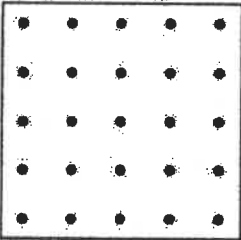
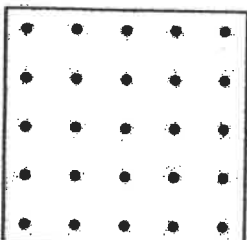
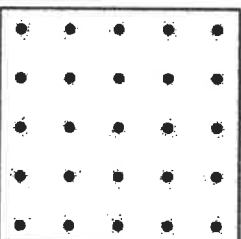
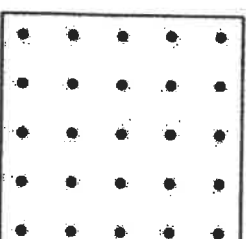
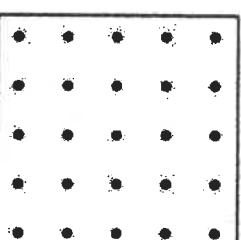
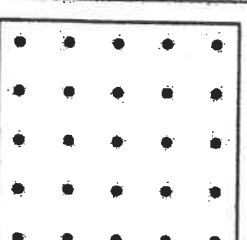
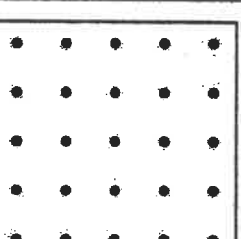
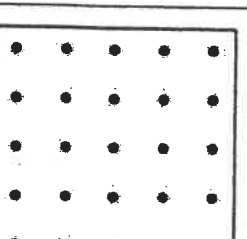
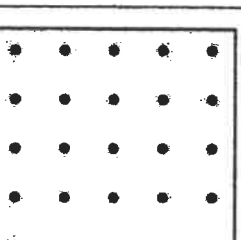
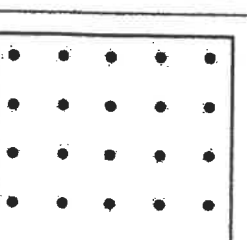


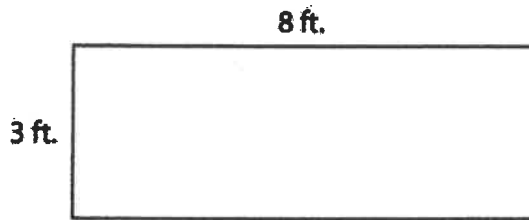
Drawing 2-Dimensional Figures (Source: mathlearningcenter.org)

Draw at least two examples of each term below.

Term	Your Drawings	
a parallel lines		
b perpendicular lines		
c right angle		
d obtuse angle		
e acute angle		

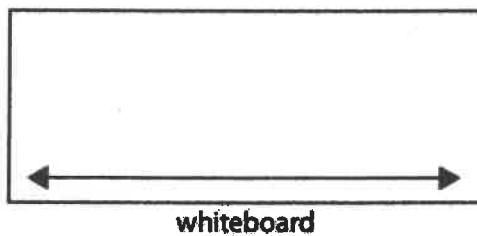
Finding Perimeter (Source: mathlearningcenter.org)

Which equation shows how to find the perimeter of this rectangle?



- ☐ $3 \times 8 = 24 \text{ ft.}$
- ☐ $(2 \times 3) + 8 = 14 \text{ ft.}$
- ☐ $(2 \times 3) + (2 \times 8) = 22 \text{ ft.}$
- ☐ $4 + 8 = 12 \text{ ft.}$

Mr. Hunter is trying to find the distance from one end of his whiteboard to the other.
Mr. Hunter is measuring:



- ☐ the whiteboard's area
- ☐ the whiteboard's length
- ☐ the whiteboard's perimeter

Multiplying Two-Digit Numbers – Closest to 7,000

(Source: <https://www.openmiddle.com/>)

