RIO SCHOOL DISTRICT

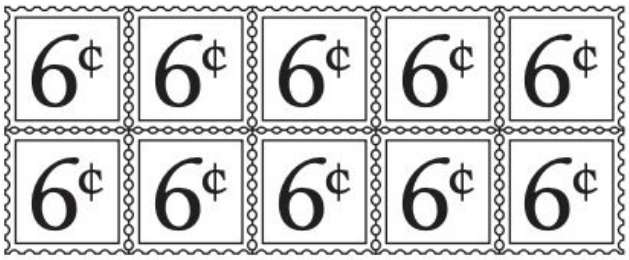
Mathematics Grade 3
Remote Learning Activities

WEEK 1

Day 1

Stamp Challenges (Source: mathlearningcenter.org)

A. How many stamps do you see? What is the total cost of the stamps?



B. Stevie has 4 cards with 8 stamps on each card. Cindy has 8 cards with 4 stamps on each card. Who has more stamps, Stevie or Cindy?

Missing Digits

Fill in the blanks with digits to make the answer closer to 200 than 300. (Source: https://www.openmiddle.com/)

$$4\square\square - 1\square\square$$

Dressing Up

Mary likes to dress up her dogs. One wears a hat, one wears a coat, and one wears a scarf. Their names are Spot, Tag, and Barney. Tag loves to wear a scarf. Spot won't wear the coat. Match each dog with what it wears. Explain your thinking.

Day 2

Combinations

This morning you got out your socks and sneakers. You had a pair of blue sneakers and a pair of black sneakers. You had a pair of red socks and a pair of green socks. What different ways could you have worn them?

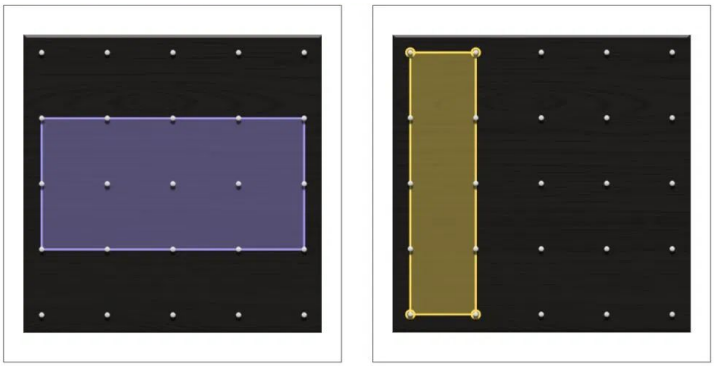
Pig Game

Materials: dice, pencil and paper.

Pig is a game for 2 or more players. Players take turns rolling the die as many times as they like. If a roll is a 2, 3, 4, 5, or 6, the player adds that many points to their score for the turn. A player may choose to end their turn at any time and "bank" their points. If a player rolls a 1, they lose all their unbanked points and their turn is over. Play to 50. (Source: mathforlove.org)

Noticing

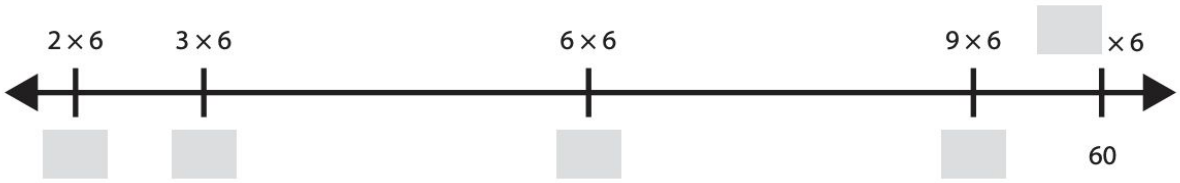
On a piece of paper, make two columns. In one column, list the things that are the same in this picture, and in the other column, list the things that are different. (Source: https://samedifferentimages.wordpress.com/)



Day 3

Number Line Puzzle (Source: mathlearningcenter.org)

Use what you know about multiplication to fill in the blanks.

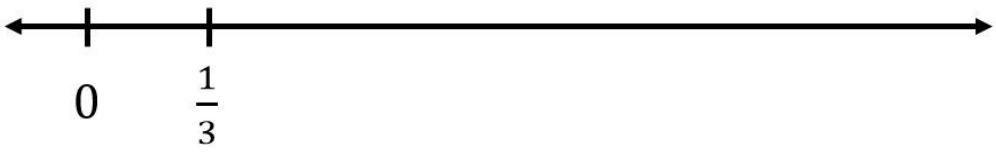


Which One Doesn't Belong? (Source: talkingmathwithyourkids.com)

Choose one item in this picture that you don't think it belongs with the rest. Explain why. Can you pick another item and give a different reason?

Identify a Fraction on a Number Line (Source: https://www.openmiddle.com/)

Label the point where 3/4 belongs on the number line. Be as precise as possible.



Day 4

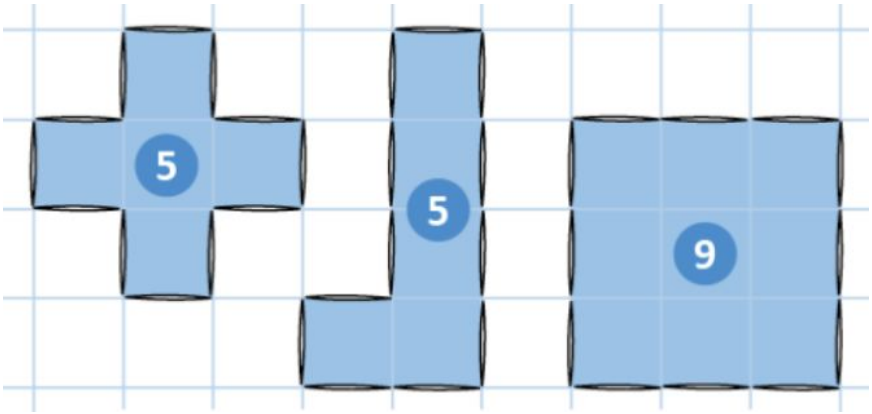
Number Puzzles. (Source: mathlearningcenter.org)

Find the missing numbers in the equations below.

