






4th grade math Packet - May 1



Mathematics Grade 4 Remote Learning Activities

WEEK 1

Day 1 Measuring in Centimeters (Source: mathlearningcenter.org)
Please measure the following objects in centimeters and record the results.

Object to be Measured	Measurement in Centimeters
1. Width of your bed 	
2. Width of a door 	
3. Height from the floor to the seat of your favorite chair 	
4. Length of a telephone or cell phone 	
5. Dimensions of your favorite book 	

Composite Numbers

Use the digits 1 to 9, at most one time each, to make 5 composite numbers. (Source: <https://www.openmiddle.com/>)

□, □□, □□□, □□□□, □□□□□, □□□□□□

Alligators

Ten alligators went down to the river. Three of them laid eggs. They laid 5 eggs each. A snake ate 8 eggs. How many eggs are left?

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Visual Pattern (Source: visualpatterns.org)

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



Day 5

Multiplying by Multiples of Ten (Source: mathlearningcenter.org)

Solve each problem below:

a $2 \times 16 =$ _____

b $20 \times 16 =$ _____

c $4 \times 21 =$ _____

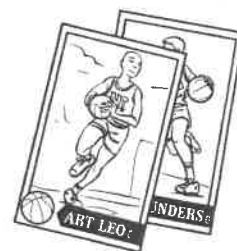
d $40 \times 21 =$ _____

e $8 \times 15 =$ _____

f $80 \times 15 =$ _____

Story Problem (Source: mathlearningcenter.org)

LaToya had a large collection of basketball cards. She decided to give half of them to her friend, Erin, and a fourth of them to her brother. She still has 75 cards left. How many cards did she start with?



Life Savers (Source: mathlearningcenter.org)

Did you know that there are 14 Life Saver candies in a roll of Life Savers? Fill in the blanks on the ratio table to show how many Life Savers there are in different numbers of rolls.

Number of Rolls	Number of Lifesavers
1 roll	14 Life Savers
3 rolls	
	56 Life Savers
8 rolls	
	140 Life Savers



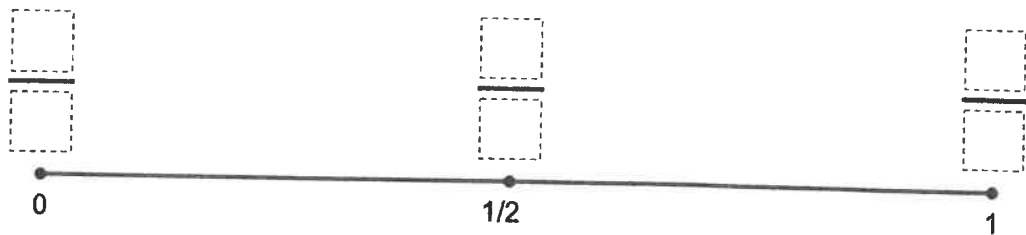
Day 1 Elapsed Time (Source: mathlearningcenter.org)

Solve problems A and B. You may want to use an open number line to model the problem.

- A. Anna started a race at 9:30 am. She ran for 3 hours and 47 minutes. What time did she finish her race?
- B. Michael and Tyler both ran a half marathon. Michael finished in 1 hour 42 minutes and 13 seconds. Tyler finished in 97 minutes and 49 seconds.
- Who was faster?
 - How much faster was he?
- C. Takumi ran the first mile of his race in 450 seconds. How many minutes was his first mile?

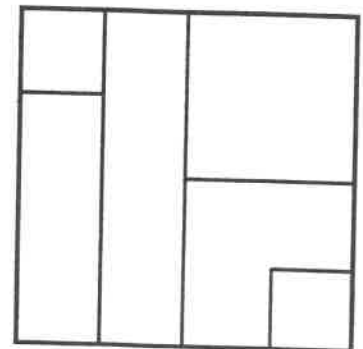
Benchmark Fractions (Source: <https://www.openmiddle.com/>)

Use the digits 1 to 9, no more than once, to create three fractions that are as close to zero, one half and one as possible. NOTE: Close as possible is measured by adding up all the differences and making it the least possible value.