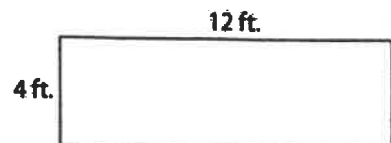
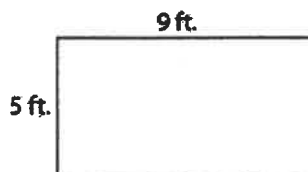
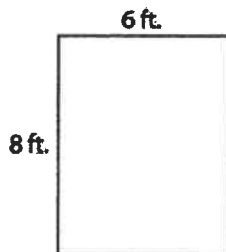
Using the digits 1 to 9 at most one time each, fill in the boxes to make the product as close to 7,000 as possible

$$\begin{array}{r} \square \square \\ \times \square \square \\ \hline \end{array}$$

Day 2

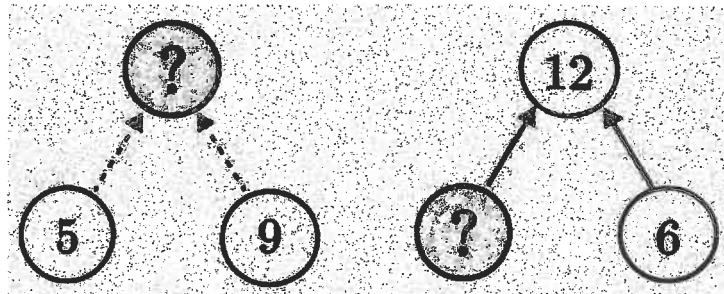
Building a Deck (Source: mathlearningcenter.org)

Alexandra and her dad built a deck in their backyard. It had an area of 48 square feet and a perimeter of 28 feet. Circle the drawing that shows the deck they built. Use numbers, labeled sketches, and words to explain your answer.

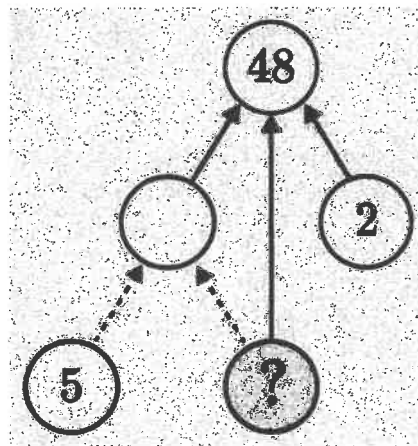


Round and Round (Source: <https://brilliant.org/>)

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.

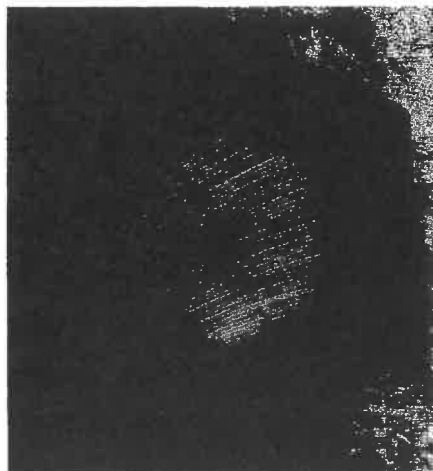


Solve the puzzle below, where 48 is a product of three numbers.



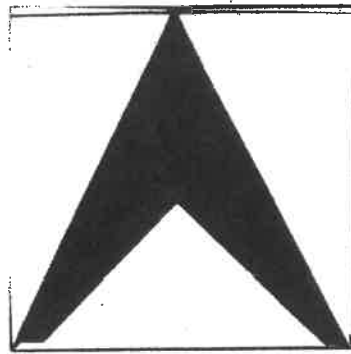
Counting (Source: mathforlove.org)

How many do you see? What did you count? How did you count them?



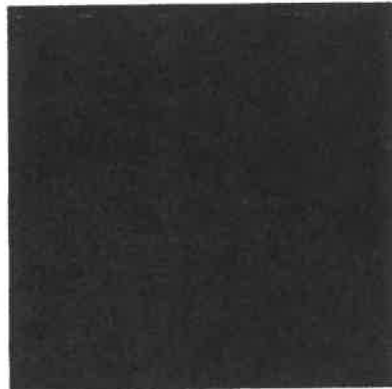
Fraction Talk (Source: <http://fractiontalks.com/>)

What fraction of the big square is shaded? Show your work.