$5 \times \_\_\_\_\_ = 20$	$\_\_\_\_\_ \times 3 = 24$	$9 \times 3 = \_\_\_\_\_$
$4 + \_\_\_\_\_ = 14$	$18 - \_\_\_\_\_ = 9$	$\_\_\_\_\_ - 7 = 8$
$4 \times \_\_\_\_\_ = 28$	$8 \times 4 = \_\_\_\_\_$	$\_\_\_\_\_ \times 6 = 3$
$16 - \_\_\_\_\_ = 9$	$\_\_\_\_\_ + 8 = 13$	$9 + \_\_\_\_\_ = 1$
$8 \times 2 = \_\_\_\_\_$	$7 \times \_\_\_\_\_ = 35$	$\_\_\_\_\_ \times 3 = 1$

Toothpicks

Twelve toothpicks can outline shapes with areas of 5 and 9. What other areas can you outline with 12 toothpicks? (Source: https://playwithyourmath.com/)



Visual Pattern

Below is a pattern of stars in stages 1-3 below. Draw what you think stage 4 might look like. Label how many stars are in each stage. (Source: visualpatterns.org)

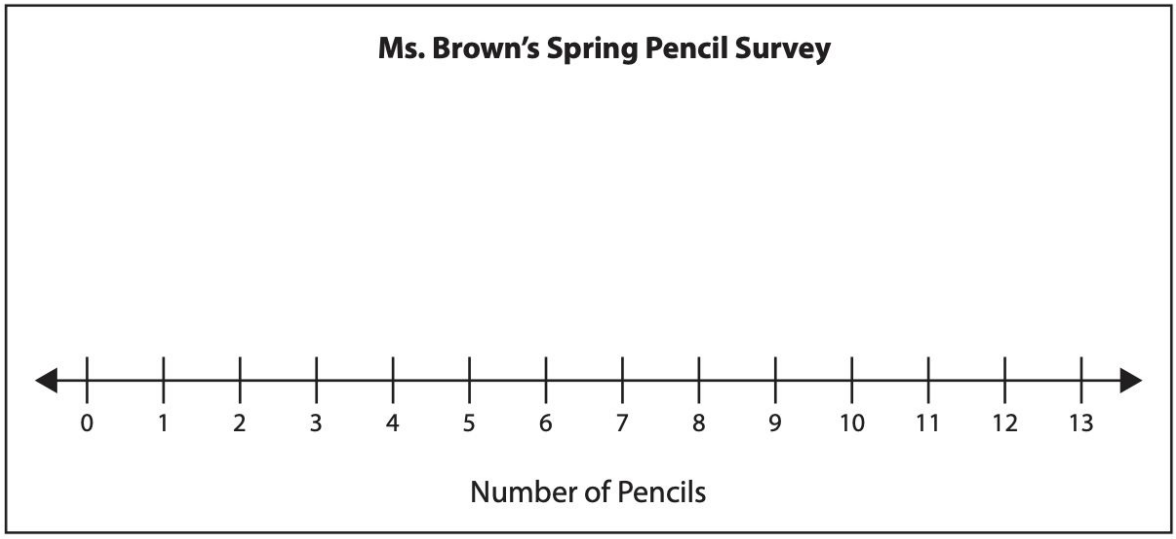
Day 5

Graphing (Source: mathlearningcenter.org)

One day last spring, Ms. Brown asked her third graders to clean out their desks. She couldn't believe how many pencils most of the kids pulled out. "So that's where all the pencils have been!" she thought. Ms. Brown decided to take a survey to find out how many pencils had been hiding in the kids' desks. The table below shows the survey results.

Number of Pencils	Number of Students
1	2
2	7
3	8
4	5
7	3
8	2
10	1
12	1

Record the data on the line plot below.



Story Problem (Source: mathlearningcenter.org)

The third and fourth graders at Fernwood School are going on a field trip. They will fill 3 school buses. Each bus holds 52 passengers. How many people will be going on the field trip? Show your work.

Combinations of 1,000 (Source: mathlearningcenter.org)

Fill in the missing numbers to make a total of 1,000 in each box.

480 + ____ = 1,000 670 + ____ = 1,000 170 + ____ = 1,000

210 + ____ = 1,000 720 + ____ = 1,000 500 + ____ = 1,000

840 + ____ = 1,000 360 + ____ = 1,000

Day 1

Story Problems (Source: mathlearningcenter.org)

Solve the story problems below. Show your thinking in words, numbers, or sketches for each one. Be sure to label your answers with the correct units.

A. Mr. Bee bought 3 jars of honey, which weighed a total of 24 ounces. If all the jars weighed the same amount, how much did each jar weigh?

B. Mrs. Bee also bought 24 ounces of honey. She put 3 ounces of honey into several small jars. How many jars did she use?

C. Mrs. Moth picked 8 flowers. Each flower had 6 petals. How many petals are on the flowers that Mrs. Moth picked?

Operations with Time (Source: https://www.openmiddle.com/)

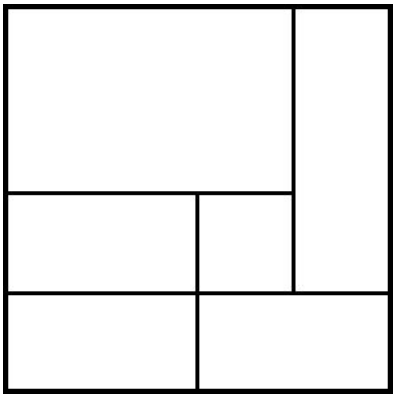
Use the digits 1 to 9, at most one time each, to fill in the boxes to make the latest possible time.

□□ minutes after

□:□□ pm

Fraction Talk (Source: http://fractiontalks.com/)

What fraction of the big square is represented by each region? (Do all your fractions add up to one whole?)



Day 2

Word Problem (Source: mathlearningcenter.org)

David, Mary, Claire, and Mark were picking strawberries in their grandparents' garden. They had each picked the same number of strawberries when their grandma gave everyone 2 more strawberries. Now the 4 kids had 36 strawberries in all.

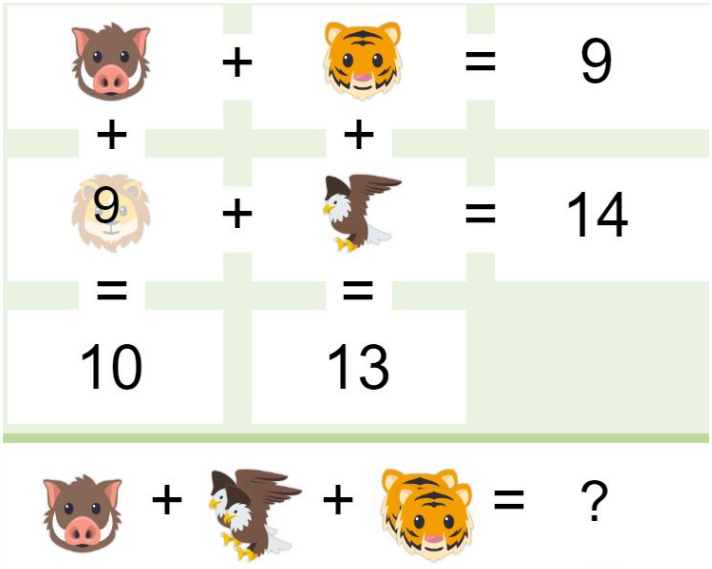
A. How many strawberries did each child have before Grandma gave them more? Show your work.

B. Mark the **two** equations below that could help you solve the problem.

- ○ $(s + 2) \times 4 = 36$
- ○ $2 \times 4 + s = 36$
- ○ $36 - (2 \times 4) = s$
- ○ $(36 \div 4) - 2 = s$

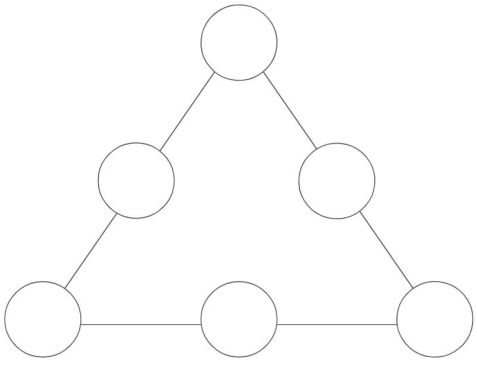
Puzzle (Source: https://www.solvemoji.com/)

What is the value of the last row?



