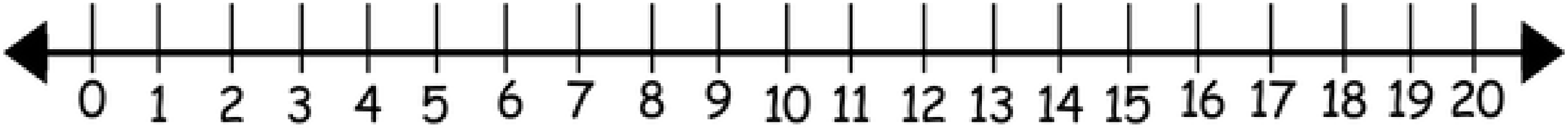
13 - 6 =

3 + 4 =

3 + 3 =

7 + 3 =



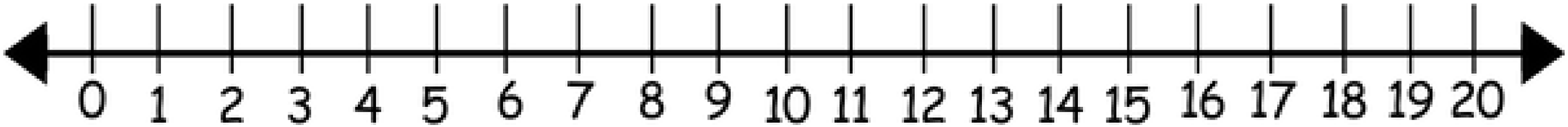


12 + 6 =

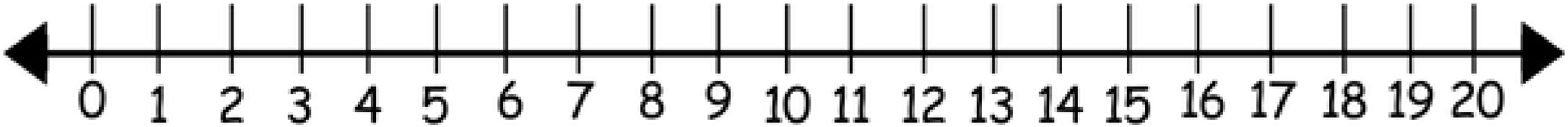
13 + 4 =

15 + 5 =

Lin had 6 suckers. His sister gave him 13 more.
How many suckers does Lin have now?



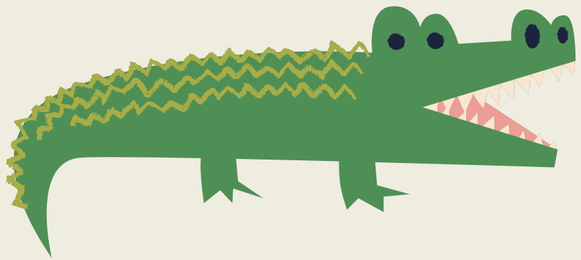
Lin had 19 suckers. He ate 4 of them. How many suckers does Lin have left?



- 25 = 2 tens 5 ones
- 46 = _ tens _ ones
- 13 = _ tens _ ones
- 61 = _ tens _ ones
- 90 = _ tens _ ones

less than < greater than > equal to =

38 is less than 40.

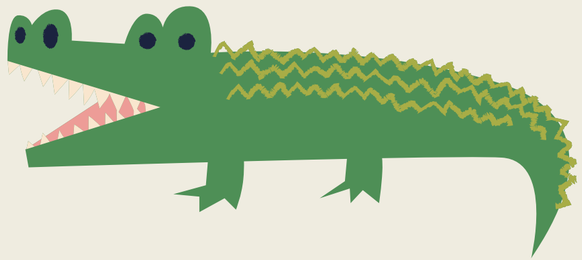


35 is _____ 61.

50 is _____ 15

105 is _____ 105

120 is _____ 75



Mental Math + 10 and -10

25 + 10 =

48 + 10 =

25 - 10 =

48 - 10 =

Adding and Subtracting by Multiples of 10

40 + 12 =

63 + 20 =

45 - 20 =

97 - 30 =

Add up to 100 Without Regrouping

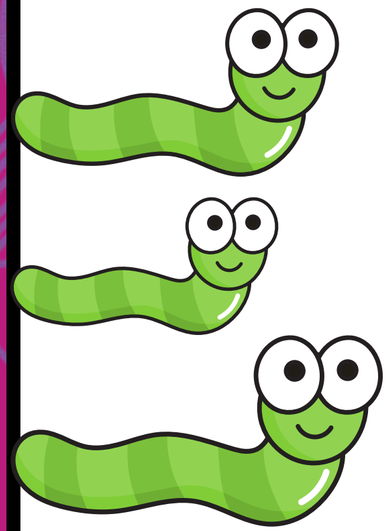
80 + 19 =

41 + 57 =

62 + 37 =

The pink flower is taller than the orange flower.

The blue flower is (taller or shorter) than the orange flower.



Put the worms in order from shortest to longest.

Clock #1

Clock #2

Clock #3

Mental Addition and Subtraction Within 20

$5 + 4 = \_\_\_\_$

$8 + 8 = \_\_\_\_$

$6 + 7 = \_\_\_\_$

$11 - 6 = \_\_\_\_$

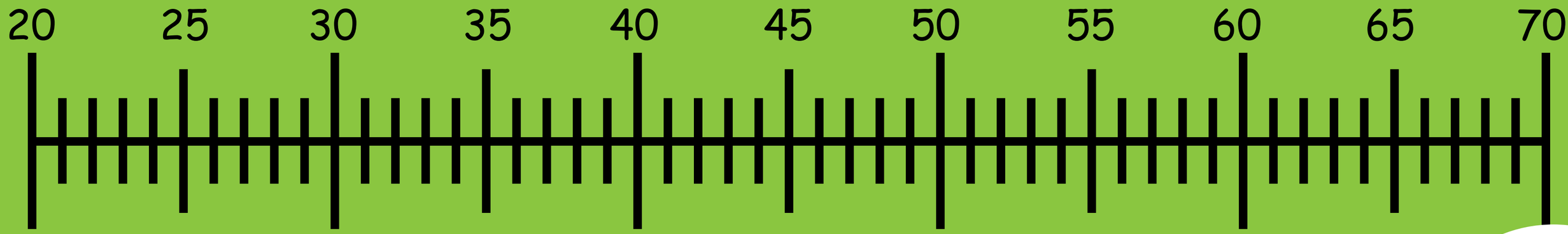
$13 - 7 = \_\_\_\_$

$18 - 9 = \_\_\_\_$

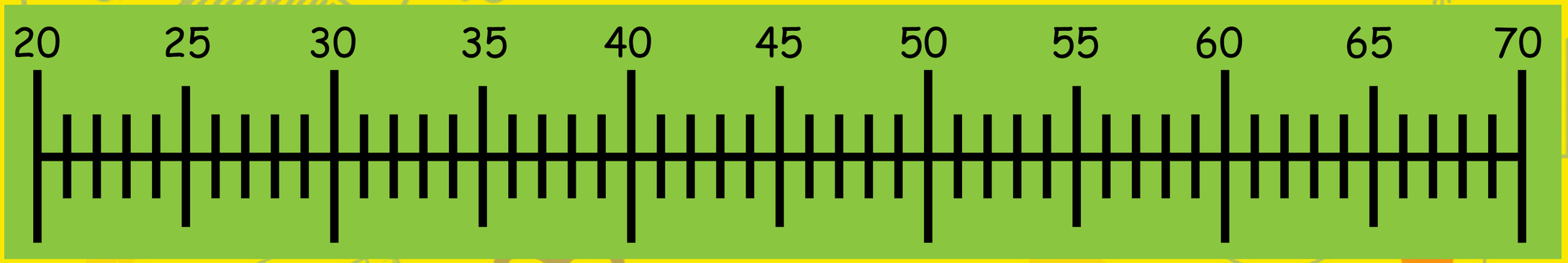
$46 + 23 = \_\_\_\_$

$68 - 37 = \_\_\_\_$

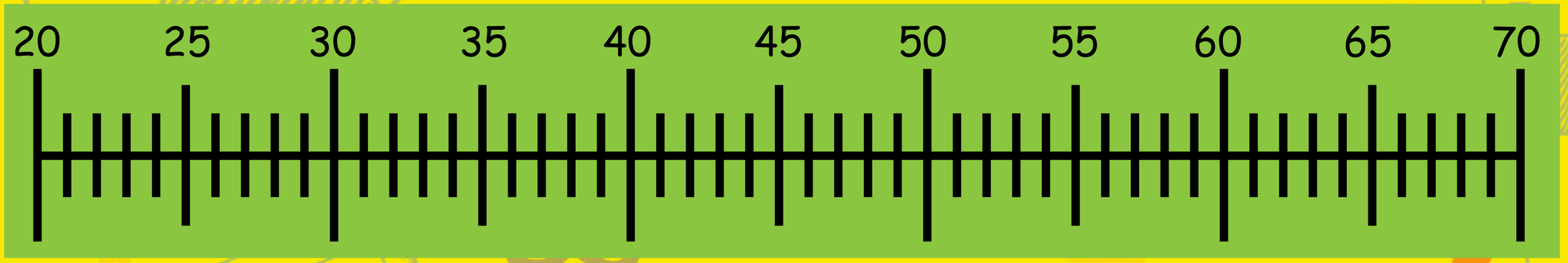
$47 - 24 = \_\_\_\_$



The bookstore had 26 boxes of books and received 15 more boxes. How many total boxes do they have now?



The bookstore has 44 boxes. They decided to start opening some of the boxes. They opened 22 boxes. How many boxes are still closed?



325

789

skip count by 5's

360, _____, _____, _____, _____, _____, _____, _____, 400

skip count by 10's

540, _____, _____, _____, _____, _____, 600

skip count by 100's

125, _____, _____, _____, 525

391 + 10 =

204 - 10 =

176 - 100 =

$$\begin{array}{r} 47 \\ +32 \\ \hline \end{array}$$

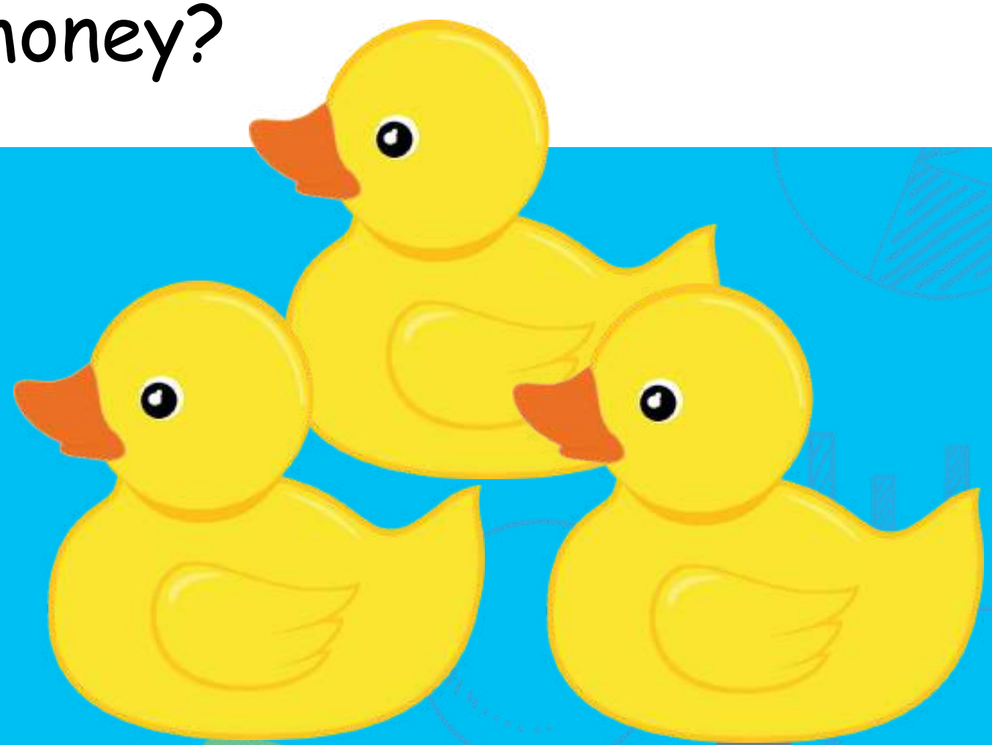
$$\begin{array}{r} 89 \\ -68 \\ \hline \end{array}$$