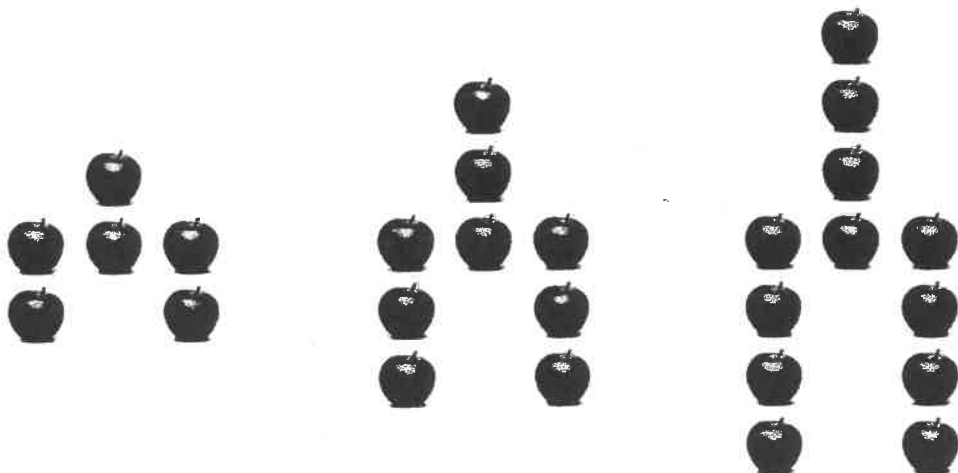
Which One Doesn't Belong? (<http://wodb.ca/>)

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 apples in stages 1-3 below. Draw what you think stage 4 might look like. Label how many apples are in each stage.



Row and Diagonals (Source: mathlearningcenter.org)

Complete each multiplication puzzle. Fill in the products of rows and diagonals.

ex

			35
8	6	1	48
3	5	3	45
7	4	2	56
			80

a

			56
1	6		
4	2		32
4	1		36
			18

b

	3		0
4	2		72
	3	3	45
			42

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

What is the value of the last row?

$$\text{Stick Figure 1} + \text{Stick Figure 1} + \text{Stick Figure 1} = 6$$

$$\text{Stick Figure 2} + \text{Stick Figure 1} + \text{Stick Figure 2} = 26$$

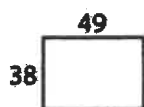
$$\text{Stick Figure 2} + \text{Stick Figure 3} + \text{Stick Figure 3} = 18$$

$$\text{Stick Figure 1} \times \text{Stick Figure 3} + \text{Stick Figure 2} = ?$$

Perimeter and Area (Source: mathlearningcenter.org)

Find the area and perimeter of each figure below.

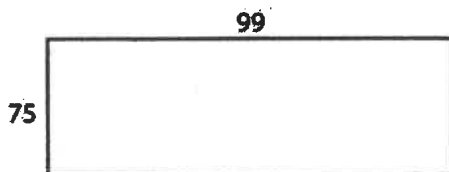
a



Area = _____

Perimeter = _____

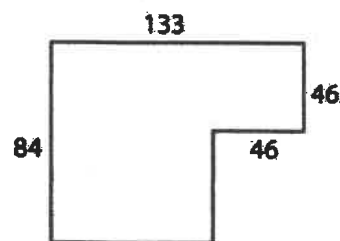
b



Area = _____

Perimeter = _____

c



Area = _____

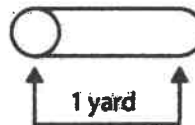
Perimeter = _____

Puzzle (Source: mathlearningcenter.org)

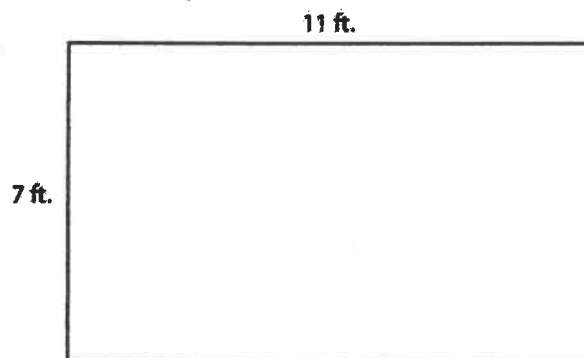
Draw and label a rectangle with an area of 32 square units and a perimeter of 36 units. Use numbers or words to show that you are correct.