Magic Pyramid (Source: *Critical Thinking Puzzles*, Michael A. DiSpezio, 1996)

For this pyramid, can you place the numbers 1, 2, 3, 4, 5, and 6 in the circles shown below? Only one number may be placed in a circle and all numbers must be used. When the final arrangement is complete, the sum of each side's three numbers must all be the same.



Day 3

Finding Sums (Source: mathlearningcenter.org)

Fill in the missing digits.

$$\begin{array}{r} \square 8 \\ +\,6\square \\ \hline \square 03 \end{array} \qquad \begin{array}{r} \square 4 \\ +\,5\square \\ \hline \square 43 \end{array} \qquad \begin{array}{r} \square\square \\ +77 \\ \hline 106 \end{array} \qquad \begin{array}{r} 87 \\ +\,\square\square \\ \hline 135 \end{array}$$

Baking Cookies (Source: https://www.openmiddle.com/)

Daniel was making chocolate cookies. He had ▫▫ cookies in each row and ▫▫ many rows. There were a total of 84 cookies. How many cookies were there in each row and how many rows of cookies were there? Draw a model to support your answer.

You may use the digits 0-9 once in any of the blank boxes. (The answer of 84 does not eliminate the 8 or the 4.)

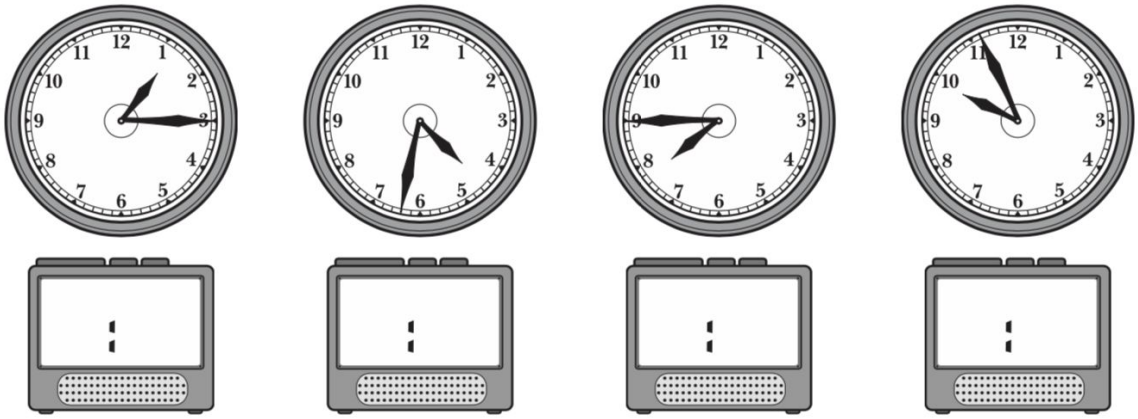
Two Positive Numbers (Source: https://brilliant.org/)

I'm thinking of two positive whole numbers that multiply to 1000, neither of which contain the digit 0. What is the **sum** of these 2 numbers?

Day 4

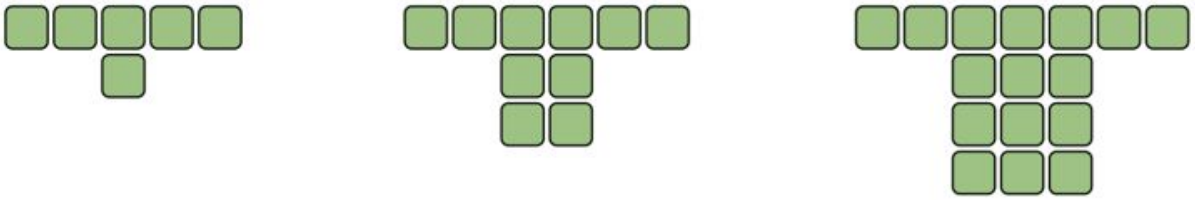
Telling Time (Source: mathlearningcenter.org)

Write the time shown on each clock.



Visual Pattern (Source: visualpatterns.org)

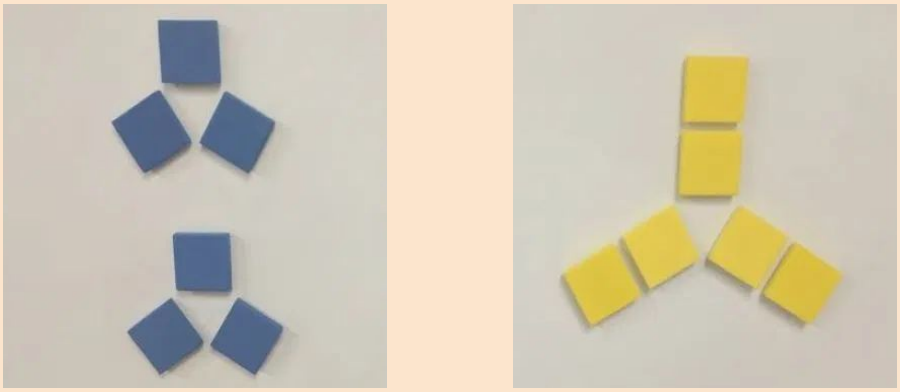
Below is a pattern of squares in steps 1-3 below. Draw what you think step 4 might look like. Label how many squares are in each stage.



Noticing

On a piece of paper, make two columns. In one column, list the things that are the same in this picture, and in the other column, list the things that are different. (Source: https://samedifferentimages.wordpress.com/)

What is the same?



What is different?

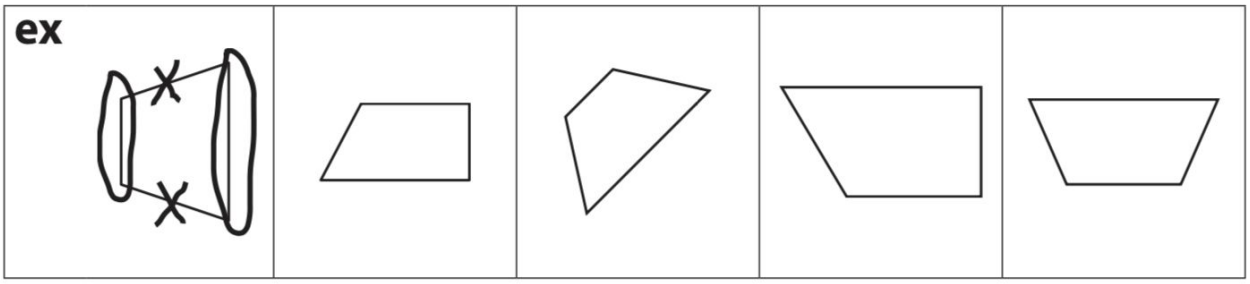
Day 5

Baking Brownies (Source: mathlearningcenter.org)