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 Perimeter and Area (Source: mathlearningcenter.org)

You can make sketches to help solve the problems below. Remember to include the units of measurement in your answers. Show all of your work.

- A. The classroom rug is 9 feet long and 8 feet wide. What is the total area of the rug? What is the perimeter of the rug?
- B. Chrissy is going to make a big painting on a piece of wood that is 4 feet wide and 7 feet long. What is the total area of the piece of wood? What is the perimeter of the piece of wood?
- C. The school playground measures 465 feet by 285 feet. What is the perimeter of the playground?

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

What is the value of the last row?

$$\begin{array}{rclclcl} \text{ant} & + & 8 & = & 13 \\ + & & + & & \\ \text{spider} & + & \text{snail} & = & 12 \\ = & & = & & \\ 8 & & 17 & & \end{array}$$

$$\text{spider} \times \text{ant} + \text{snail} = ?$$

Noticing (Source: <https://samedifferentimages.wordpress.com/>)

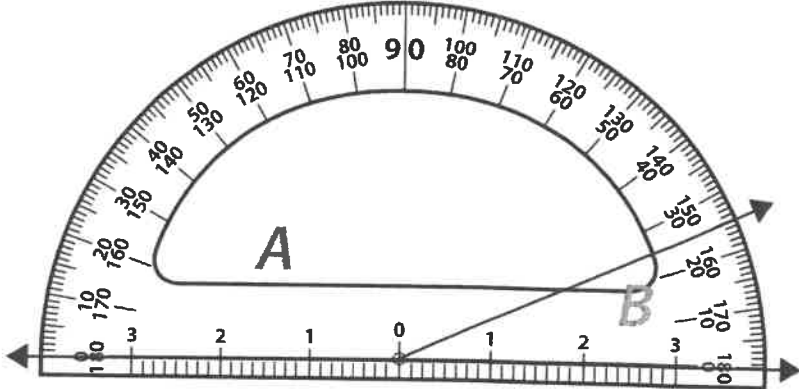
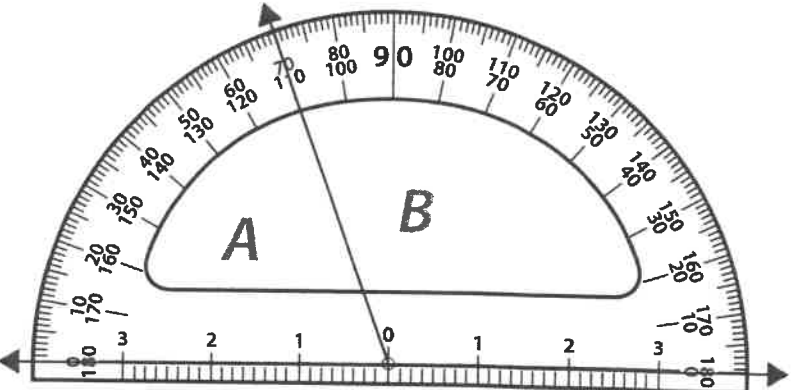
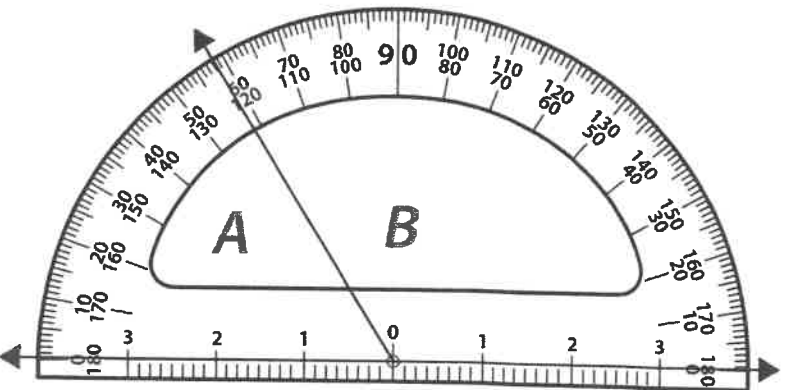
On a piece of paper, make two columns. In one column, list the things that are the same in this picture, and in the other column, list the things that are different.