Covering a Bulletin Board (Source: mathlearningcenter.org)

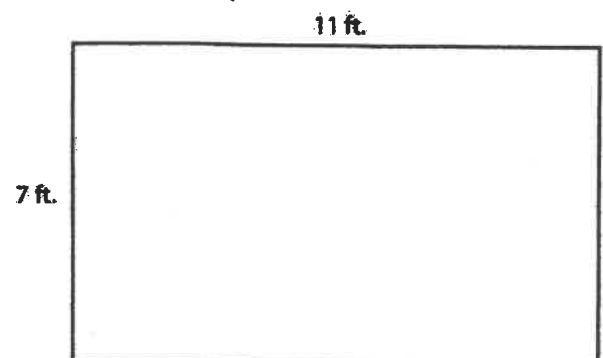
Shanice and Micah are using yellow craft paper to cover a bulletin board. The board is 11 feet wide and 7 feet tall. The craft paper comes in a roll that is 1 yard wide. They can roll it out and cut it to any length, but the paper will always be 1 yard wide. Draw and label on the bulletin board pictures below to show 2 different ways Shanice and Micah can cover the bulletin board.



a First way.



b Second way.



Would You Rather (Source: <https://www.wouldyourathermath.com/>)

Whichever option you choose, justify your reasoning with mathematics.

Would you rather?

Sell a batch of 30 cookies for 50 cents each with a cost to make of \$8?



OR



Sell a batch of 30 cookies for \$15 with a cost to make of \$6?



Fraction Stories (Source: mathlearningcenter.org)

Missy's mother owns a pet supply store. The directions on the small cans of cat food say to feed a cat 1 can of food each day for every 4 pounds of body weight. Missy started to make a table to help people know how much of this food to give their cats every day. Finish the table.

 weight in pounds	 cans per day
4	1
5	
6	
7	
8	2
9	

 weight in pounds	 cans per day
10	
11	
12	
13	
14	
15	

Inequalities (Source: mathlearningcenter.org)

Fill in the blanks with $<$, $>$, or $=$.

a $\frac{1}{3}$  $\frac{4}{9}$

b $\frac{7}{12}$  $\frac{4}{8}$

c $\frac{5}{15}$  $\frac{1}{3}$

d $\frac{9}{12}$  $\frac{2}{3}$

Whole Number Division (Source: <https://www.openmiddle.com/>)

Using the digits 1 to 9 at most one time each, fill in the boxes to make a true statement.

$$\square \div \square = \square \div \square = \square$$

Day 2

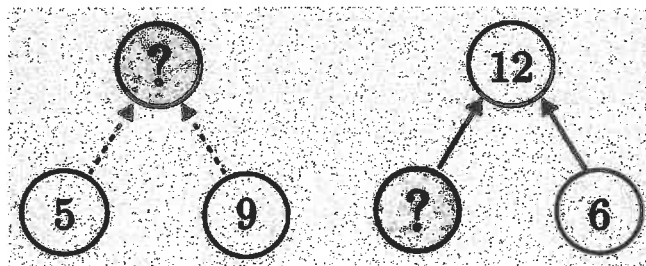
Story Problem (Source: mathlearningcenter.org)

Tina collects cans to recycle at the supermarket. Last week, on Monday, Wednesday and Thursday, she collected 37 cans each day. On Tuesday, Friday, Saturday, and Sunday, she collected 43 cans each day. Tina gets 5 cents for every can she recycles.

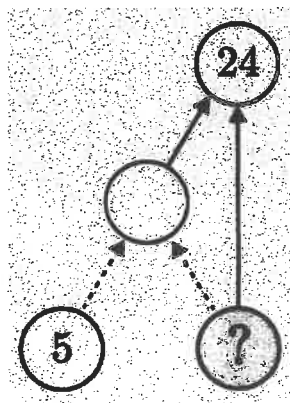
- A. How much money did Tina get for her cans last week?
- B. Tina kept \$5 for herself. She divided the rest of the money evenly among her three little brothers. How much money did each brother get?