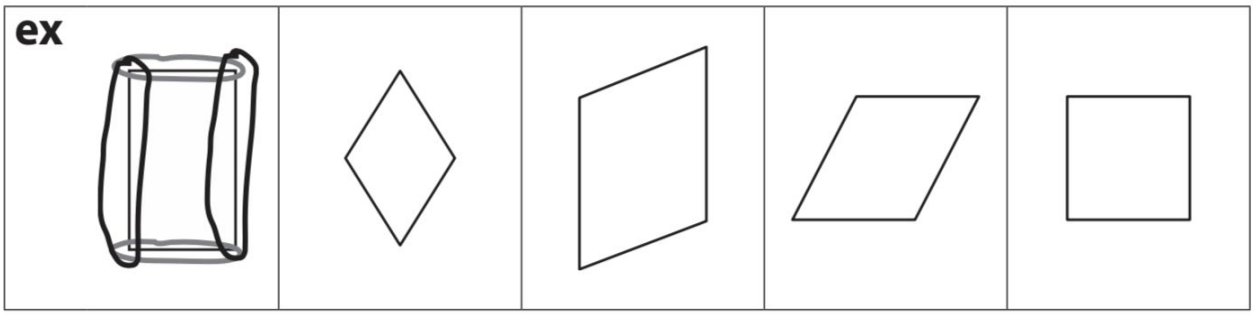
Brad likes to bake brownies. It takes him 15 minutes to mix up all the ingredients. Then the brownies need to bake for 25 minutes. After that they have to cool off for 7 minutes. How long does it take Brad to have brownies ready to eat? Show your work.

Sorting Quadrilaterals (Source: mathlearningcenter.org)

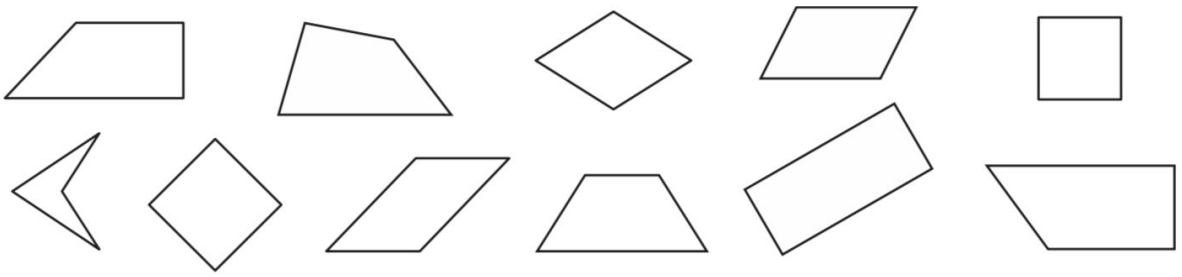
A trapezoid is a quadrilateral with exactly 1 pair of parallel sides. Circle the 2 sides that are parallel to each other on each of the trapezoids below. Mark the 2 sides that are not parallel to each other with an x on each of the trapezoids below.



A parallelogram is any quadrilateral with 2 pairs of parallel sides. On each of the parallelograms below, circle 1 pair of parallel sides in blue. Circle the other pair of parallel sides in red.

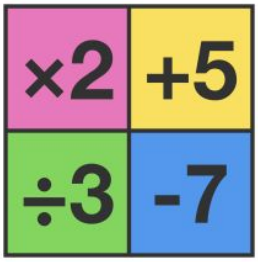


Find all the trapezoids below. Color them orange. Find all the parallelograms below. Color them purple. When you finish, you should have 2 quadrilaterals that are not colored.



Calculator (Source: https://solveme.edc.org/Mobiles.html)

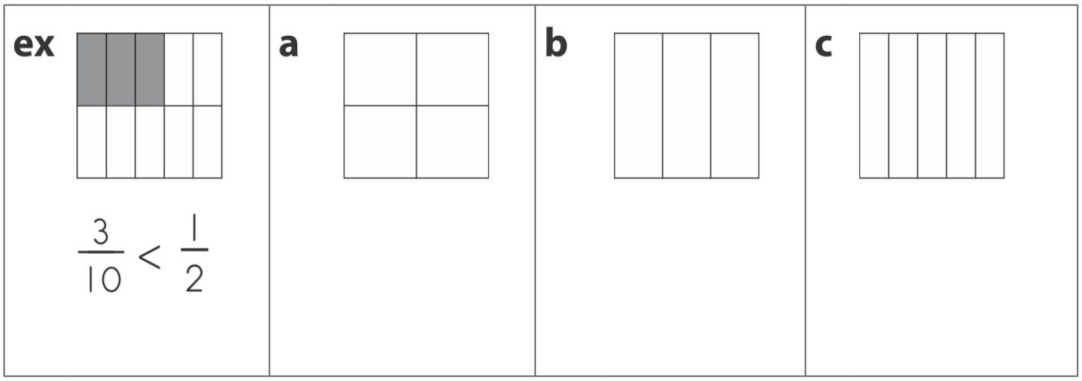
You have a calculator with 4 buttons as shown; they multiply the current value shown on the calculator by 2, divide the current value by 3, add 5 to the current value, or subtract 7 from the current value. If the screen starts at 6, what are the button presses you need to make to get a value of 1?



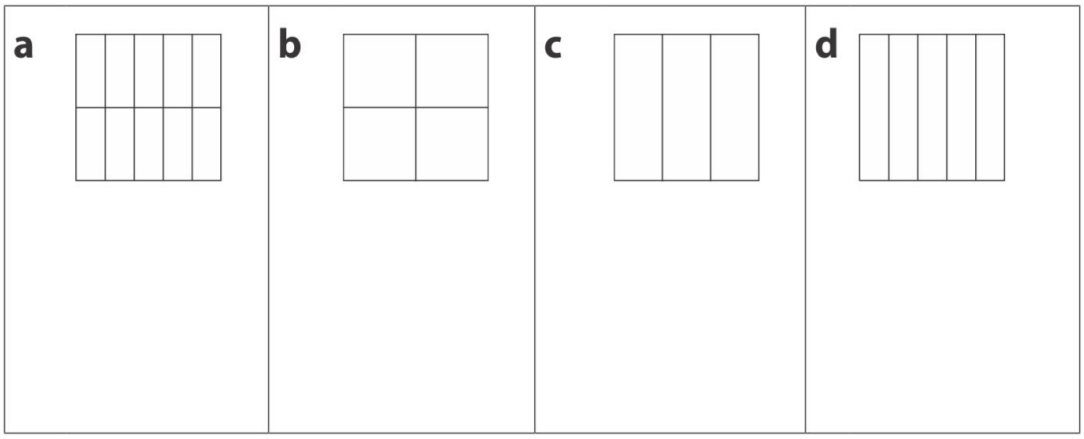
Day 1

Fractions (Source: https://www.openmiddle.com/)

On each square, fill in a fraction of the square that is less than 1/2 . Then use the symbols >, =, or < to compare your fraction to 1/2 .