$$\begin{array}{r} 89 \\ -34 \\ \hline \end{array}$$

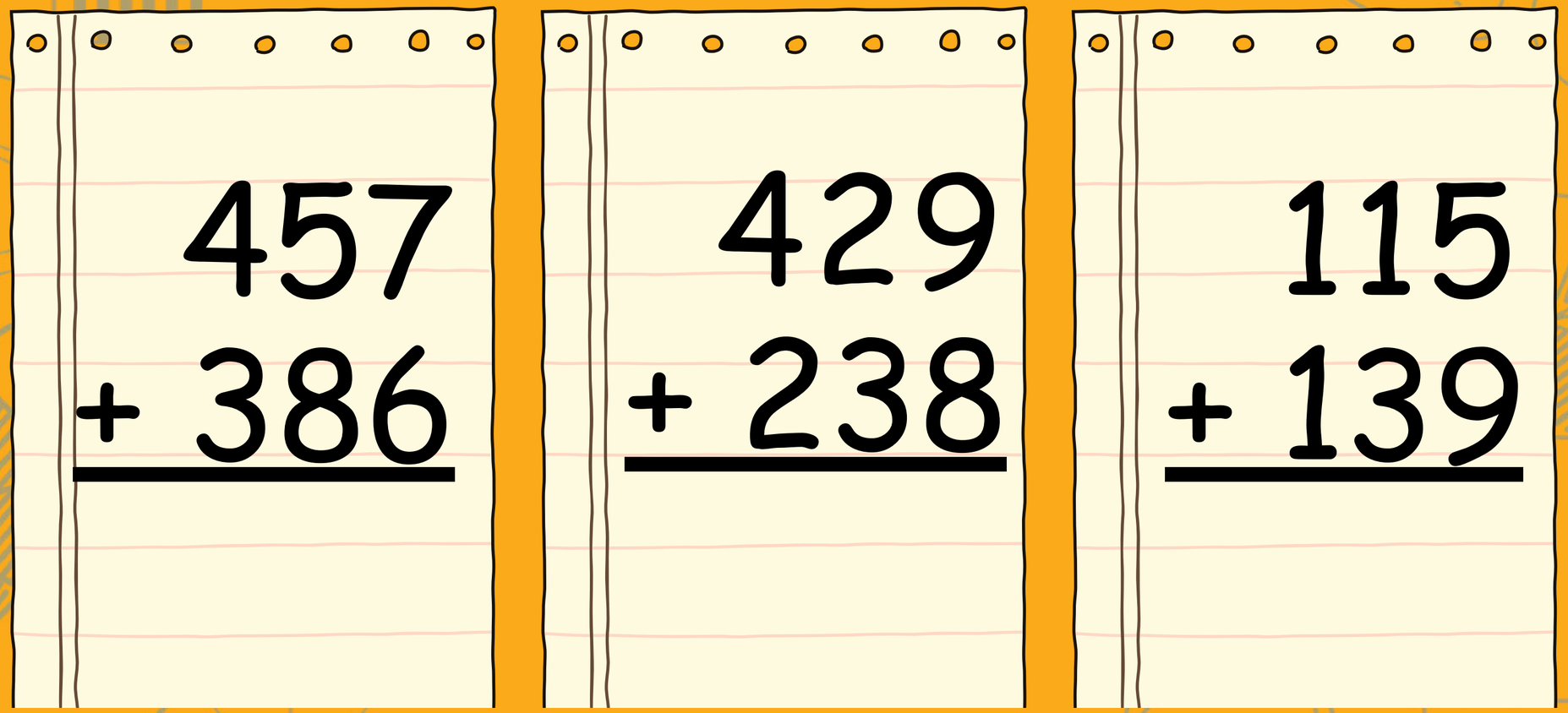
Jason collected 23 shells in the morning and 13 shells in the afternoon. 14 shells were broken. How many were NOT broken?

What is the name of each coin?
What is the value of each coin?
How much money is there in total?

Maria has 98 cents. She wants to buy three rubber ducks. Each rubber duck costs 32 cents. Does she have enough money?



Addition with Regrouping



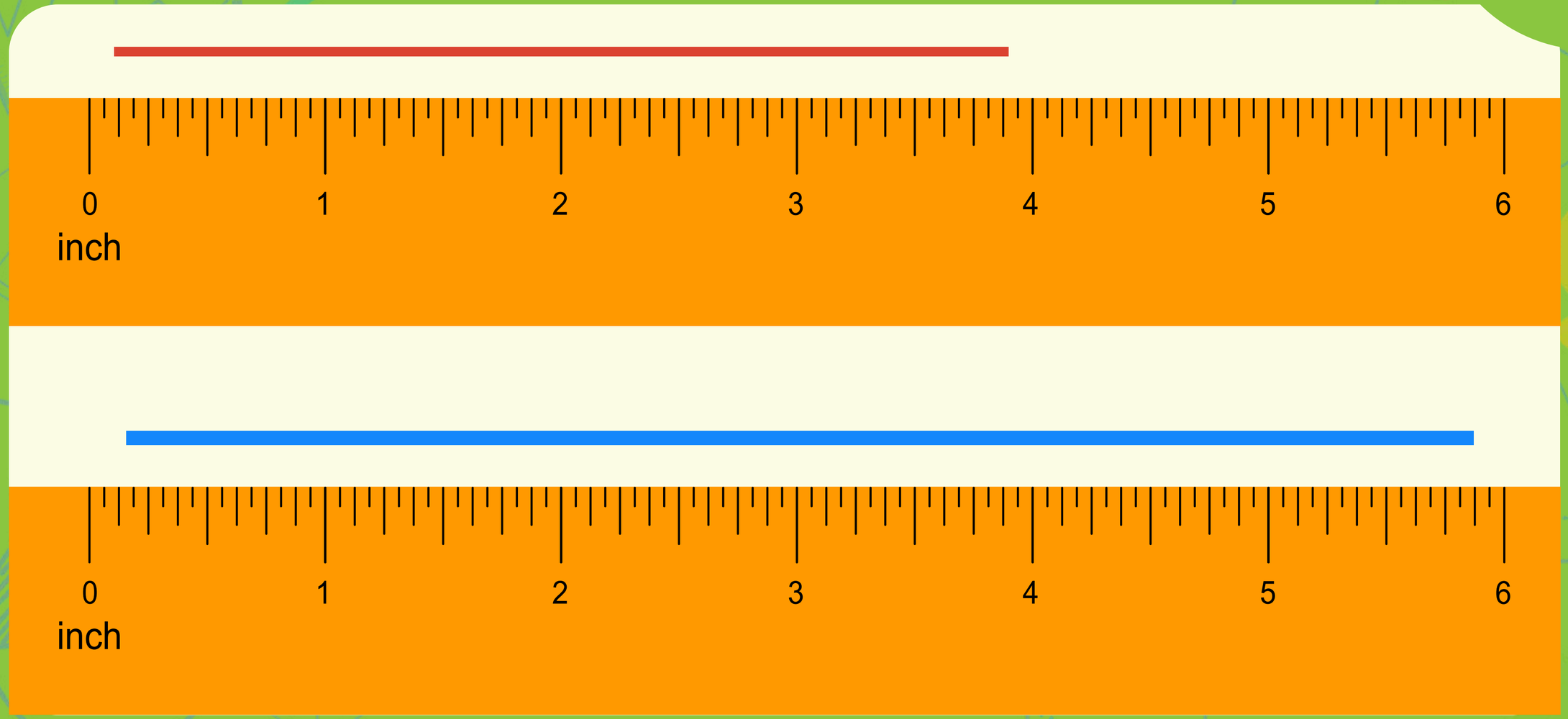
$$\begin{array}{r} 640 \\ -\ 287 \\ \hline \end{array}$$

$$\begin{array}{r} 401 \\ -\ 380 \\ \hline \end{array}$$

$$\begin{array}{r} 645 \\ -\ 327 \\ \hline \end{array}$$

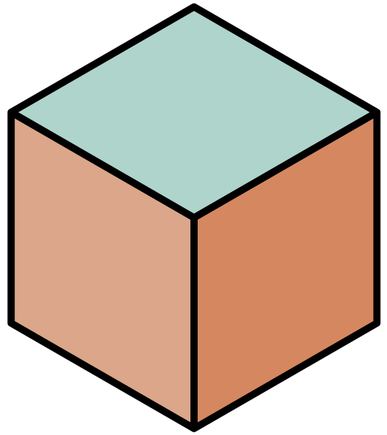
While shopping, Tiffany bought 30 blue candies and 34 pink candies. If she gave her mother 29 of them, how many candies did Tiffany end up with?

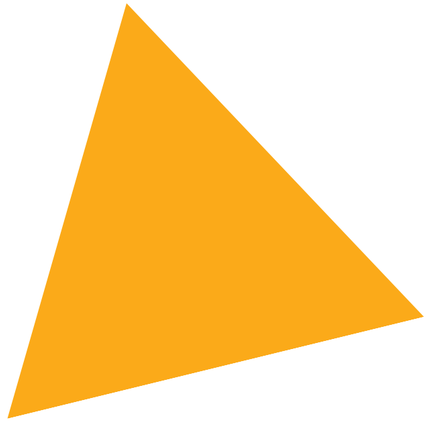
$$34 + 65 + 25 + 16 =$$

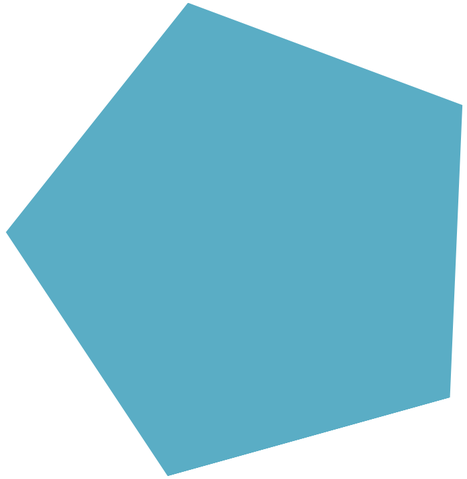


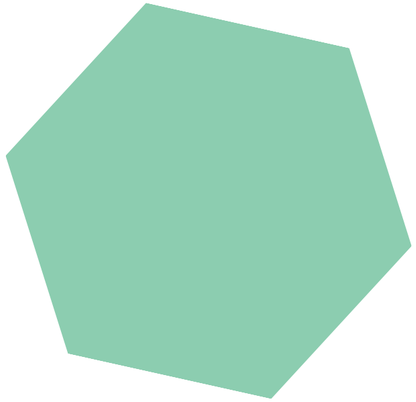
How much longer is the blue line than the red line?

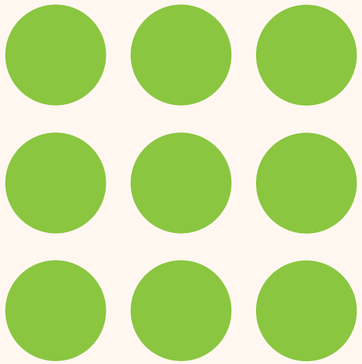
pentagon, hexagon, cube, triangle, rhombus