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.

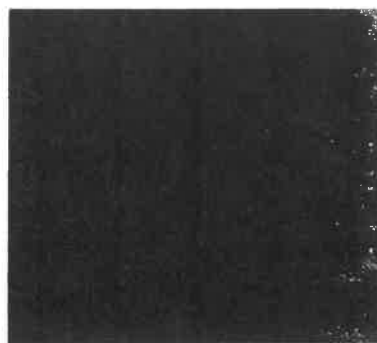


Solve the puzzle below.



Counting (Source: mathforlove.org)

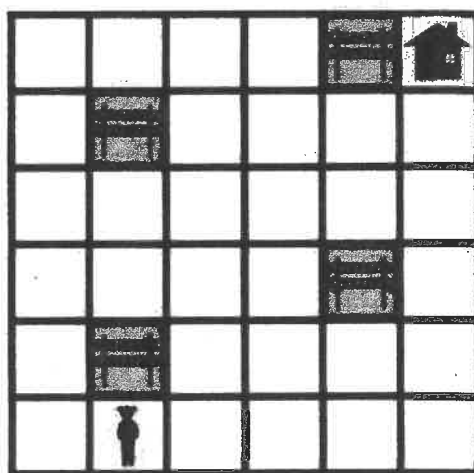
How many do you see? What did you count? How did you count them?



Walking Home (Source: <https://brilliant.org/>)

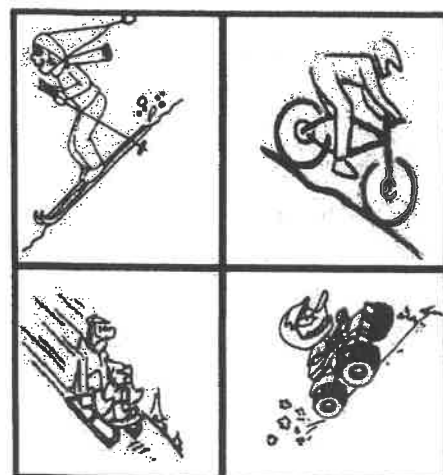
Zara is finding her way home, but she wants to take a route that visits her neighborhood as much as possible. From any square on the map shown, she can move up, down, left, or right a square (not diagonally).

She also wants to visit every empty square exactly once, entirely avoid the squares marked with "under construction" signs, and she wants her trip to end at her house. Is it possible for her to do this?



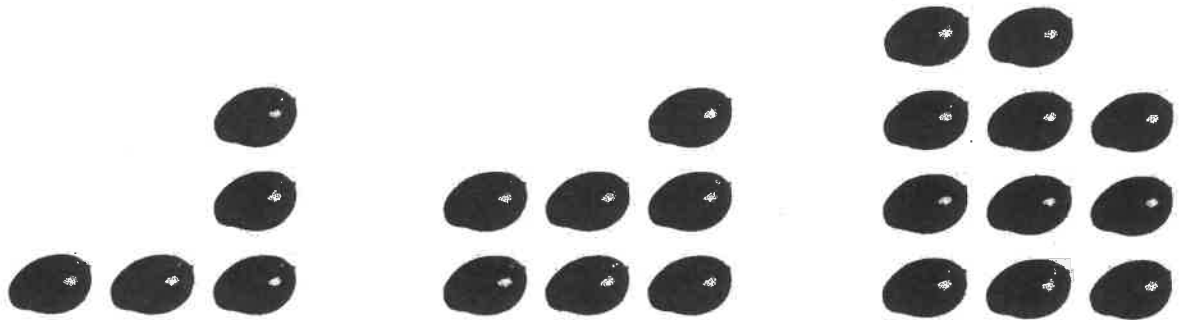
Which One Doesn't Belong? (<http://wodb.ca/>)

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



Visual Pattern (Source: visualpatterns.org)

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



Day 4

Paloma's Picture (Source: mathlearningcenter.org)

Paloma is painting a picture of a house. Help Paloma solve the following problems. Show your work using numbers, sketches, or words.