What is the same? What is different?



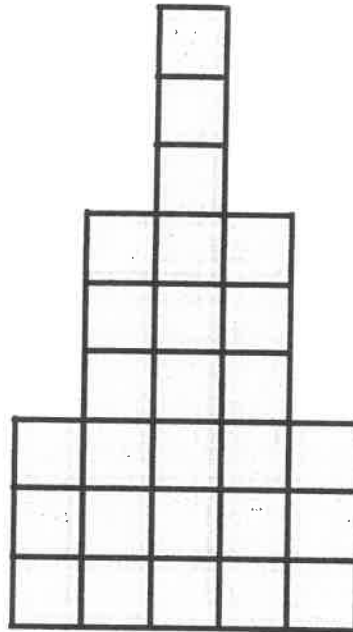
Day 3 Protractors (Source: mathlearningcenter.org)

When you measure an angle you usually have to choose between two numbers because protractors are designed to measure angles that start on either the right or left side. There are two angles to measure in each of the problems. The angle on the left side is angle A. The angle on the right side is angle B. Find and record the measure of both angles in each problem.

<p>Angle A measures:</p> <p>_____</p> <p>Angle B measures:</p> <p>_____</p>	
<p>Angle A measures:</p> <p>_____</p> <p>Angle B measures:</p> <p>_____</p>	
<p>Angle A measures:</p> <p>_____</p> <p>Angle B measures:</p> <p>_____</p>	

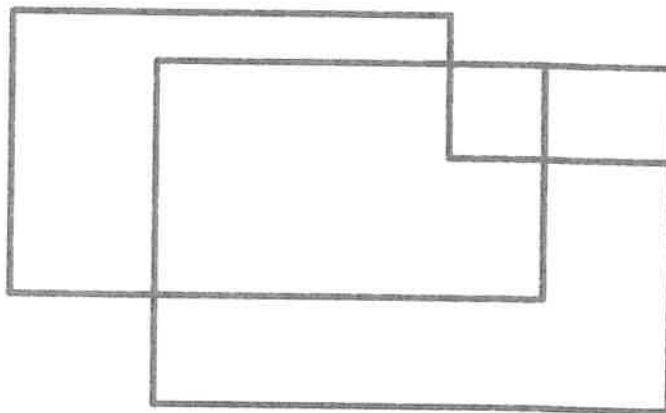
Counting (Source: visualpatterns.org)

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



Tracing a Figure (Source: <https://brilliant.org/>)