On each square, fill in a fraction of the square that is greater than 1/2 . Then use the symbols >, =, or < to compare your fraction to 1/2 .



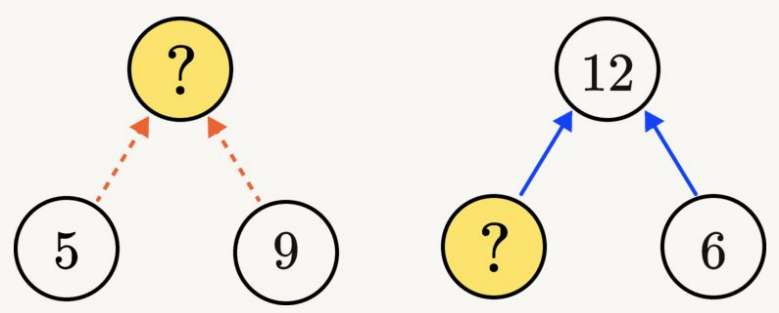
Number Line (Source: mathlearningcenter.org)

Write each of the following fractions where they belong on the number line below.

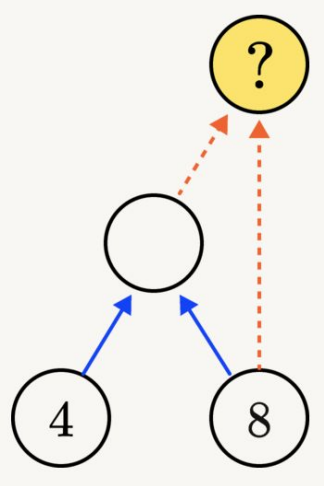
$\frac{9}{10}$ $\frac{1}{4}$ $\frac{2}{5}$ $\frac{2}{3}$

Round and Round (Source: https://brilliant.org/)

In a circle puzzle like the one below, dashed arrows mean to add and solid arrows mean to multiply. For example, the solution to the puzzle is a number whose sum is, 5 + 9, which is 14. The solution on the right is a number that, when multiplied by 6, gives us 12. By working backwards, we get a solution of 2.



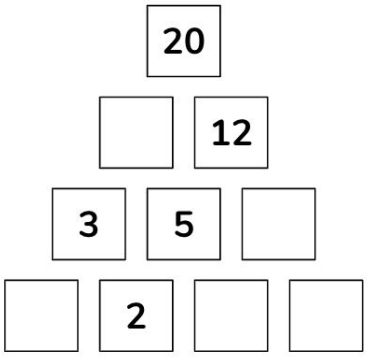
Solve the puzzle below.



Day 2

Pyramid Puzzle #3 (Source: mathforlove.org)

Each number in the Pyramid is the sum of the two numbers below it. Fill in the missing numbers in the Pyramid. Numbers may repeat.



Sharing Money (Source: mathlearningcenter.org)

Show your work as you solve these problems.

A. Tom and Zara have a dog-walking business. They walk their customers' dogs together and share all the money they make equally.

   a. On Monday they made $4.00. How much does each of them get?

   b. On Tuesday they made $5.00. How much does Tom get?

   c. On Wednesday they made $5.50. How much does Zara get?

B. Lately, Tom and Zara and their little sister, Molly, have been incredibly lucky at finding money.

   a. On the way home from school on Thursday they found $3.00. How much does each one get if the three of them share equally?

   b. On Friday they found $6.00. How much does each one get?

Multiplying (Source: mathlearningcenter.org)

Fill in the missing numbers. Also write an equation for each picture.

ex 1 skateboard has 4 wheels. 1 × 4 = 4

ex 2 skateboards have 8 wheels. 2 × 4 = 8

a 3 skateboards have _____ wheels. _____

b 4 skateboards have _____ wheels. _____

c 5 skateboards have _____ wheels. _____

d 10 skateboards have _____ wheels. _____

Day 3

Dividing (Source: mathlearningcenter.org)

My friends and I went to the skateboard park. We saw 16 wheels rolling up and down the ramps. How many skateboards did we see? Fill in the bubble beside the matching expression and fill in the answer.

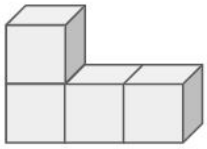
- ○ $15 \div 3 =$ _____
- ○ $16 \div 2 =$ _____
- ○ $16 \div 4 =$ _____
- ○ $24 \div 6 =$ _____

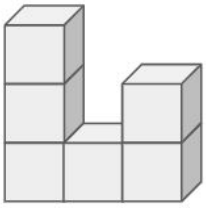
Which One Doesn't Belong? (http://wodb.ca/)

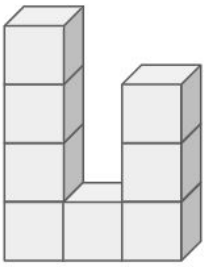
Choose one number in this picture that you don't think it belongs with the rest. Explain why. Can you pick another number and give a different reason?

Visual Pattern (Source: visualpatterns.org

Below is a pattern of cubes in stages 1-3 below. Draw what you think stage 4 might look like. Label how many cubes are in each stage.







Day 4

Telling Time to the Minute (Source: mathlearningcenter.org)

Fill in the circle next to the time shown on each block.

a

- ○ 8:30
- ○ 7:27
- ○ 5:35
- ○ 7:05

b

- ○ 7:55
- ○ 11:08
- ○ 11:38
- ○ 11:40

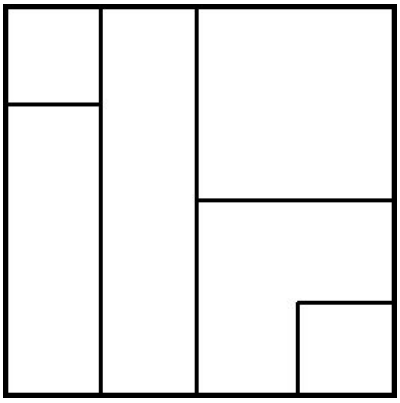
Write the time shown on each block.

a _____ : _____

b _____ : _____

Fraction Talk (Source: https://www.wouldyourathermath.com/)

What fraction of the big square is represented by each region? (Do all your fractions add up to one whole?)



Telling Time (Source: mathlearningcenter.org)

Circle the digital clock that shows the same time as this analog clock.

What fraction of a clock is represented if the hands are at 12 and 3?