- A. The door of Paloma's house is 49 millimeters by 24 millimeters. What is the area of the door?
- A. One of the windows is 15 millimeters by 32 millimeters. Another window is 30 millimeters by 16 millimeters. Paloma says the windows have the same area. Do you agree or disagree? Why?
- B. The porch is 12 centimeters by 19 centimeters. What is the area of the porch?

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

What is the value of the last row?

$$\text{grape} + \text{grape} + \text{grape} = 6$$

$$\text{grape} + \text{cherry} + \text{cherry} = 18$$

$$\text{cherry} + \text{cherry} + \text{pear} = 22$$

$$\text{pear} + \text{grape} \times \text{cherry} = ?$$

Practice (Source: mathlearningcenter.org)

Fill in the blanks.

- A. $48 \times 25 = 24 \times \underline{\hspace{2cm}}$
- B. $48 \times 29 = (48 \times 30) - (48 \times \underline{\hspace{2cm}})$
- C. $48 \times 29 = (48 \times 20) + (48 \times \underline{\hspace{2cm}})$
- D. $50 \times 29 = \frac{1}{2} \text{ of } \underline{\hspace{2cm}} \times 29$

True or False?

- A. $16 \times 17 = 34 \times 8 \underline{\hspace{2cm}}$
- B. $39 \times 8 = (40 \times 8) - 1 \underline{\hspace{2cm}}$
- C. $64 \times 20 = 32 \times 40 \underline{\hspace{2cm}}$
- D. $50 \times 89 = 100 \times 89 \underline{\hspace{2cm}}$

Metric Units (Source: mathlearningcenter.org)

Write and solve an equation for each of the problems below. Use the table to help.

Measurement Equivalents			
1 kilometer	1,000 meters	10,000 decimeters	100,000 centimeters
	1 meter	10 decimeters	100 centimeters
		1 decimeter	10 centimeters

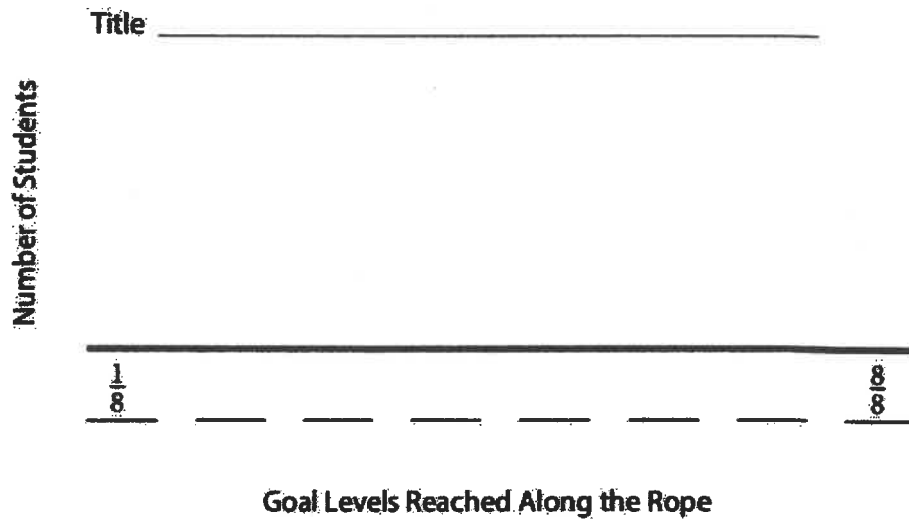
- A. How many centimeters are in 45 meters?
- B. How many meters are in 45 kilometers?
- C. How many meters are in 800 centimeters?

Rope Climb (Source: mathlearningcenter.org)

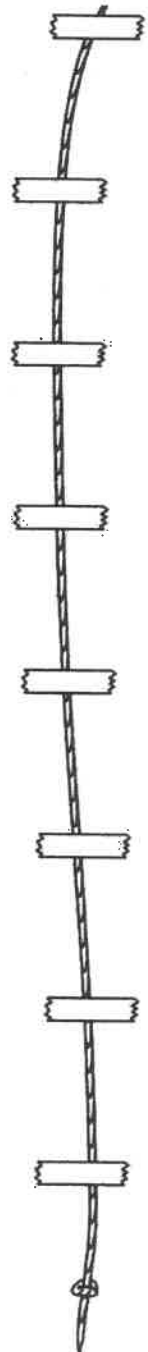
Your P.E. teacher has challenged your class to a rope climb! There are 8 blue pieces of tape equally spaced, and wrapped around the rope to mark off the distances. The following results represent the goal levels that were reached by the students in your group.