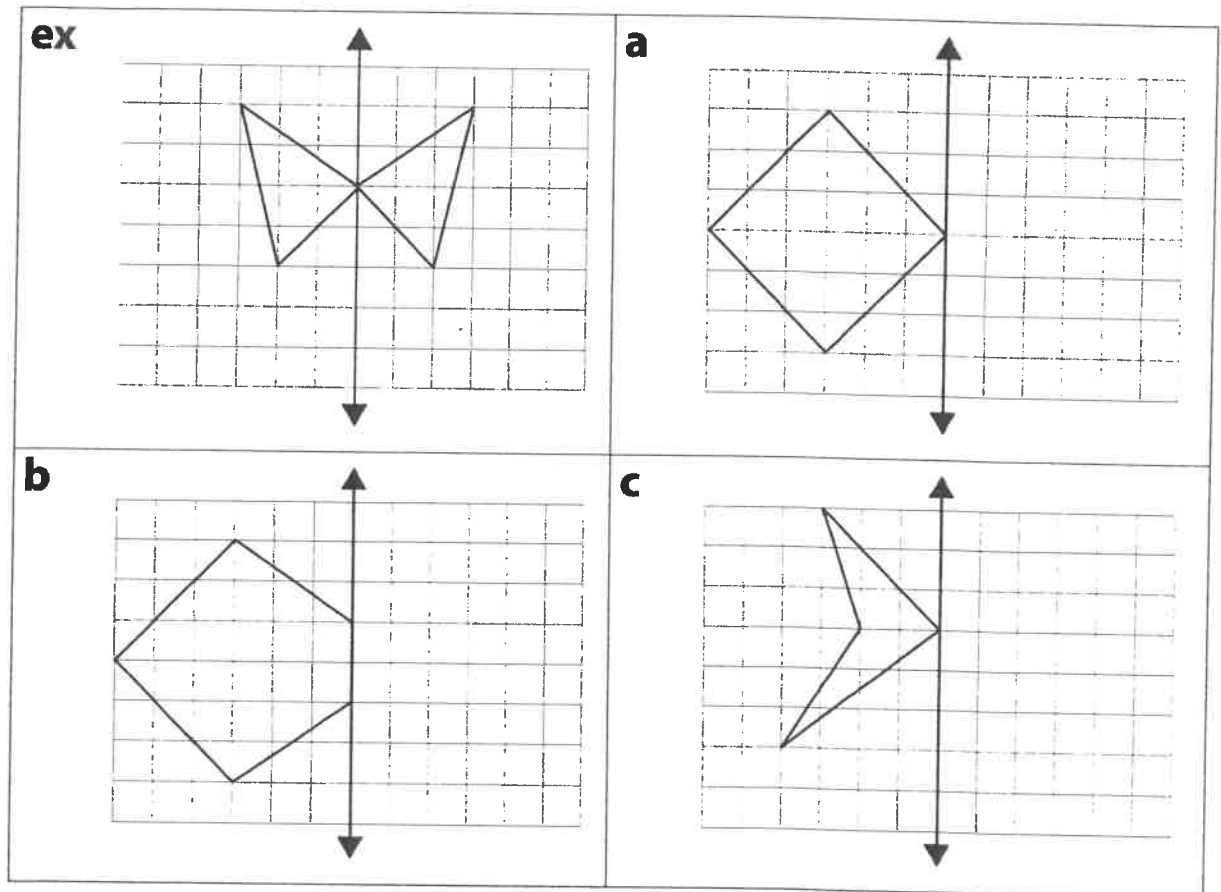
Starting with your pencil at a location of your choice on the two dimensional figure, is it possible to trace this entire figure without lifting your pencil or redrawing a line? (Crossing at an intersection is okay.)



Day 4 Symmetry (Source: mathlearningcenter.org)

Figures a–c show only half of the designs, on the left side of their lines of symmetry.

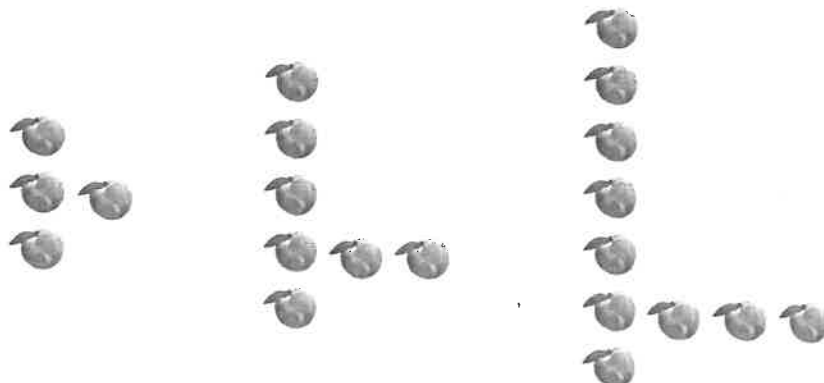
Complete each design on the right side of the line of symmetry.



What did you do to make sure that the other half of each design you drew was accurate?

Visual Pattern (Source: visualpatterns.org)

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



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

Use the digits 1 to 9, at most one time each, to fill in the boxes to create two different fractions: one that is less than one half and one that is more than one half.

$$\frac{\square}{\square} < \frac{1}{2} \text{ and } \frac{\square}{\square} > \frac{1}{2}$$

Day 5 Conrad's Room (Source: mathlearningcenter.org)

Think about the most efficient strategy for each problem. Then show your work using numbers, labeled sketches, or words.