Day 5

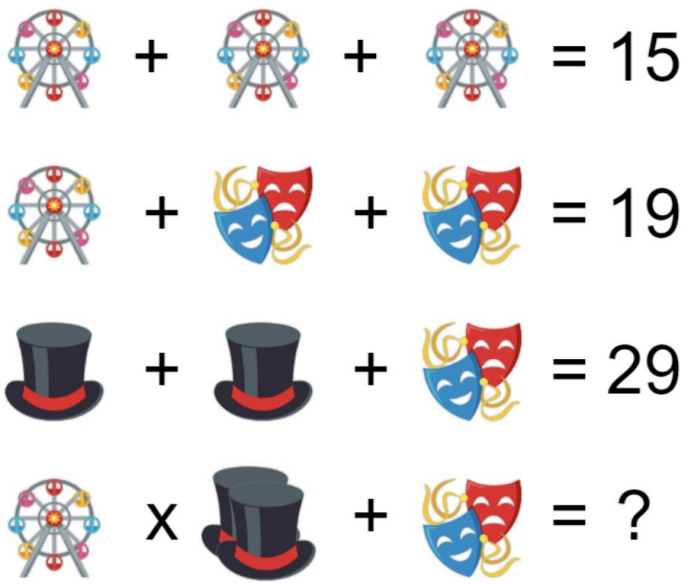
More Division Practice (Source: mathlearningcenter.org)

Fill in the blanks.

a	$4 \times \_\_\_\_\_ = 24$	$24 \div 4 = \_\_\_\_\_$
b	$36 \div 9 = \_\_\_\_\_$	$9 \times \_\_\_\_\_ = 36$
c	$\_\_\_\_\_ \times 5 = 35$	$35 \div \_\_\_\_\_ = 5$
d	$21 \div \_\_\_\_\_ = 7$	$\_\_\_\_\_ \times 7 = 21$
e	$4 \times 3 = \_\_\_\_\_$	$\_\_\_\_\_ \div 4 = 3$
f	$\_\_\_\_\_ = 9 \times 6$	$\_\_\_\_\_ \div 9 = 6$
g	$403 + 296 = \_\_\_\_\_$	
h	$403 - 296 = \_\_\_\_\_$	

Puzzle (Source: https://www.solvemoji.com/)

What is the value of the last row?



Multiplication Challenge (Source: mathlearningcenter.org)

Use the digits 0–9 each just one time. Write them in the boxes below. Make each multiplication problem correct.

0 1 2 3 4 5 6 7 8 9

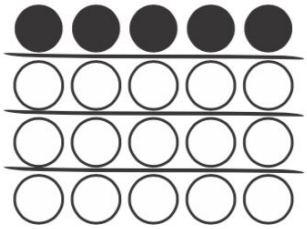
$$\square \times 6 = 36 \qquad 2 \times \square = \square 8 \qquad \square \times 4 = 2\square \qquad \square \times \square = 12 \qquad 9 \times \square = \square\square$$

Day 1

Fractions (Source: https://www.openmiddle.com/)

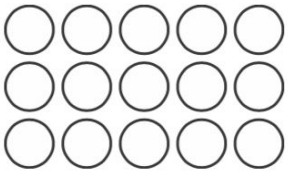
Divide each set into equal groups. Shade in some circles as directed.

ex Shade in $\frac{1}{4}$ of the circles.



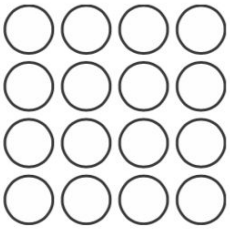
a Shade in $\frac{1}{3}$ of the circles.

Hint: Divide the set into 3 equal groups first.



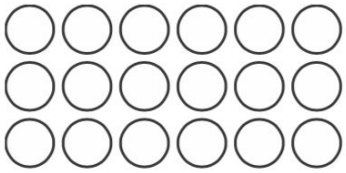
b Shade in $\frac{1}{2}$ of the circles.

Hint: Divide the set into 2 equal groups first.



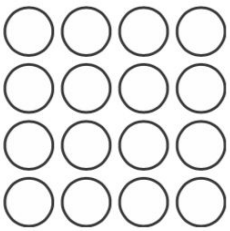
c Shade in $\frac{2}{3}$ of the circles.

Hint: Divide the set into 3 equal groups first.



d Shade in $\frac{2}{4}$ of the circles.

Hint: Divide the set into 4 equal groups first.



e **CHALLENGE** Shade in $\frac{3}{5}$ of the circles.

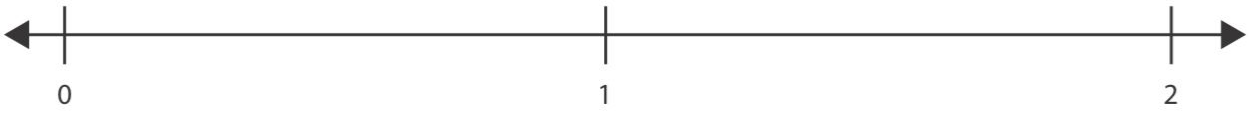
Hint: Divide the set into 5 equal groups first.

Find two fractions above that are equal. Write them here: _____ = _____

How do you know these fractions are equal?

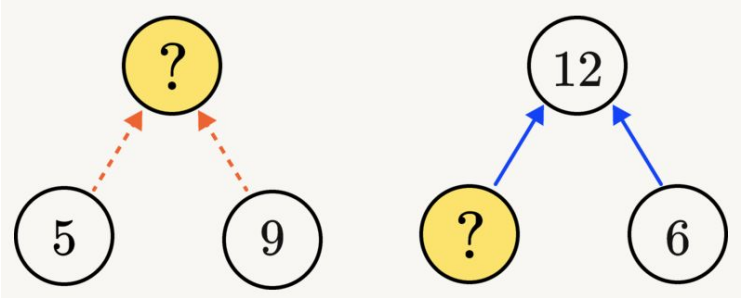
Number Line (Source: mathlearningcenter.org)

Mark and label each of these fractions on the number line: ½, 1 ¼ , 1 ⅓ , 1 ¾ .

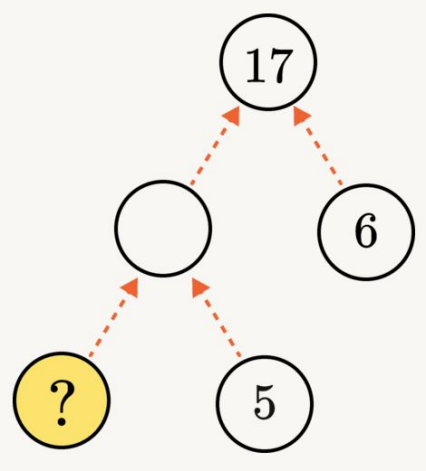


Round and Round (Source: https://brilliant.org/)

In a circle puzzle like the one below, dashed arrows mean to add and solid arrows mean to multiply. For example, the solution to the puzzle is a number whose sum is, 5 + 9, which is 14. The solution on the right is a number that, when multiplied by 6, gives us 12. By working backwards, we get a solution of 2.



Solve the puzzle below.



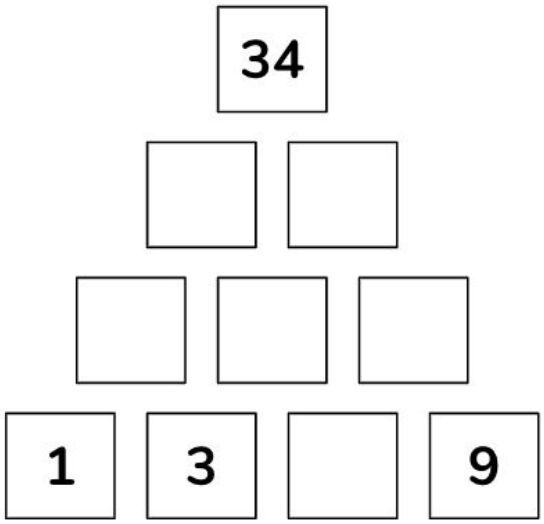
Day 2

Three-Digit Addition (Source: https://www.openmiddle.com/)

Using the digits 0 to 9 at most one time each, fill in the boxes to make the following problem true.