$\frac{4}{8}$ $\frac{1}{8}$ $\frac{3}{8}$ $\frac{1}{8}$ $\frac{4}{8}$ $\frac{2}{8}$ $\frac{3}{8}$ $\frac{8}{8}$ $\frac{4}{8}$ $\frac{6}{8}$ $\frac{7}{8}$

Display this data on the line plot below. Enter the rest of the goal levels below the heavy line. Make an X above the heavy line to represent each student in your group. Give your finished line plot a good title.



- How many students stopped at the goal line $\frac{3}{8}$?
- Which goal level did the most students reach?
- How many students touched or even passed $\frac{3}{8}$ of the rope?
- What was the total distance combined for climbing the rope?



Would You Rather. (Source: <https://www.wouldyourathermath.com/>)

Whichever option you choose, justify your reasoning with mathematics.

Would You Rather...

**Read 12 pages
every night in a
chapter book with
144 pages?**

**Read 50 pages 3
times a week in a
chapter book with
132 pages?**

Answer Key 4th grade

COMPARING FRACTIONS:

There are many possible answers including $\frac{1}{4}$ and $\frac{8}{9}$

Other answers you may not expect would be improper fractions that are greater than $\frac{1}{2}$ such as $\frac{5}{2}$.

Day 5

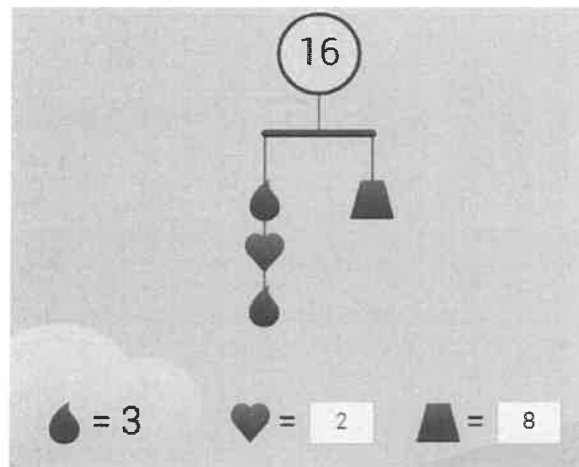
Conrad's Room:

- A. $7 \times 18 = 126$ books
- B. $6 \times 13 = 78$ pieces of clothing
- C. $11 \times 17 = 187$ toy

Fractions:

- A. 12 B. 6 C. 3 D. 8 E. 4 F. 2

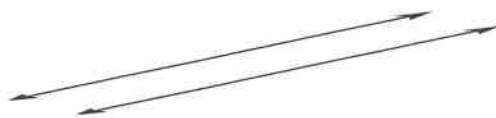
Mobile




WEEK 3


Day 1


Parallel: Lines that never cross. (like railroad tracks)



Perpendicular: \perp

Right Angle:  90° straight up and down – like a corner

Obtuse Angle:  Big huge fat angle ^{Bigger than} 90°

Acute Angle:  little teeny angle it's ^{Less} a-cute little angle – than 90°

Finding perimeter: $(2 \times 3) + (2 \times 8) = 22$ ft

The Whiteboard's length

Multiplying 2 digit numbers:
One answer: $98 \times 61 = 6,950$

Day 2

8ft. X 6 ft.
Area $8 \times 6 = 48$ sq. ft.
Perimeter $(2 \times 6) + (2 \times 8) = 28$ ft.. or $6 + 6 + 8 + 8 = 28$ ft.

Solve the puzzle:
Yellow ? = 3
Circle above 5 = 8

Counting:
1 total hexagon OR 1 hexagon, 2 triangles and 8 diamonds.

Day 3

Fraction Talk:
Answers will vary.

Which one doesn't belong? (possible answers but kids come up with better ones)
N because it is not symmetrical
Or U because it is curved and the others aren't.

Visual Pattern:
6 apples 9 apples 12 apples
Their drawing should follow the pattern and have 15 apples.

Day 4

Row and Diagonals:

ex

a

b

			35					56					0
8	6	1	48		1	6	7	42		7	3	0	0
3	5	3	45		4	2	4	32		4	2	9	72
7	4	2	56		4	1	9	36		5	3	3	45
			80					18					42

Puzzle:

$$2 \times 6 + 12 = 24$$

Perimeter and Area

a. Area 1,862

Per. 184

b. Area 7,425

Per. 348

c. Area 9,424

Per. 434

Shape c is a challenge. You need to figure out what the whole shape area would be. $133 \times 48 = 11,172$. Then subtract the area that is missing $46 \times 38 = 1,748$. Then $11,172 - 1,748 = 9,424$.

For perimeter, you have to figure out the missing numbers and then add all the sides. $133 - 46 = 87$ that is the bottom. $84 - 46 = 38$ that is the right hand side. Then add all of them together $133 + 46 + 46 + 38 + 87 + 84 = 434$

Day 5Puzzle will be a rectangle 2×16

$$\text{Area } 2 \times 16 = 32 \quad \text{perimeter } (2 \times 16) + (2 \times 2) = 36$$

Bulletin boards. Answers will vary. They can do horizontally or vertically and will have to cut some off either way.

Which would you rather?

$$30 \times \$0.50 = \$15.00 - \$8.00 = \text{profit } \$7.00$$

Or

$$30 \text{ for } \$15.00 - \$6.00 = \text{profit } \$9.00 \text{ I would choose this one.}$$

WEEK 4

Day 1

wt	cans	wt	cans
4	1	10	2 1/2
5	1 1/4	11	2 3/4
6	1 1/2	12	3
7	1 3/4	13	3 1/4
8	2	14	3 1/2
9	2 1/4	15	3 3/4

a. $\frac{1}{3} < \frac{4}{9}$ b. $\frac{7}{12} > \frac{4}{8}$ c. $\frac{5}{15} = \frac{1}{3}$ d. $\frac{9}{12} > \frac{2}{3}$

Whole number division

$$8 \div 4 = 6 \div 3 = 2$$

Day 2

Story Problem:

A. Tina got \$14.15

B. Her three little brothers each got \$3.05 (\$14.15-\$5.00=\$9.15)

$$\$9.15 \div 3 = \$3.05$$

Puzzle:

Yellow ?=3

Number above 5 is 8

Counting

3 green triangles and 6 trapezoids

Or 4 triangles

Day 3

Walking Home

Answers will vary, but I'm sure you can do it if you just work at it!

Which one doesn't belong?

4 wheeler because it is motorized
 Or skier is a girl others aren't
 Or skier is standing up others are sitting down.

Visual Pattern:

Mangos: 5 7 11 15

Day 4

Paloma's picture

A. $49 \times 24 = 1,176$ sq. mm (door)

Windows $15 \times 32 = 480$ sq. mm $30 \times 16 = 480$ sq. mm Yes I agree.

B. Porch $12 \times 19 = 228$ sq. m

Practice:

T or F

A. 50

A. T

B. 1

B. F

C. 9

C. T

D. 100

D. F

Puzzle:

$$6 + 2 \times 16 = 38$$

Day 5

Metric Units

A. $45\text{m} \times 100\text{cm} = 4,500\text{cm}$

B. $45\text{km} \times 1000\text{m} = 45,000\text{m}$

C. $800\text{cm} \div 100\text{cm} = 8\text{m}$

Rope Climb

X		x	x				
X	x	x	x		x	x	x
$\frac{1}{8}$	$\frac{2}{8}$	$\frac{3}{8}$	$\frac{4}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	$\frac{8}{8}$

A. 2 students B. $\frac{4}{8}$ C. 8 students D. $1\frac{3}{8}$

Rather

$144 \div 12 = 12$ nights of reading

Or the second one will only take 3 nights but more reading per night!