- A. Conrad is cleaning his room. His bookcase has 7 shelves. He put 18 books on each shelf. How many books did Conrad put away?
- B. Conrad's dresser has 6 drawers. He put 13 pieces of clothing in each drawer. How many pieces of clothing did he put away?
- C. Conrad has 11 containers for his toys. He put 17 toys in each container. How many toys did he put away?

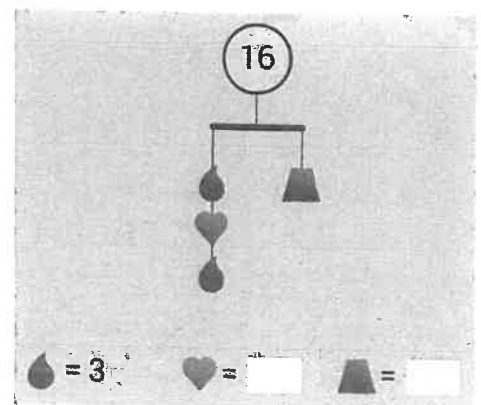
Fractions (Source: mathlearningcenter.org)

Fill in the blanks.

A. $\frac{1}{2}$ of 24 is _____	B. $\frac{1}{4}$ of 24 is _____	C. $\frac{1}{8}$ of 24 is _____
D. $\frac{1}{3}$ of 24 is _____	E. $\frac{1}{6}$ of 24 is _____	F. $\frac{1}{12}$ of 24 is _____

Mobile (Source: <https://solverme.edc.org/Mobiles.html>)

What is the value of the heart? The trapezoid?



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

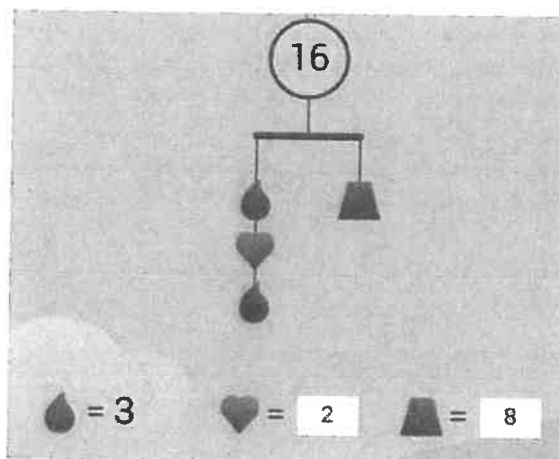
Conrad's Room:

- 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

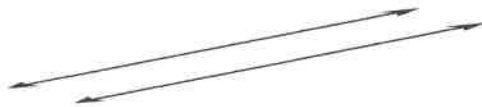
Mobile



WEEK 3

Day 1

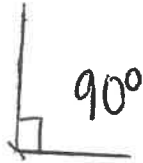
Parallel: Lines that never cross. (like railroad tracks)



Perpendicular:



Right Angle:



Obtuse Angle: larger than 90°

BIG, FAT Angle



Acute Angle:

Oh! It's such a cute little angle!

Less 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.

$133 \times 84 = 11,172$. 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 5

Puzzle will be a rectangle 2×16

Area $2 \times 16 = 32$ 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

$30 \text{ for } \$15.00 - \$6.00 = \text{profit } \$9.00$ 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	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!

4th grade math Answer Key

We're crowdsourcing the answers to the K-8 Remote Learning Activities. Please help.



Mathematics Grade 4 Remote Learning Activities

ANSWER KEY

WEEK 1	
Day 1	<p>Measuring in Centimeters: Answers will vary</p> <p>Composite Numbers: There are many answers but here are a few: 8, 35, 96, 74, 12 4, 21, 69, 78, 35 9, 32, 85, 76, 14 4, 21, 36, 95, 78</p> <p>Alligators: There are 7 eggs left.</p>
Day 2	<p>Stacking Shapes: Rectangular prism - will stack, won't roll Cube - will stack, won't roll Pyramid - will only stack if on top, won't roll Sphere - won't stack, will roll Cylinder - will stack, will roll Cone - will only stack if on top, will roll</p> <p>Pig Game: N/A</p> <p>Noticing: Answers will vary</p>
Day 3	<p>Prime Numbers: There are many answers but here are a few: 5, 23, 41, 89, 67 5, 83, 61, 29, 47 2, 41, 53, 67, 89 5, 29, 41, 83, 67</p> <p>Multiplication Strategies:</p>