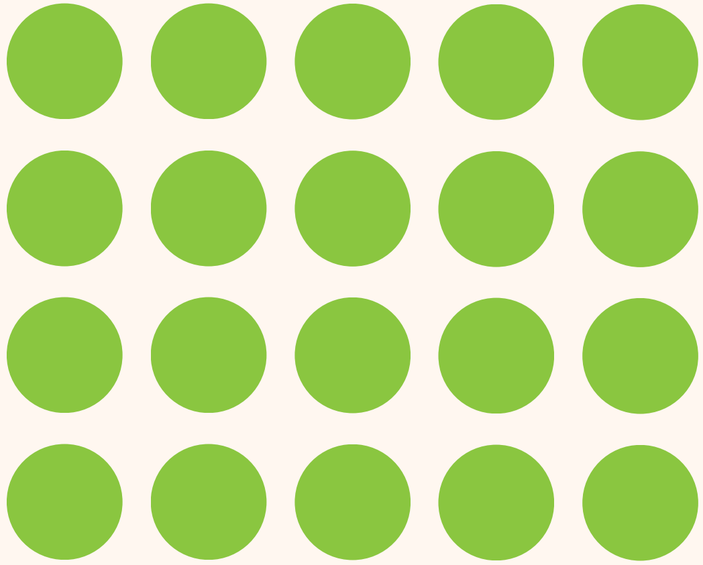








3 + 3 + 3



1. Three friends have 12 cookies. They decide to split the cookies up evenly. How many cookies will each friend get?

2. Which expression below matches the word problem?

3 x 12

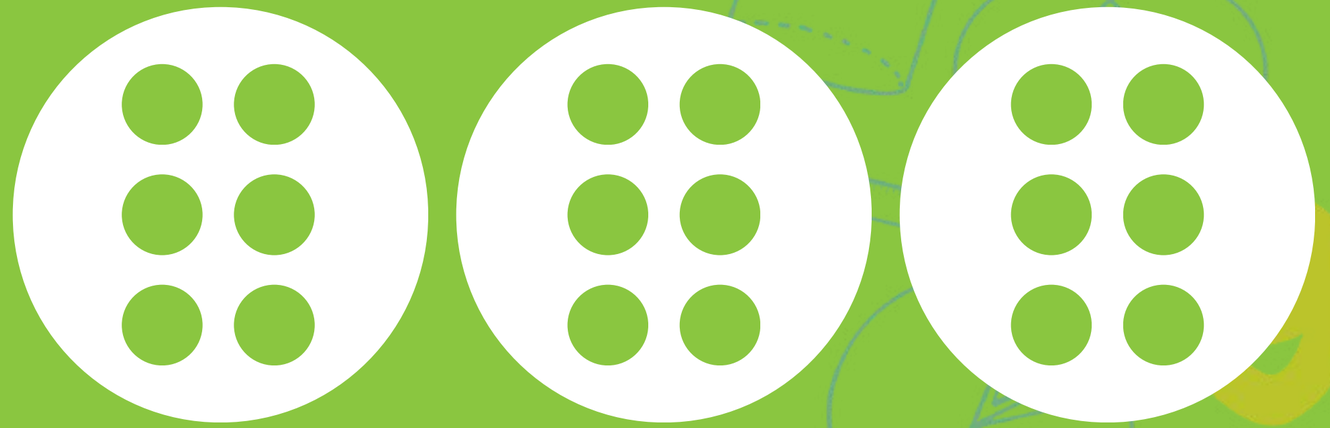
12 ÷ 3

3 x 4

12 ÷ 4

Modeling Division with Pictures

$3 \times 6 =$ _____



$18 \div 3 =$ _____

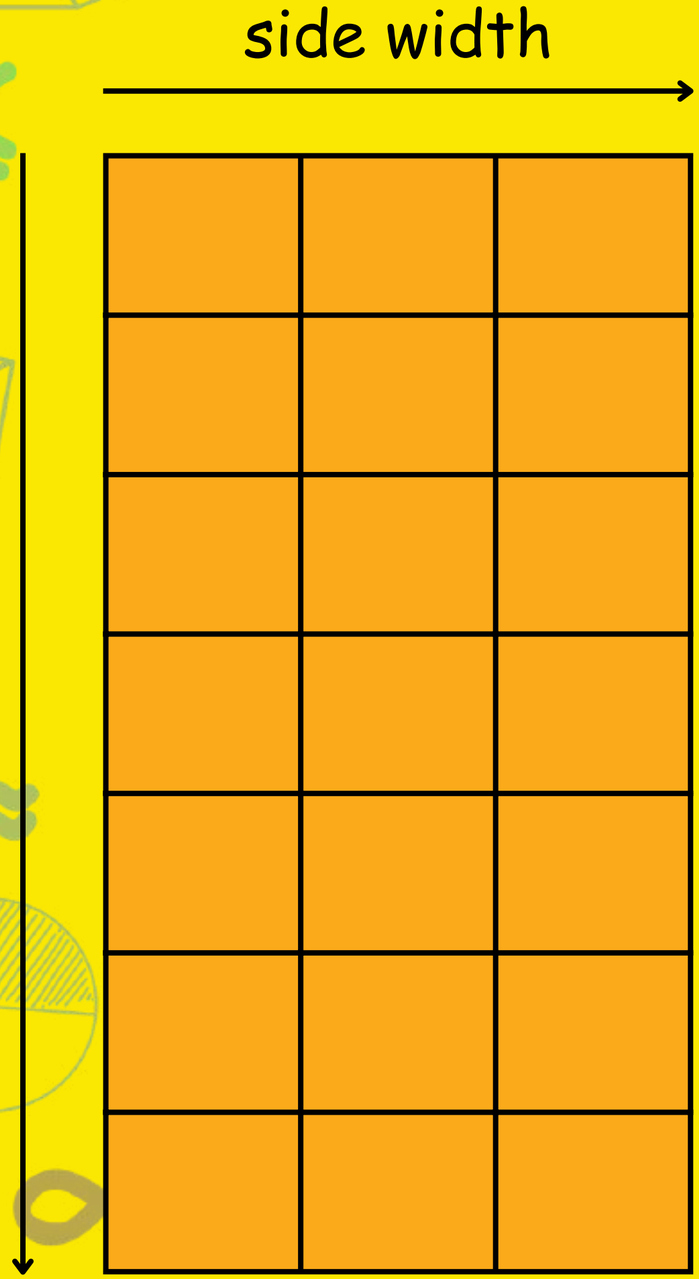
Solve for the missing numbers.

$3 \times \_\_\_\_ = 9$

$10 \times \_\_\_\_ = 80$

$12 \div \_\_\_\_ = 3$

$14 \div \_\_\_\_ = 2$



1. What is the length of this rectangle in units?
2. What is the width of this rectangle in units?
3. What is the total area of this rectangle in units?

What is the area of the rectangle?

9 in.

2 in.

3 ft.

3 ft.

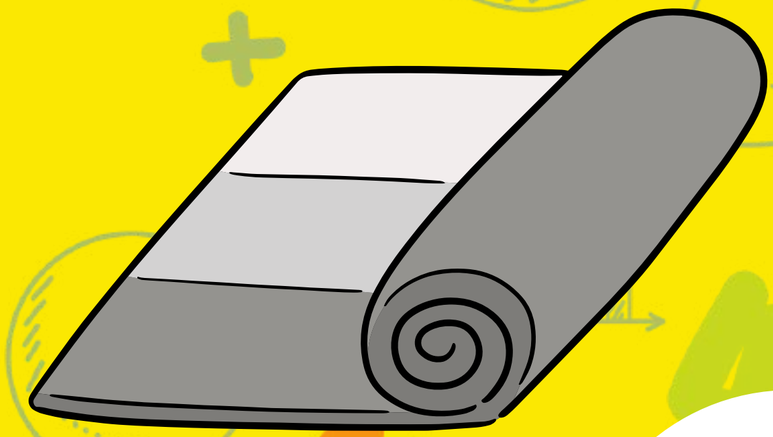
closet

2 ft.

hallway

6 ft.

My grandma is getting new carpet for her closet and hallway. Her closet measures 3 feet by 3 feet. Her hallway measures 2 ft. by 6 ft. How much carpet will she need to order to cover the total area of the closet and hallway?



Round to the nearest <u>ten</u>.

- 62
- 138
- 4,309

Round to the nearest <u>hundred</u>.

- 172
- 729
- 3,820

$$\begin{array}{r} 476 \\ +351 \\ \hline \end{array}$$

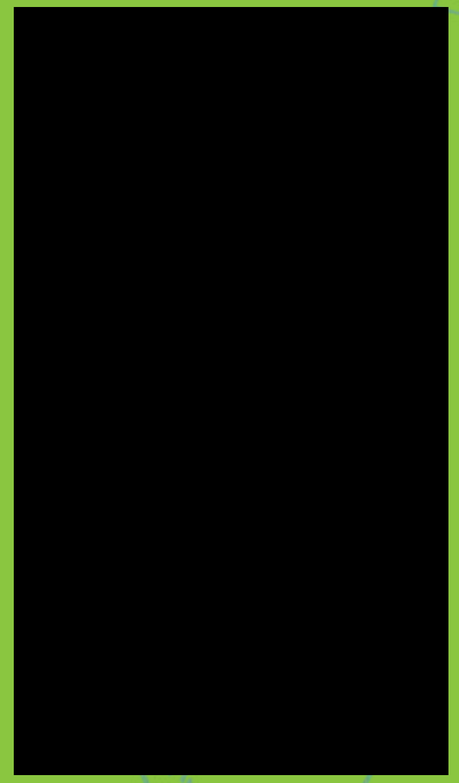
$$\begin{array}{r} 329 \\ -186 \\ \hline \end{array}$$

$$\begin{array}{r} 604 \\ -534 \\ \hline \end{array}$$

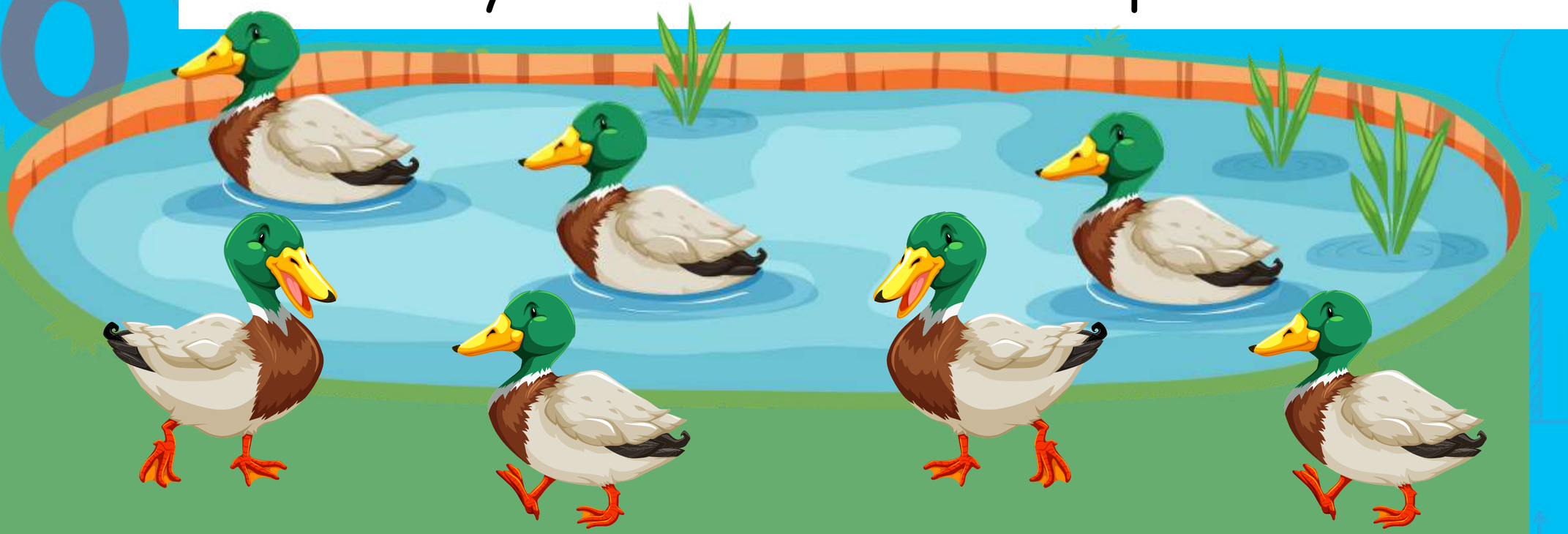
The perimeter of the pink shape is 14 inches.
What is the perimeter of the blue shape?

The floor of a dog kennel has a perimeter of 20 feet.
The length of the kennel is 6 feet. How wide is the kennel?

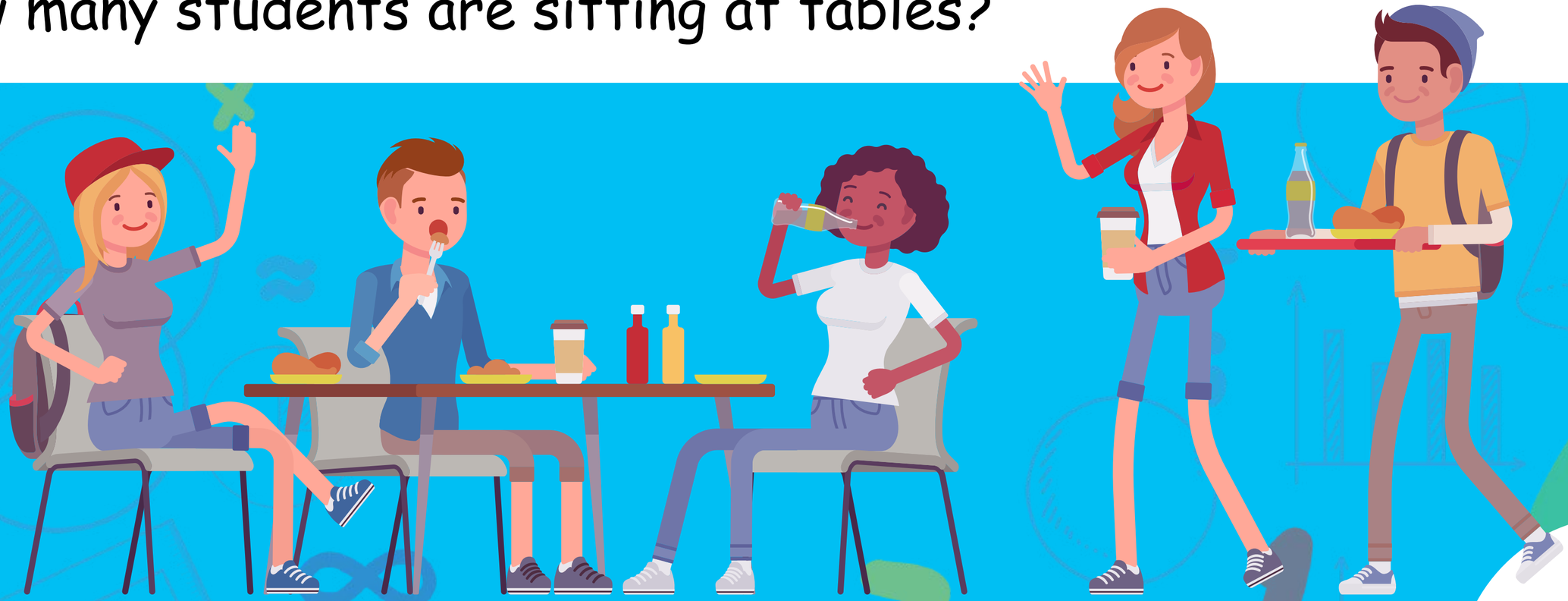
Perimeter= 20 feet



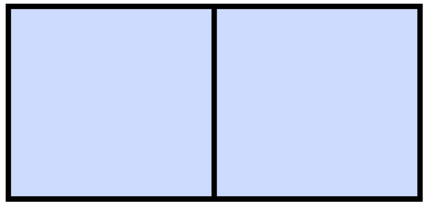
There were 125 ducks on the pond. 105 ducks joined them. After a couple of hours, 135 ducks flew away. How many ducks are now on the pond?

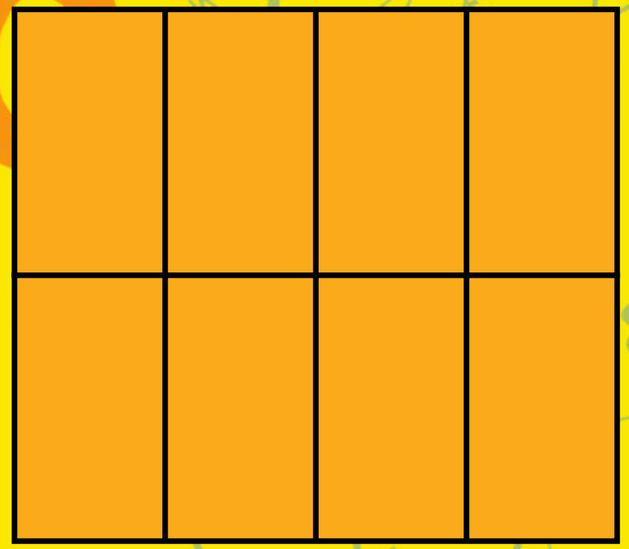


There are 8 tables in the lunchroom. Three students sit at each table. Two tables do not have any students sitting at them. How many students are sitting at tables?

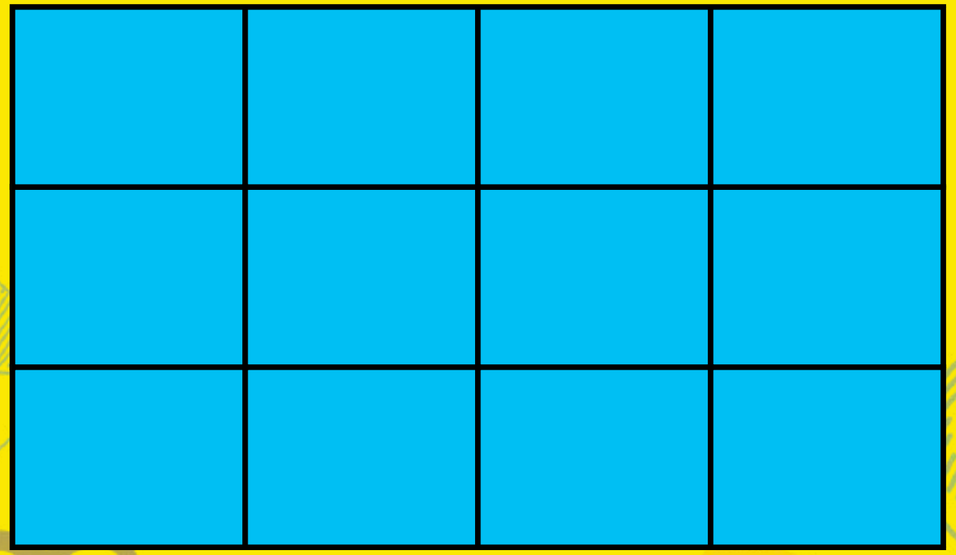


This shape is split into two equal parts or two halves. How are the shapes below split?

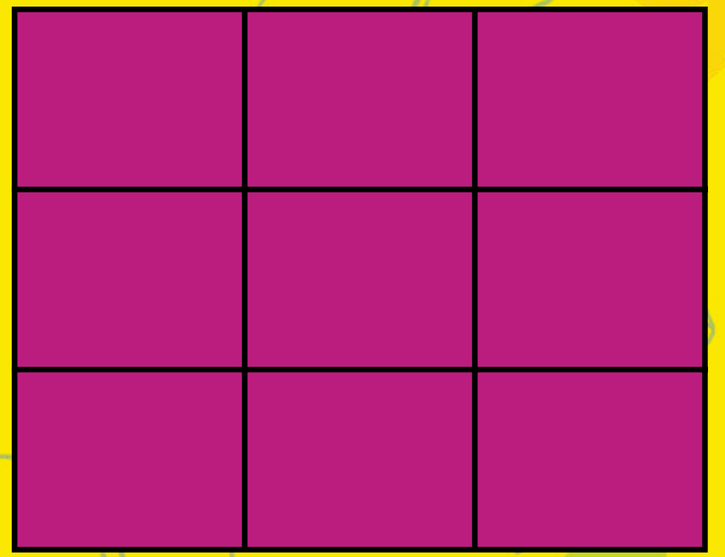




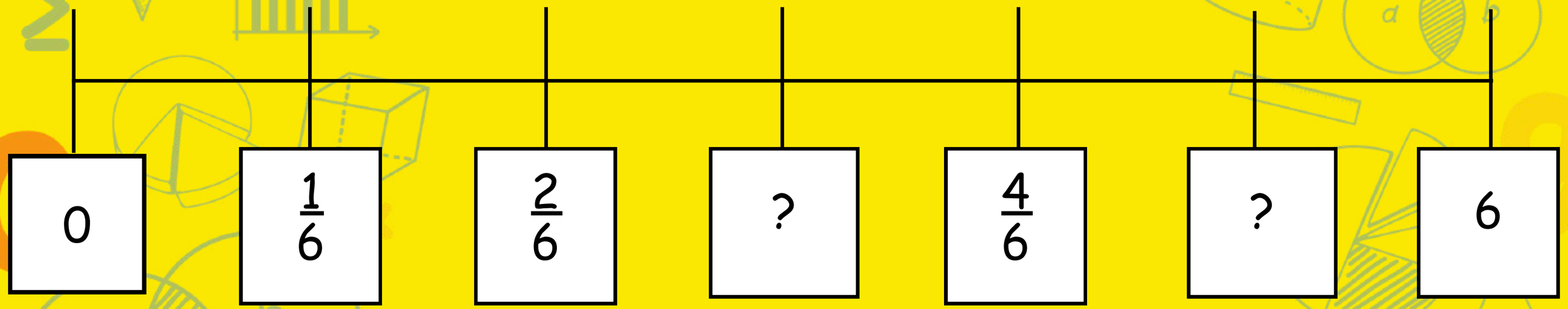
A.



B.

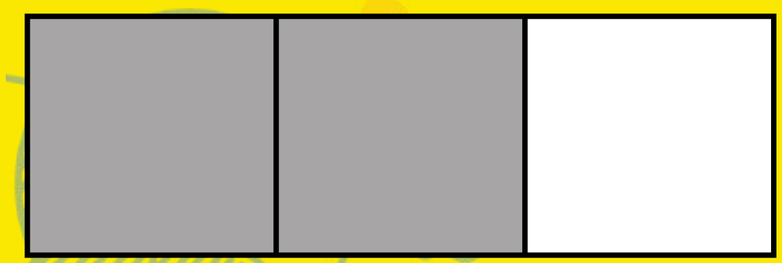


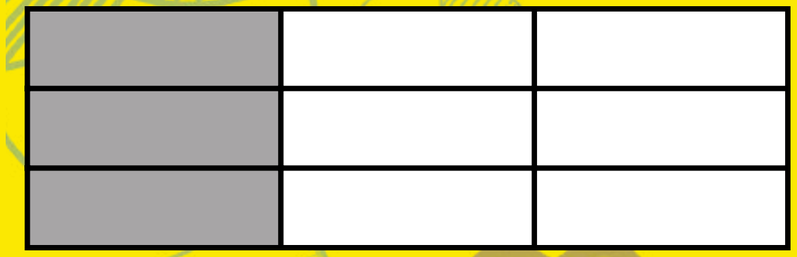
C.


0
1/6
2/6
?
4/6
?
6

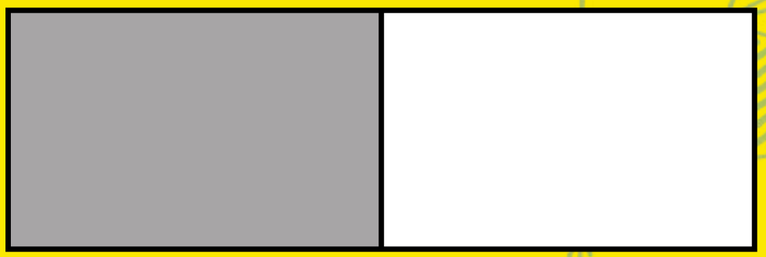
Match the equivalent fractions.

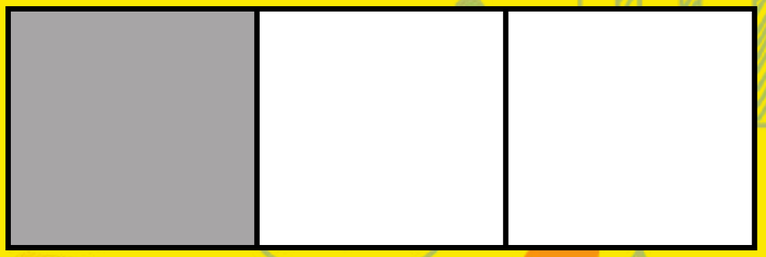
1. 

2. 

3. 

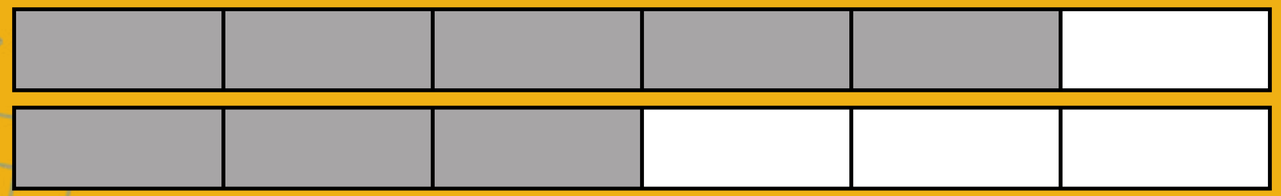
a. 

b. 

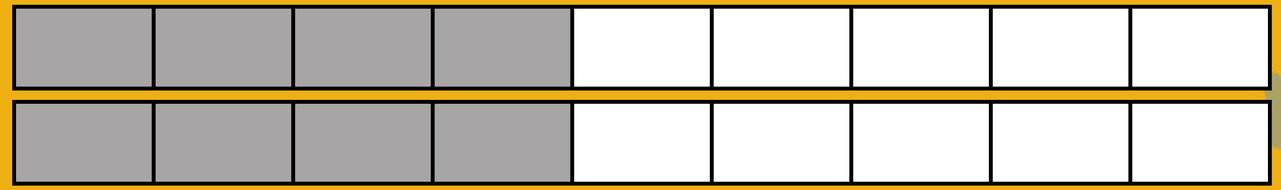
c. 

Use the symbols <, >, or = to compare the fractions.

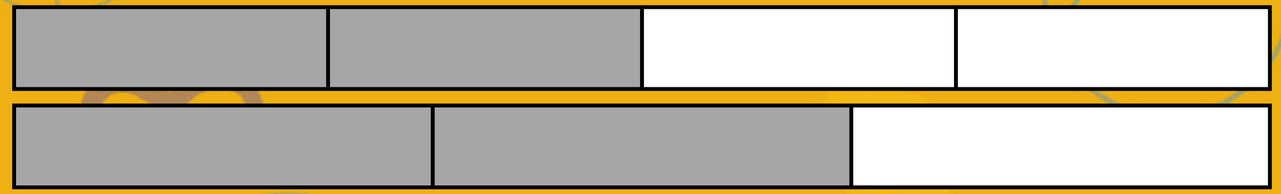
$\frac{5}{6}$ ☐ $\frac{3}{6}$



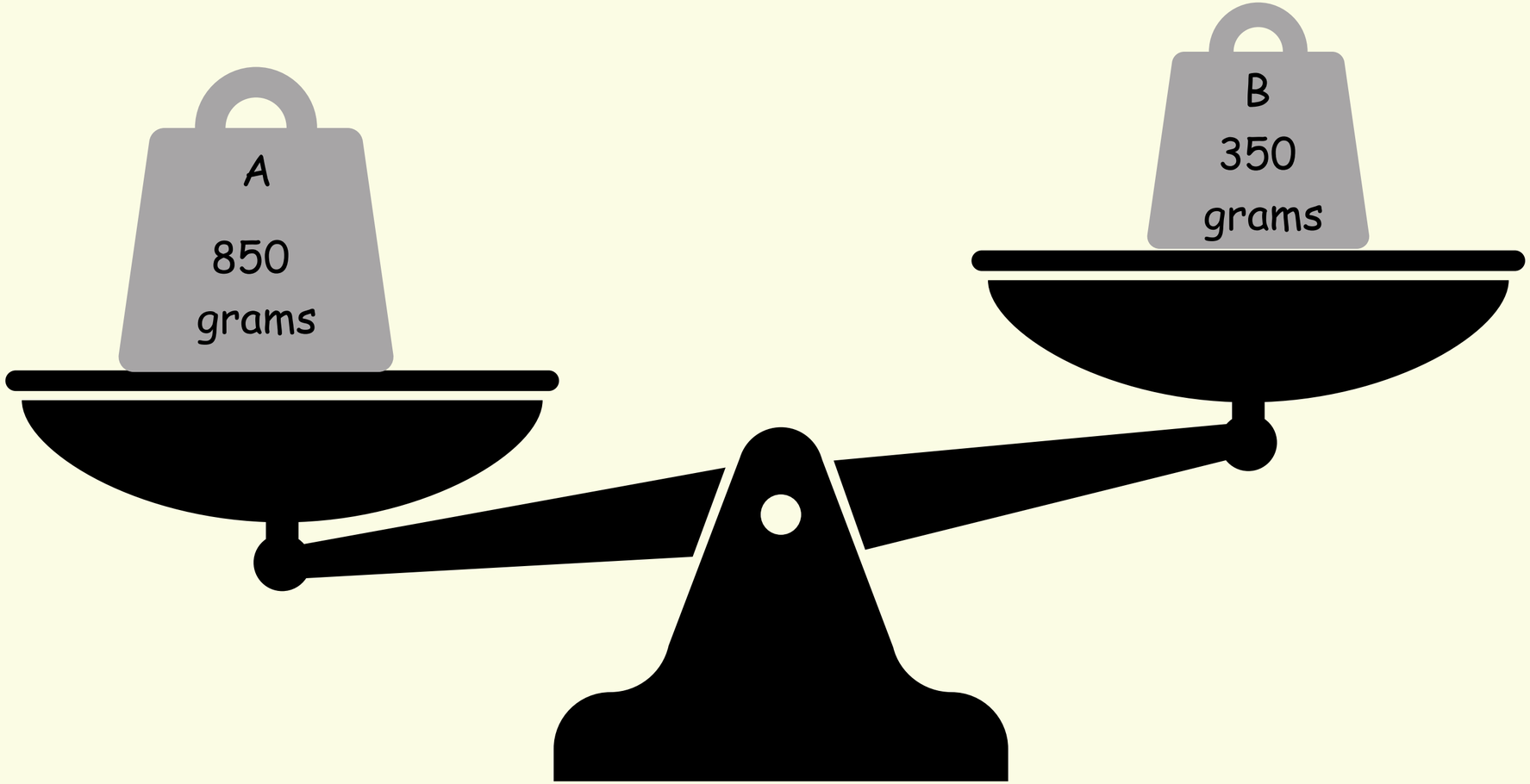
$\frac{4}{9}$ ☐ $\frac{4}{9}$



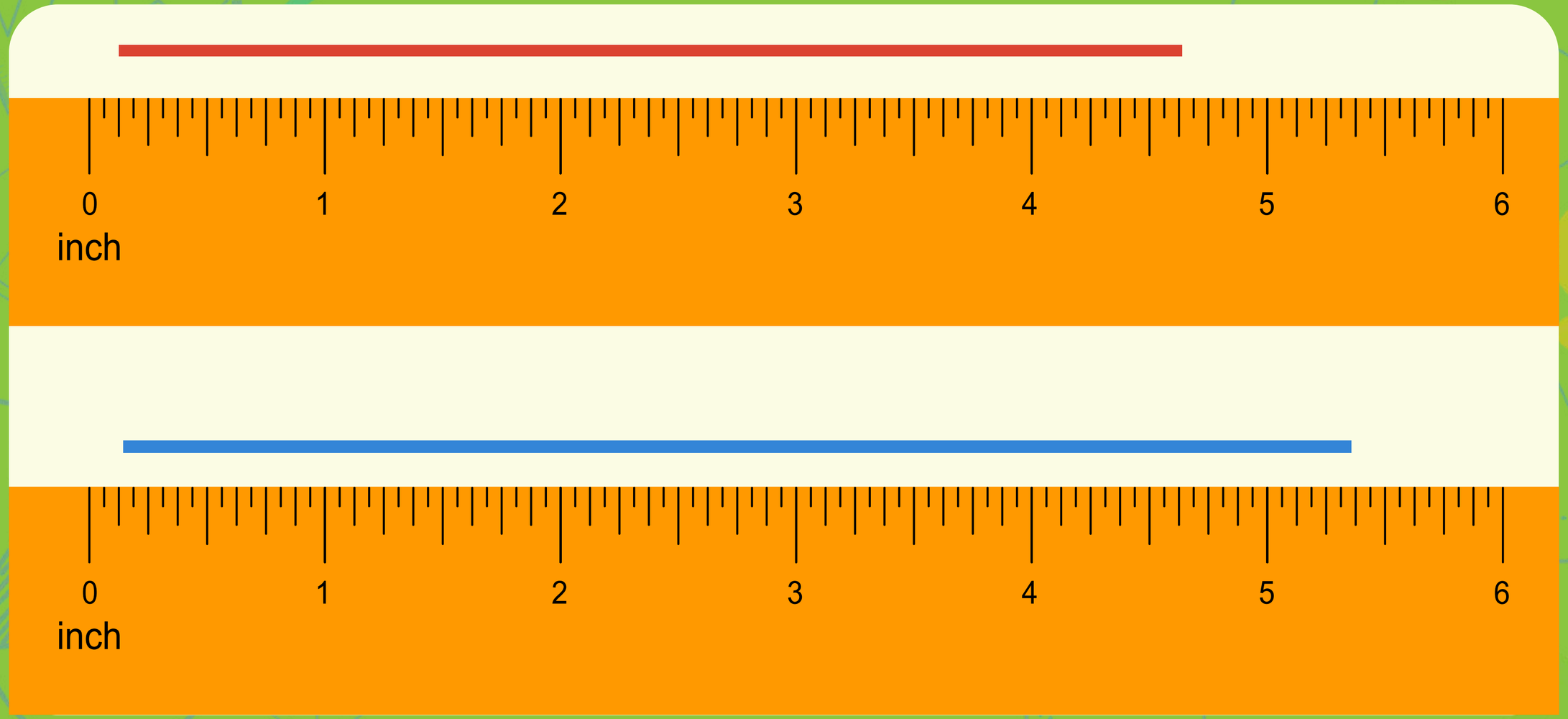
$\frac{2}{4}$ ☐ $\frac{2}{3}$



Tim started reading at 6:30.
He read for 1 hour and 20 minutes.
What time did he stop reading?

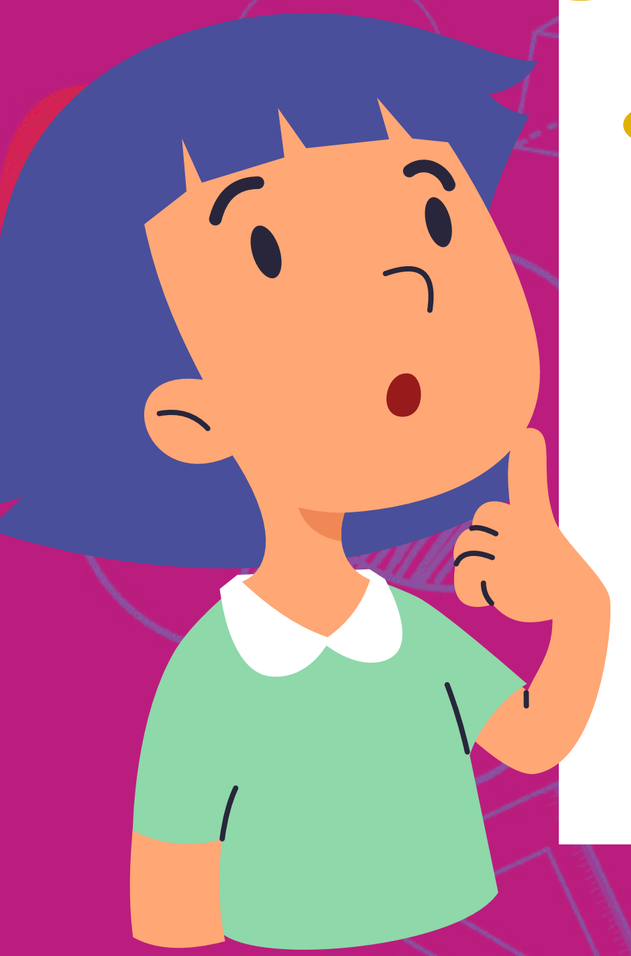

A
850
grams
B
350
grams

What is the length of each line to the nearest $\frac{1}{4}$ inch?



Place Value to the Millions

8,671,324



- Round 72,789 to the nearest thousands place.
- Now round 72,789 to the nearest ten thousands place.
- New York City has a population of 8,380,000 people. Round this number to the nearest million people.

5,134 + 972 = _____

8,275 + 3,642 = _____

5,671 - 860 = _____

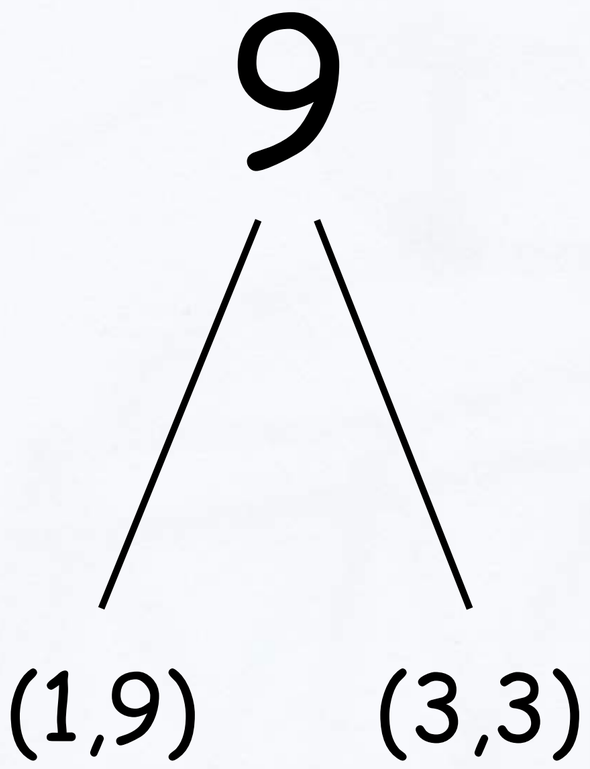
4,201 - 2,579 = _____

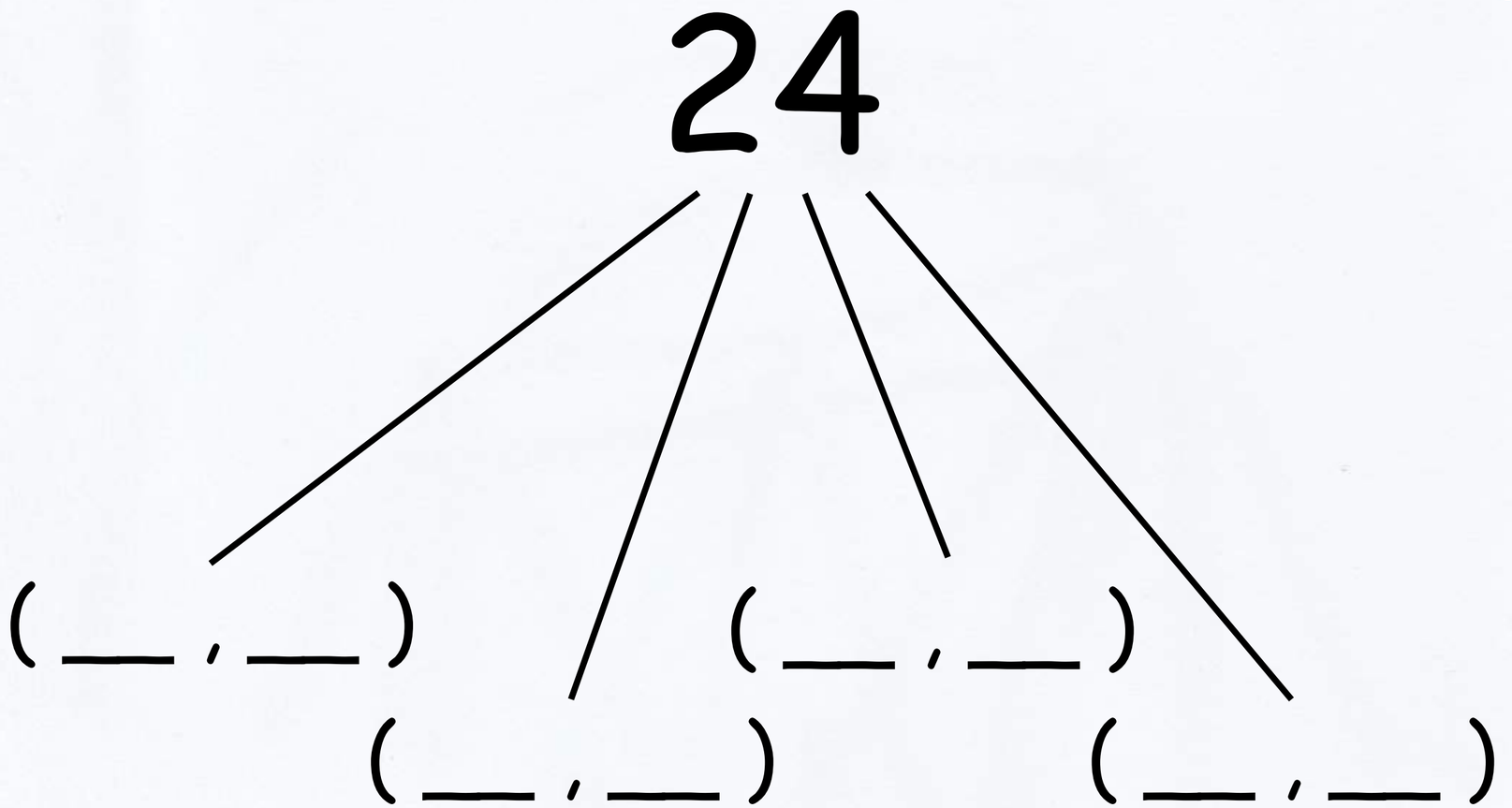
Multi-Step Word Problem

Marco has 4,374 paper clips. Eliza has 827 paper clips. They decided to combine their paper clips. If they give 584 paper clips to Jackson, how many paper clips will they have left?

Rule: add 8

1, _____, _____, _____, _____, _____


9
(1,9)
(3,3)


24
(__ , __)
(__ , __)
(__ , __)
(__ , __)

814 x 5 = _____

621 x 4 = _____

24 x 36 =_____

$752 \div 4 = \_\_\_\_$

$273 \div 3 = \_\_\_\_$

$436 \div 8 = \_\_\_\_$

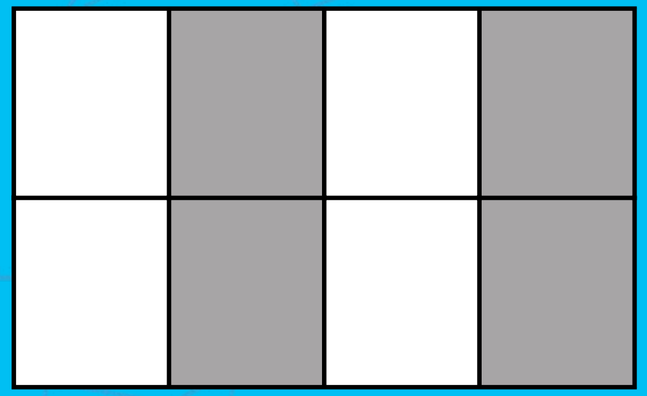
Two-Step Word Problem

A furniture company has 14 workers and each worker makes 52 couches a day. If each delivery truck can only carry 5 couches at a time, how many trucks will the furniture company need to deliver all of the couches?
*You must round up to get a full truck.

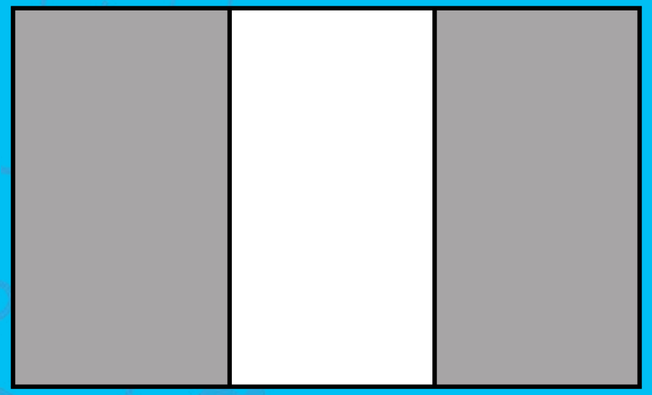
Equivalent Fractions

1. Write the fraction for the shaded area for all 6 rectangles.

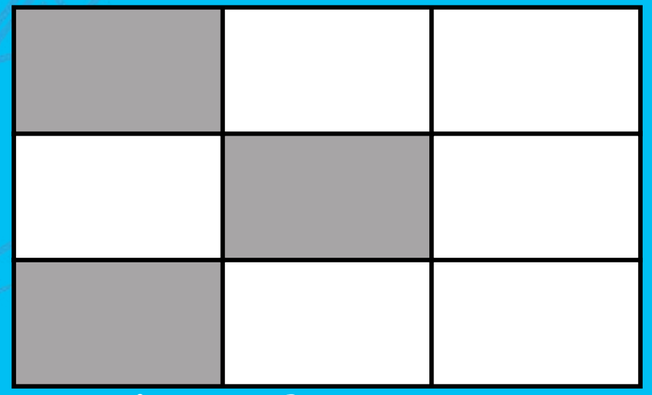
1.



2.

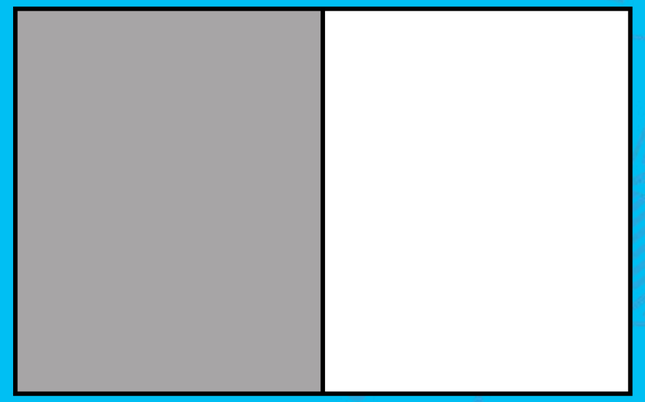


3.

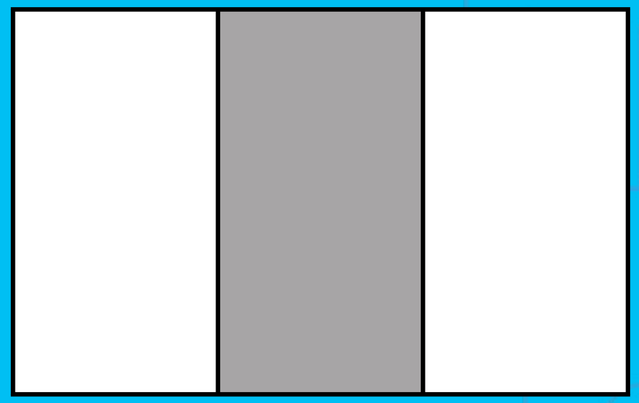


a.

b.



c.

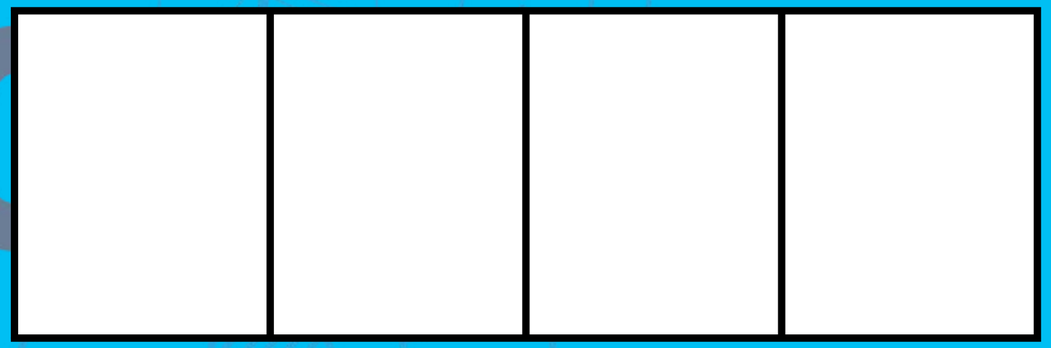


2. Match the equivalent fractions.

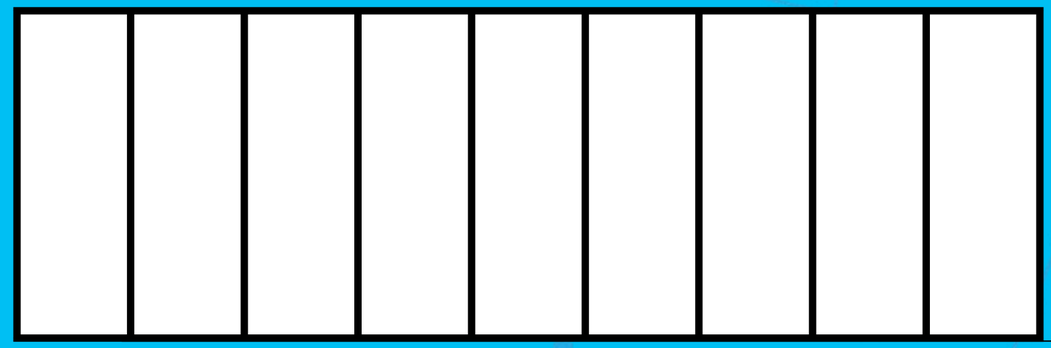
Denise ate $\frac{3}{4}$ of a cake.

Tammy ate $\frac{6}{9}$ of a cake.

Who ate more?



Denise



Tammy

Adding and Subtracting Mixed Numbers

$1\frac{2}{4} + 3\frac{3}{4} =$

$5\frac{1}{3} - 3\frac{2}{3} =$

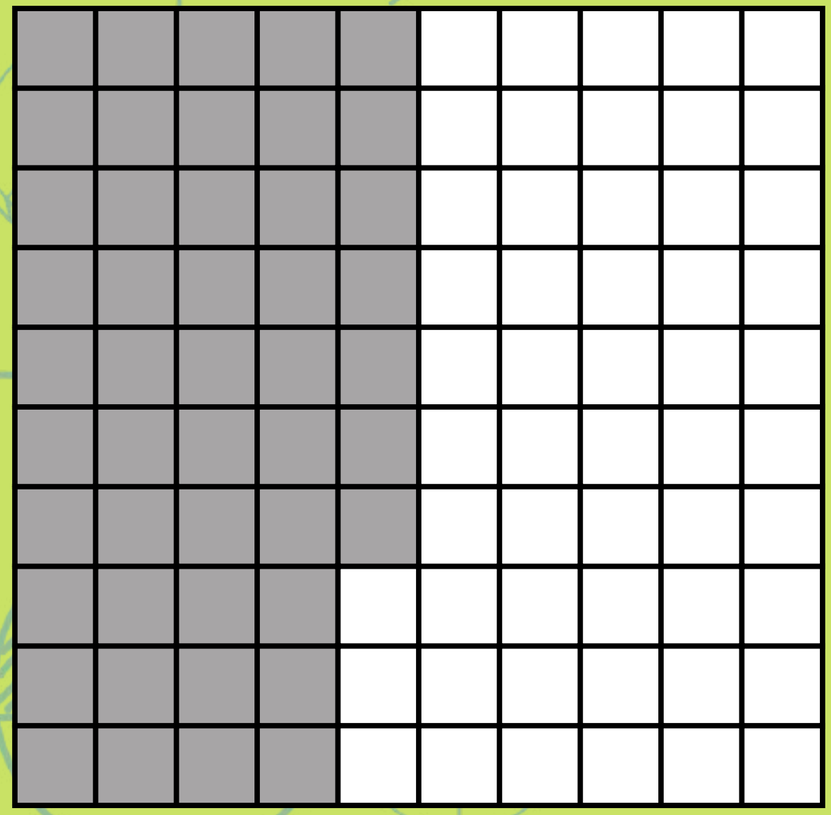
$5\frac{4}{6} + 2\frac{5}{6} =$

Multiplying a whole number by a fraction

$5 \times \frac{1}{4} =$

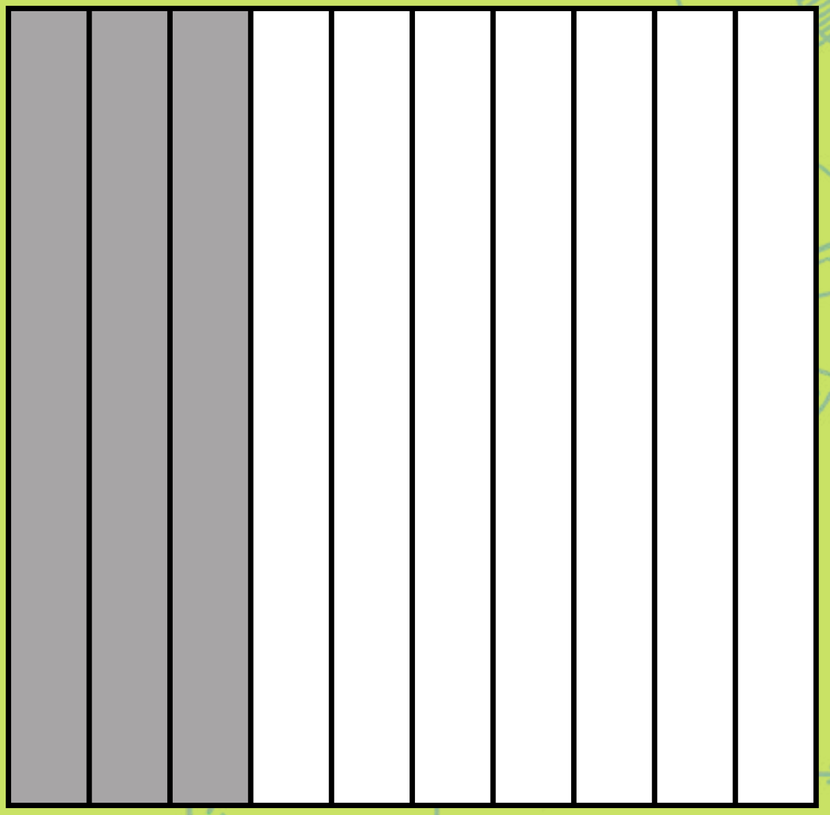
A recipe calls for $\frac{2}{5}$ cups of sugar. If you made the recipe five times, how much sugar would you need?

What fraction does this represent?



+

What fraction does this represent?



Now, add the fractions together. What is the total?

$$\frac{8}{10} =$$

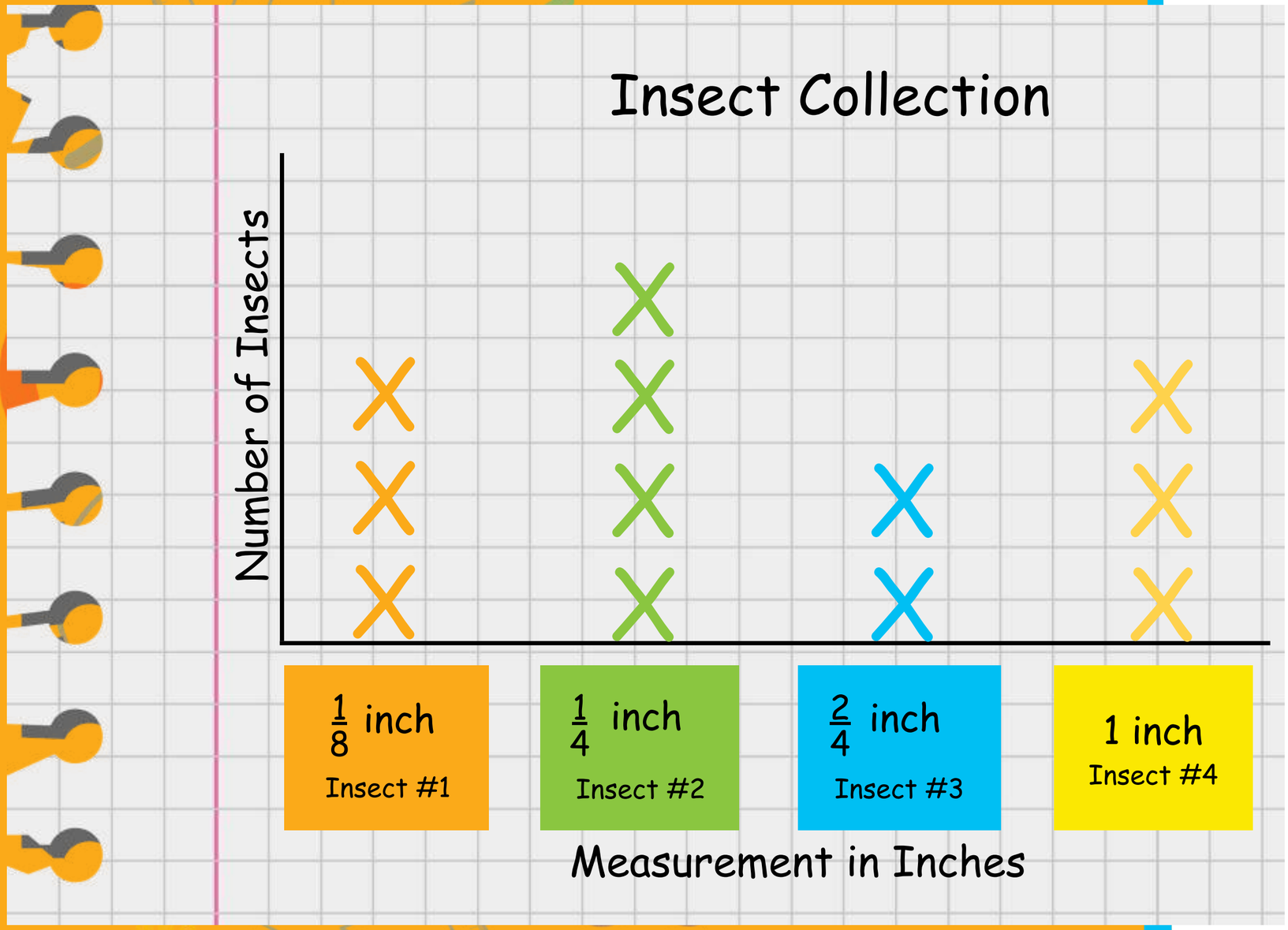
$$\frac{67}{100} =$$

$$\frac{3}{100} =$$

Compare the following decimals using using <, >, or =

.67 ◯ .7

.09 ◯ .1



1. What is the longest insect?
2. What is the shortest insect?
3. What is the difference between the longest and the shortest insects?
4. If I lined all of the insects that measured $\frac{1}{4}$ of an inch one behind another, what would their total length be?

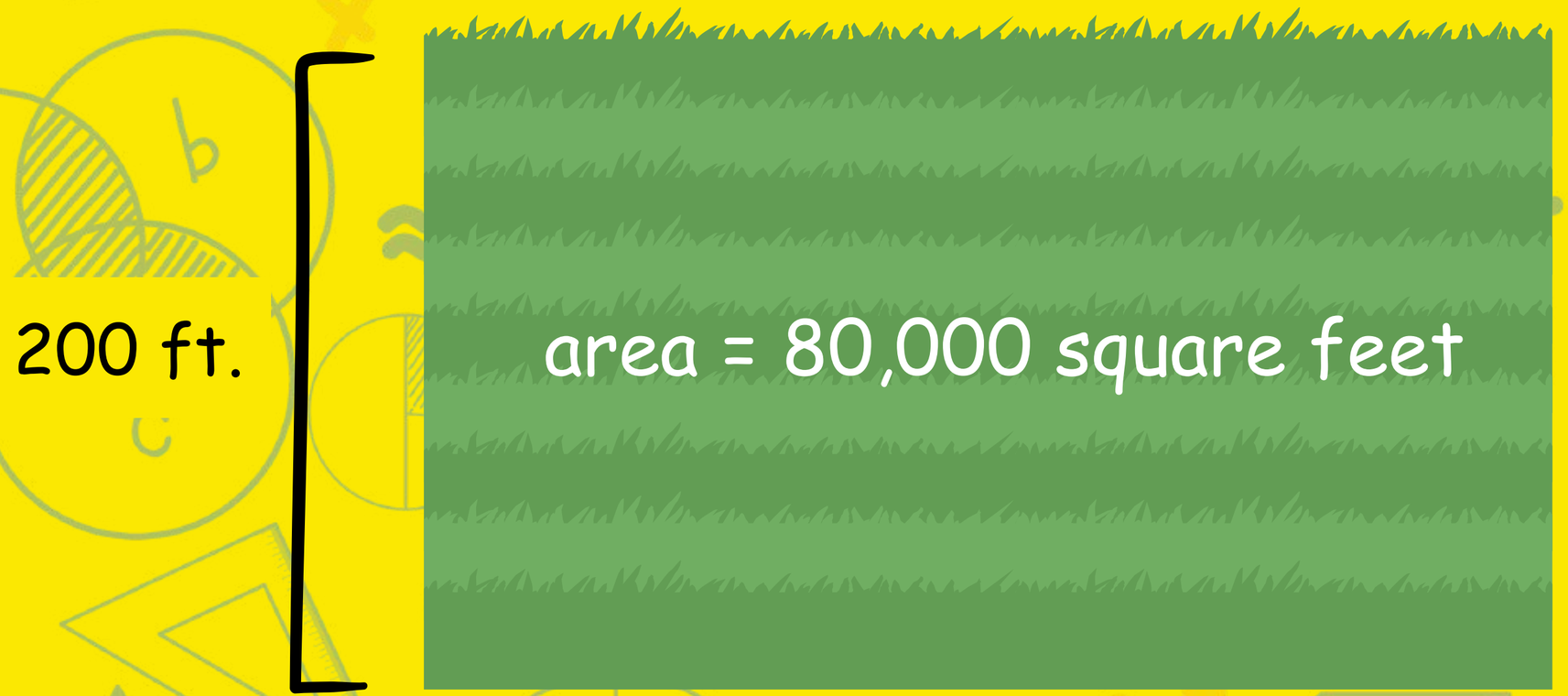
Fill in the missing parts in the tables.

Hours	Minutes
1	60
3	
5	

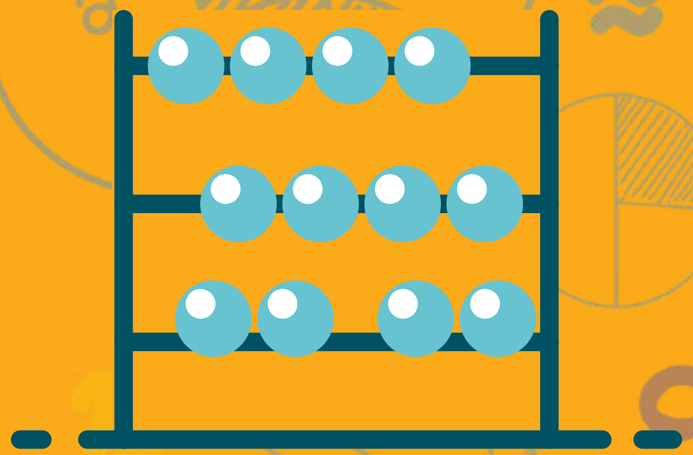
Meters	Centimeters
1	100
3	
	1,000

Liters	Milliliters
1	1,000
20	
	100,000

Helen needs to put up a fence around her rectangular shaped yard. She knows the square footage of her yard is 80,000 square feet. She measured one side of her yard and it measured 200 feet. What is the perimeter of her yard?



3,482,956



23,479 x 100 =

6,190 x 1,000 =

32,891,900 ÷ 10 =

12,340,000 ÷ 1,000 =

Example: In exponential form the number 100 can be written as 10^2.

- How would you write the number 10,000 in exponential form?
- How would you write the number 1,000,000 in exponential form?
- How would you write 10^3 in numeral (number) form?
- How would you write 10^7 in numeral (number) form?

$20 + 15 - 8$

$3 \times (15 \div 5)$

$5 + (6 \times 7) - 12 \div 2$

Multi-Digit Multiplication

$32 \times 24 =$

$406 \times 135 =$

$324 \times 22 =$

624 ÷ 7=

752 ÷ 25=

2,359 ÷ 15 =

8.392

25.467

What is the place value of the 6?

What is the place value of the 4?

What is the place value of the 5?

What is the place value of the 7?

$0.5 \times 10 =$

$.35 \times 10 =$

$.67 \times \frac{1}{10} =$

$3 \times \frac{1}{10} =$

8.2̲45 rounded to the nearest tenth is 8.2 or 8.200.

- Round 6.74̲3 to the nearest hundredth.
- Round 4̲.531 to the nearest one.
- Round .4̲12 to the nearest tenth.

Adding and Subtracting with Decimals

$1.85 + 2.41 =$

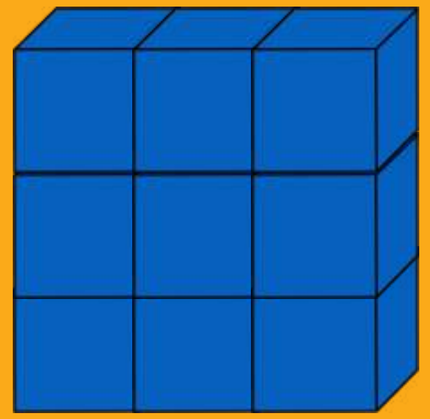
$25.67 + 76.52 =$

$5.19 - 3.64 =$

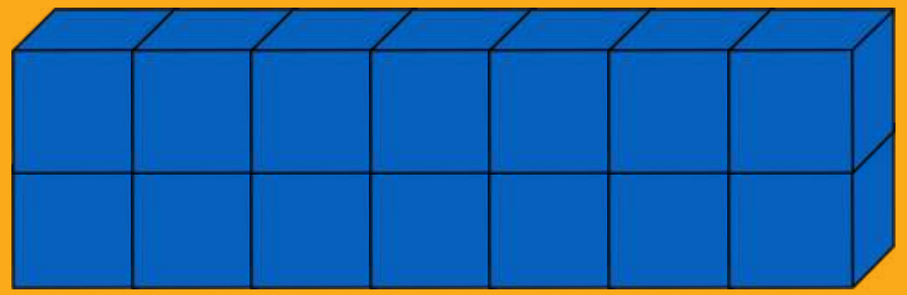
$8.13 \times 45 =$

$7.04 \times 57 =$

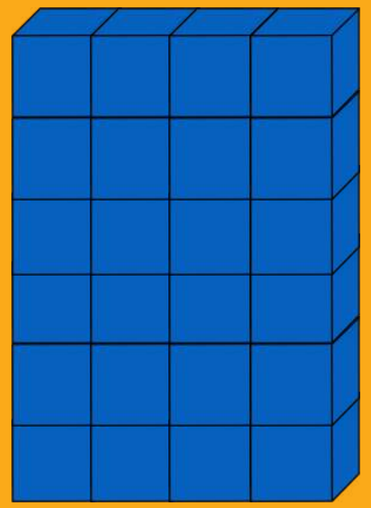
$35.35 \div 2 =$



= 9 cubic units

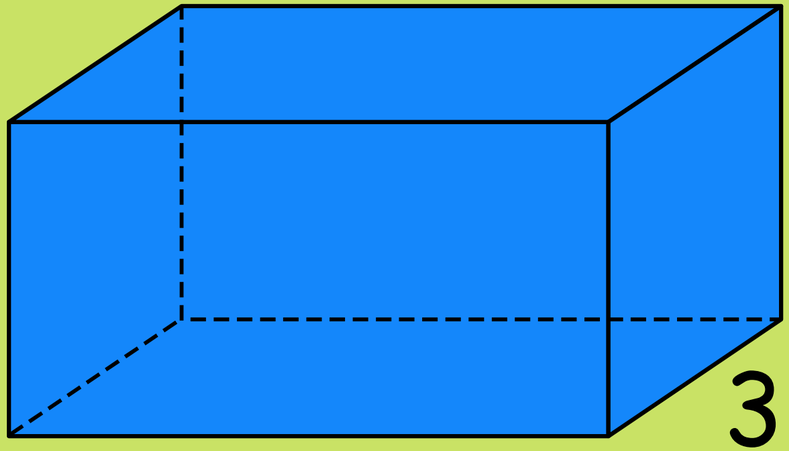


= ___ cubic units

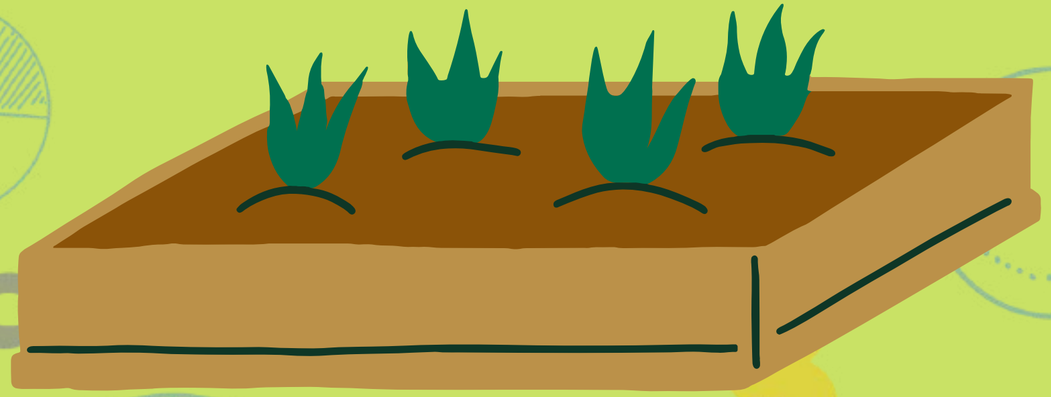


= ___ cubic units

What is the volume?



June wants a garden. She builds a planter box that measures 5 ft length and 4 ft width. June fills the planter box with soil 2 ft deep. What is the volume of soil in June's planter box?



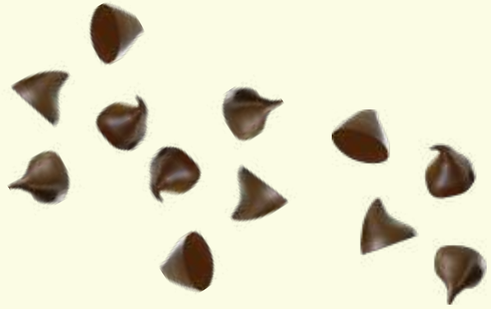
Adding and Subtracting Fractions with Unlike Denominators

$\frac{1}{3} + \frac{2}{6} =$

$\frac{4}{12} + \frac{2}{3} =$

$\frac{6}{8} - \frac{2}{4} =$

Megan had $\frac{3}{4}$ bag of chocolate chips. She used $\frac{2}{8}$ of the bag to make cookies. What fraction of the bag of chocolate chips does Megan have left?



$25 \div 3 =$

$78 \div 9 =$

$39 \div 7 =$

Multiplying a whole number by a fraction

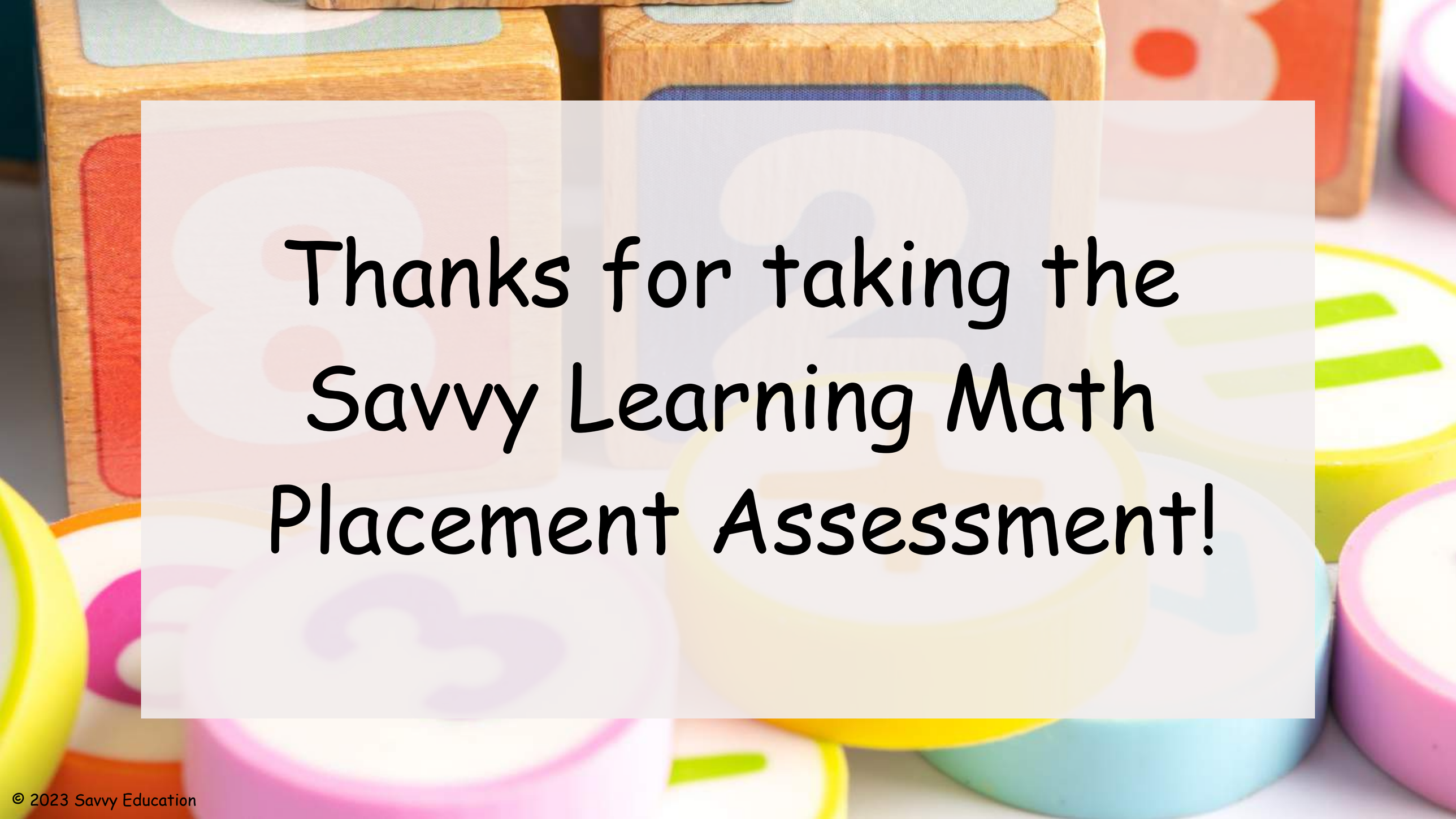
$7 \times \frac{4}{6} =$ $6 \times \frac{9}{10} =$

Jamal poured 9 glasses of juice for his friends.
If each glass holds $\frac{2}{3}$ of a cup,
how much juice did Jamal pour in all?

Multiplying a whole number by a fraction

$\frac{4}{6} \times \frac{4}{6} =$ $\frac{9}{10} \times \frac{9}{12} =$

At the zoo $\frac{7}{10}$ of the animals have fur. Out of these furry animals $\frac{2}{6}$ belong to the cat family. What fraction of all the animals at the zoo belong to the cat family?



Thanks for taking the Savvy Learning Math Placement Assessment!