Pyramid Puzzle #5 (Source: mathforlove.org)

Each number in the Pyramid is the sum of the two numbers below it. Fill in the missing numbers in the Pyramid. Numbers may repeat.



Dividing (Source: mathlearningcenter.org)

Fill in the missing number in each fact. Then write a related division equation.

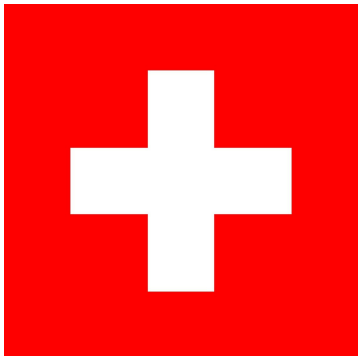
ex	4 × 5 = 20	20 ÷ 5 = 4
a	☐ × 3 = 21	____ ÷ ____ = ☐
b	5 × ☐ = 25	____ ÷ ____ = ☐
c	☐ × 7 = 14	____ ÷ ____ = ☐

Day 3

Fraction Talk

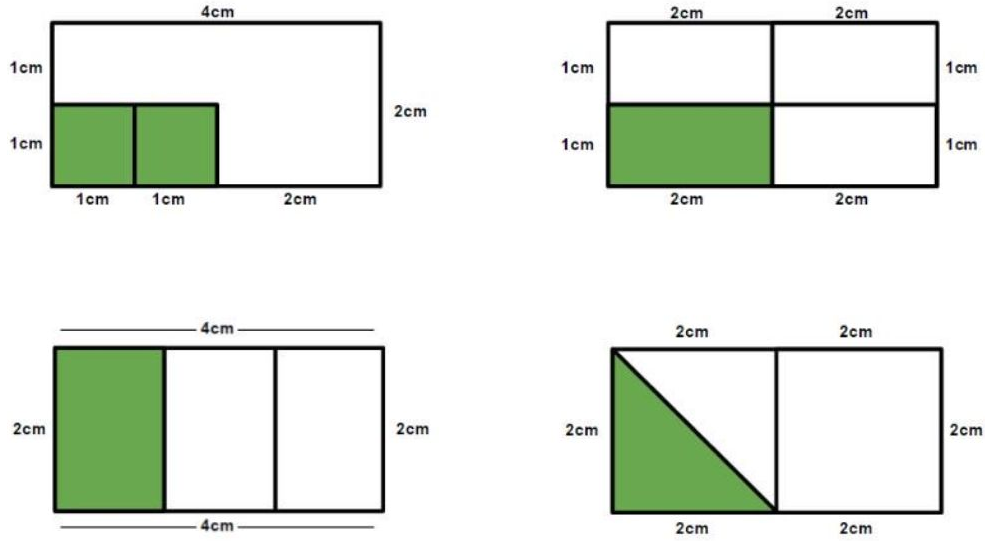
(Source: https://www.wouldyourathermath.com/)

What fraction of the big square is represented by the white space?



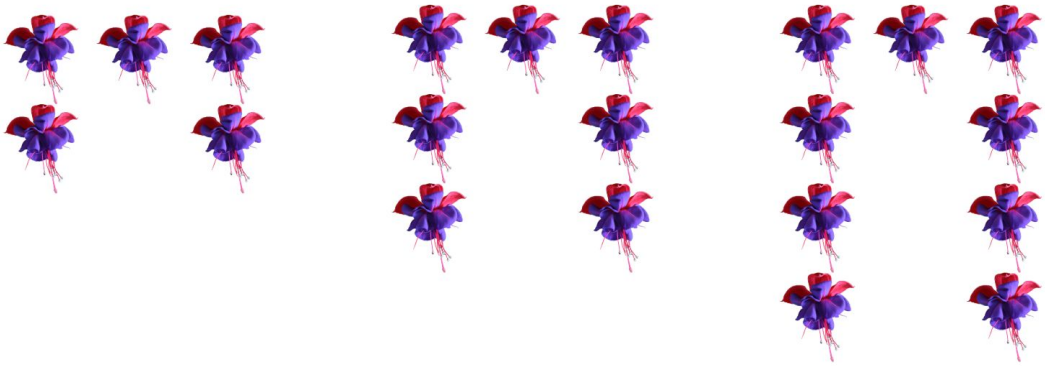
Which One Doesn't Belong? (http://wodb.ca/)

Choose one rectangle in this picture that you don't think belongs with the rest. Explain why. Can you pick another rectangle and give a different reason?



Visual Pattern (Source: visualpatterns.org

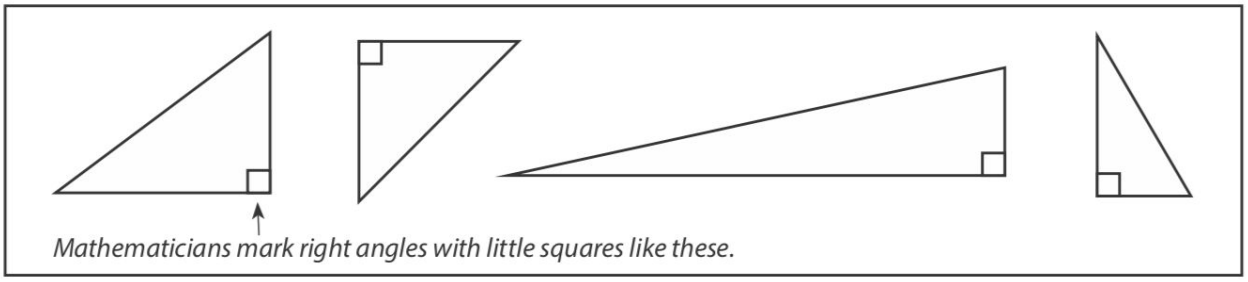
Below is a pattern of fuschias in stages 1-3 below. Draw what you think stage 4 might look like. Label how many fuschias are in each stage.



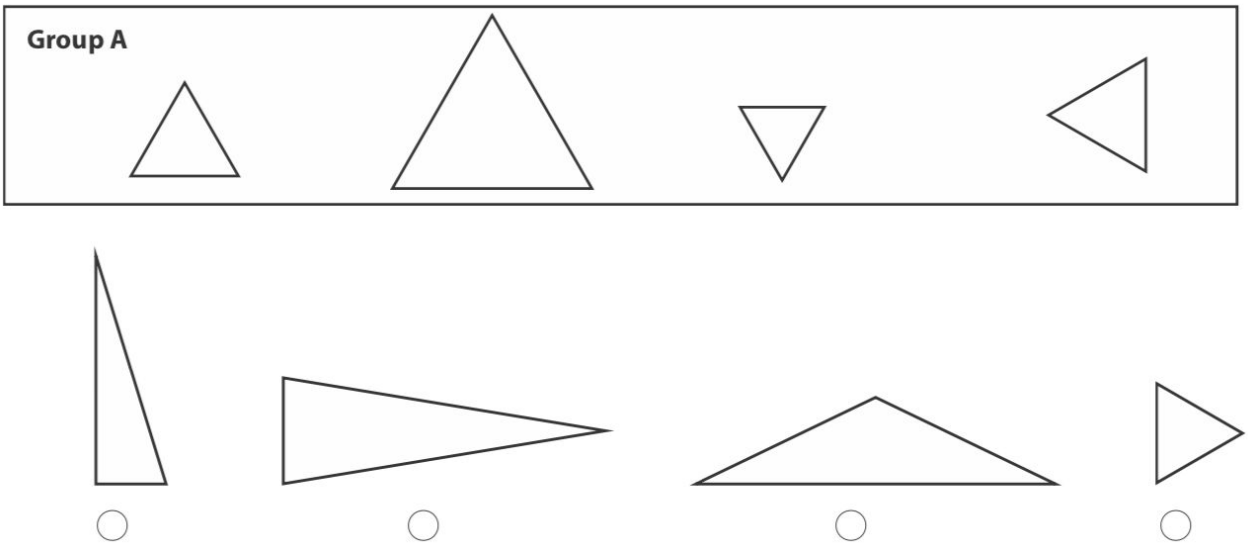
Day 4

Triangles (Source: mathlearningcenter.org)

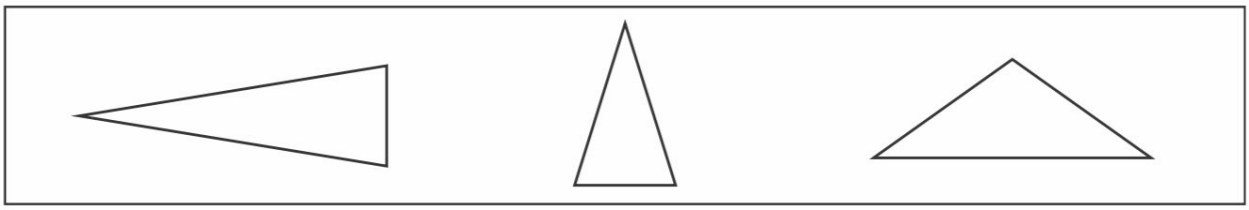
A. What is the same about all of these triangles below?



B. All of the triangles in group A have something in common. Fill in the circle next to the triangle that belongs with them.

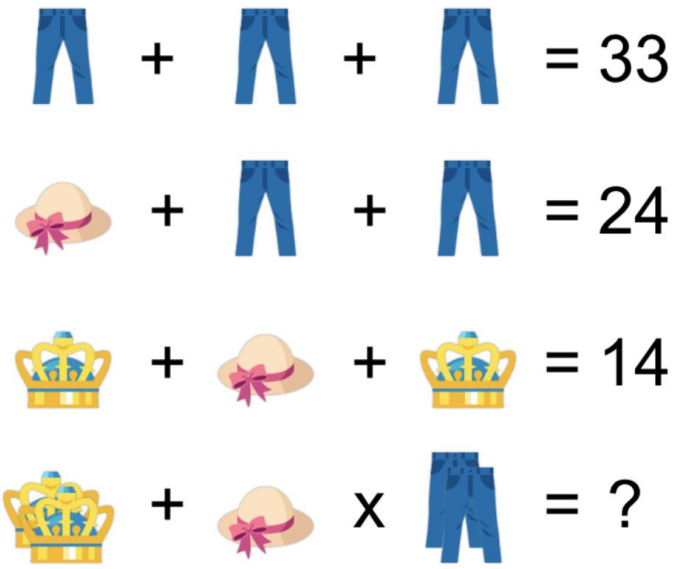


C. What do these three triangles below have in common?



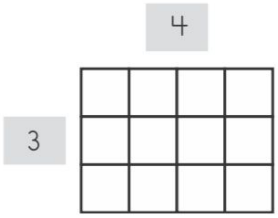
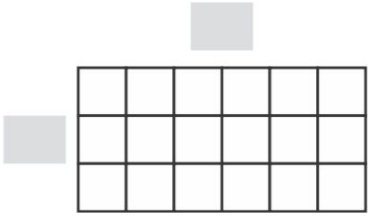
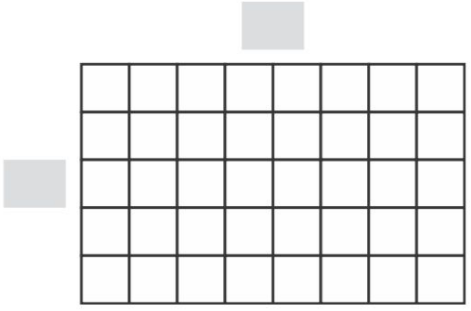
Puzzle (Source: https://www.solvemoji.com/)

What is the value of the last row?



Dimensions of a Rectangle (Source: mathlearningcenter.org)

Label the dimensions and area of each rectangle. Write two (or more) different equations to show how someone could find the area.

ex  Area = 12 square units	Equations: 3 + 3 + 3 + 3 = 12 4 + 4 + 4 = 12 3 × 4 = 12 (3 × 2) + (3 × 2) = 12
a  Area = _____ square units	Equations:
b  Area = _____ square units	Equations:

Day 5

Practice (Source: mathlearningcenter.org)

Add.

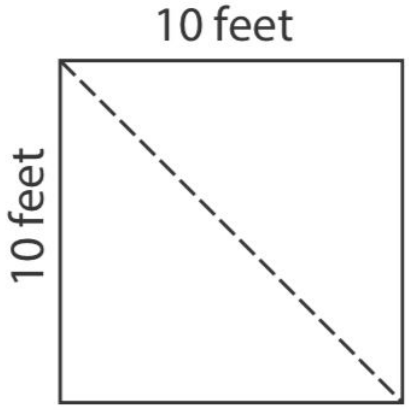
229	448	124	180	229	99
+ 71	+ 326	+ 255	+ 352	+ 71	+ 216

Subtract.

162	148	97	108	203	261
− 31	− 23	− 65	− 28	− 87	− 15

Fair Share (Source: mathlearningcenter.org)

Angie and Kara share a bedroom. They've been having trouble agreeing on who is doing her fair share of the cleaning. So they decided to lay a rope on the floor to divide the room in half. Each girl is responsible for keeping half the room clean and organized.



A. The area of the whole room is _____ square feet. Show your work.

B. The area of each girl's part of the room is _____ square feet. Show your work.

Digits Puzzle (Source: https://brilliant.org/)

If each letter represents a different nonzero digit, what must **S** be?

$$\begin{array}{cccc} & S & E & E \\ + & E & Y & E \\ \hline & Y & E & S \end{array}$$

- ○ 2
- ○ 4
- ○ 6
- ○ 8