$\begin{array}{r} 10 \\ \times 3 \\ \hline 30 \end{array}$	$\begin{array}{r} 20 \\ \times 3 \\ \hline 60 \end{array}$	$\begin{array}{r} 30 \\ \times 3 \\ \hline 90 \end{array}$	$\begin{array}{r} 40 \\ \times 3 \\ \hline 120 \end{array}$	$\begin{array}{r} 50 \\ \times 3 \\ \hline 150 \end{array}$	$\begin{array}{r} 60 \\ \times 3 \\ \hline 180 \end{array}$	$\begin{array}{r} 70 \\ \times 3 \\ \hline 210 \end{array}$
$\begin{array}{r} 80 \\ \times 3 \\ \hline 240 \end{array}$	$\begin{array}{r} 90 \\ \times 3 \\ \hline 270 \end{array}$	$\begin{array}{r} 100 \\ \times 3 \\ \hline 300 \end{array}$	$\begin{array}{r} 1,000 \\ \times 3 \\ \hline 3,000 \end{array}$	$\begin{array}{r} 10,000 \\ \times 3 \\ \hline 30,000 \end{array}$	$\begin{array}{r} 100,000 \\ \times 3 \\ \hline 300,000 \end{array}$	$\begin{array}{r} 1,000,000 \\ \times 3 \\ \hline 3,000,000 \end{array}$

Which One Doesn't Belong?

"3+9" does not belong because all the other equations equal 10 and 3+9=12.

"5+5" does not belong because it is adding the same numbers.

"

5+5	2+8
9+1	3+9

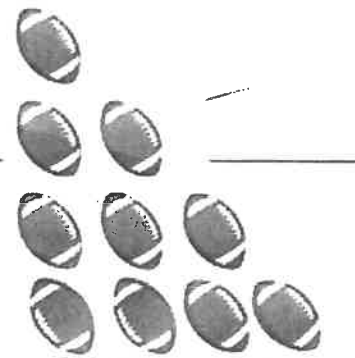
Day 4

Ratio Table: ...

1	2	20	100	300	10	5	50
31	62	620	93	930	310	155	1550

Mountain Ranges: There are 3 that are 4 units wide.

Visual Pattern: ^{footballs} 1 3 5 7 →



Day 5

Multiplying by Multiples of Ten:

a. 32

b. 320

c. 84

d. 840

e. 120

f. 1,200

Story Problem:

She started with 300 cards.

X = total amount of cards LaToya started with

$$X - (\frac{1}{2})X - (\frac{1}{4})X = 75$$

$$X - (\frac{3}{4})X = 75$$

$$(\frac{1}{4})X = 75$$

$$X = 75 \times 4$$

$$X = 300$$

Life Savers:

Number of Rolls	Number of Lifesavers
1 roll	14 Life Savers
3 rolls	42 Life Savers
4 rolls	56 Life Savers
8 rolls	112 Life Savers
10 rolls	140 Life Savers

WEEK 2

Day 1

Elapsed Time:

- A. 1:17
- B. Tyler, 5 minutes faster
- C. Tamuki 7.5 minutes

Benchmark Fractions:

There are multiple solutions

One possible answer: $\frac{1}{7}$, $\frac{3}{6}$, $\frac{8}{9}$

Fraction Talk:

6/16 or 3/8		3/16
2/16 or 1/8	1/16	
2/16 or 1/8	2/16 or 1/8	

Day 2

Perimeter and Area:

- A. 72 and 34
- B. 28 and 22
- C. 1,500

Puzzle: 25

Noticing: Answers may vary but here's one example:
Same - both are equal to 30
Different - one is 3 tens, the other is 2 tens and 10 ones

Day 3

Protractors:

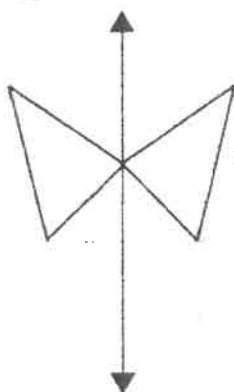
1. A=155 B=25
2. A=70 B=110
3. A=58 B=122

Counting: 27 (ways to count may vary, see if someone else in your house counted differently)

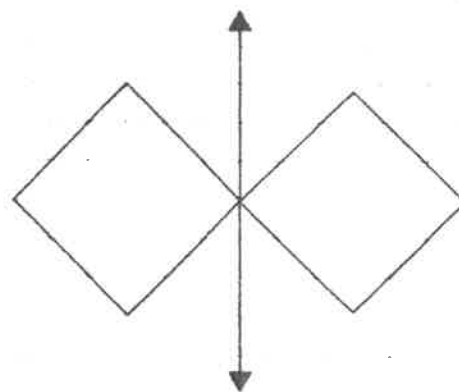
Day 4

Symmetry

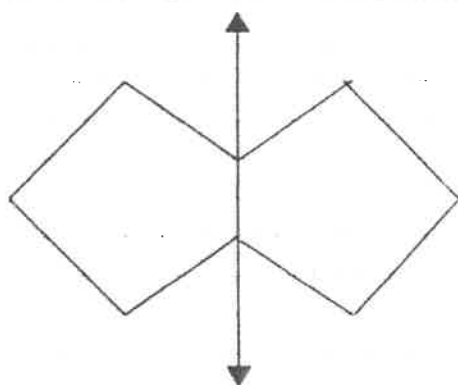
ex



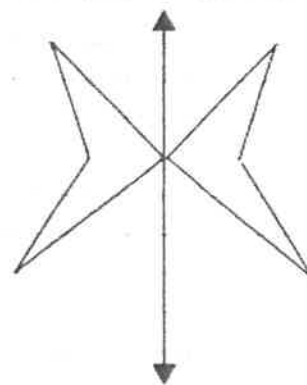
a



b



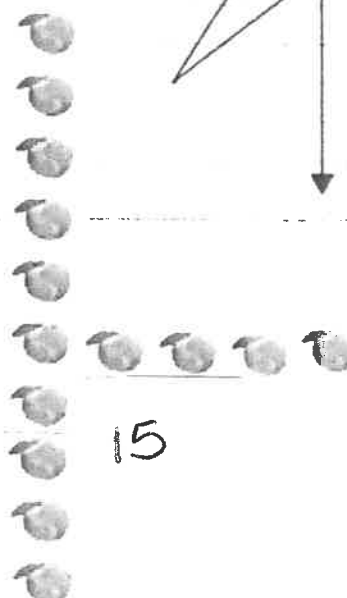
c



VISUAL PATTERN:

Peaches

4 7 10



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

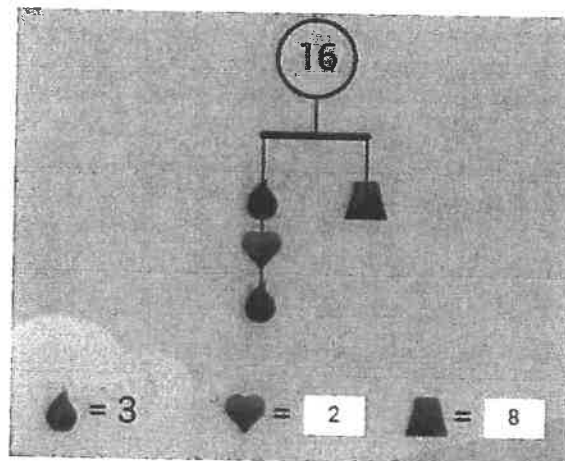
B. $6 \times 13 = 78$ pieces of clothing

C. $11 \times 17 = 187$ toy

Fractions:

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

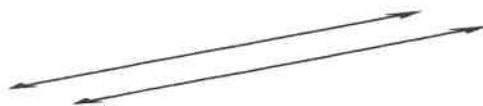
Mobile



WEEK 3

Day 1

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



Perpendicular:

