



November

NUMBER CORNER

November 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Day 1	2
3	4 Day 2	5 Day 3	6 Day 4	7 EARLY OUT	8 NO SCHOOL	9
10	11 Day 5	12 Day 6	13 Day 7	14 Day 8	15 Day 9	16
17	18 Day 10	19 Day 11	20 Day 12	21 Day 13	22 Day 14	23
24	25 Day 15	26	27	28 NO SCHOOL	29 NO SCHOOL	30



November Daily Planner

Day	Date	Calendar Grid	Calendar Collector	Computational Fluency	Number Line	Solving Problems
1			Activity 1 Introducing the Unit Fraction Race (p. 15)			
2		Activity 1 Introducing the Calendar Grid (p. 9)	Update			
3		Update	Update			Activity 1 Introducing Equations with Variables (p. 34)
4		Update	Update		Activity 1 Rounding to the Nearest Ten (p. 28)	
5		Update	Update			
6		Update	Activity 2 Labeling the Number Lines & Making Predictions (p. 17)			
7		Update	Update			Activity 2 Solving Problems with Equations (p. 36)
8		Update	Update		Activity 2 Playing Round & Add as a Class (p. 30)	
9		Update	Update			Activity 3 Discussing Problems with Equations (p. 38)
10		Activity 2 Exploring Patterns & Using the Area Model (p. 10)	Update			
11		Update	Update	Activity 1 Introducing Array Race (p. 22)		
12		Update	Activity 3 Working with Equivalent Fractions & Number Lines (p. 18)			
13		Update	Update		Activity 3 Playing Round & Add in Pairs (p. 32)	
14		Activity 3 Reviewing Multiplication Concepts & Arrays (p. 12)	Update			
15		Update	Update	Activity 2 Playing Array Race (p. 24)		

Note On days when the Calendar Grid or Calendar Collector are not featured in an activity, a student helper will update one or both either before or after Number Corner. Summaries of the update routines appear below.

Calendar Grid – The student helper posts one or more calendar markers so that the Calendar Grid is complete up to the current date. After the record sheet is posted, the student will update the chart as well.

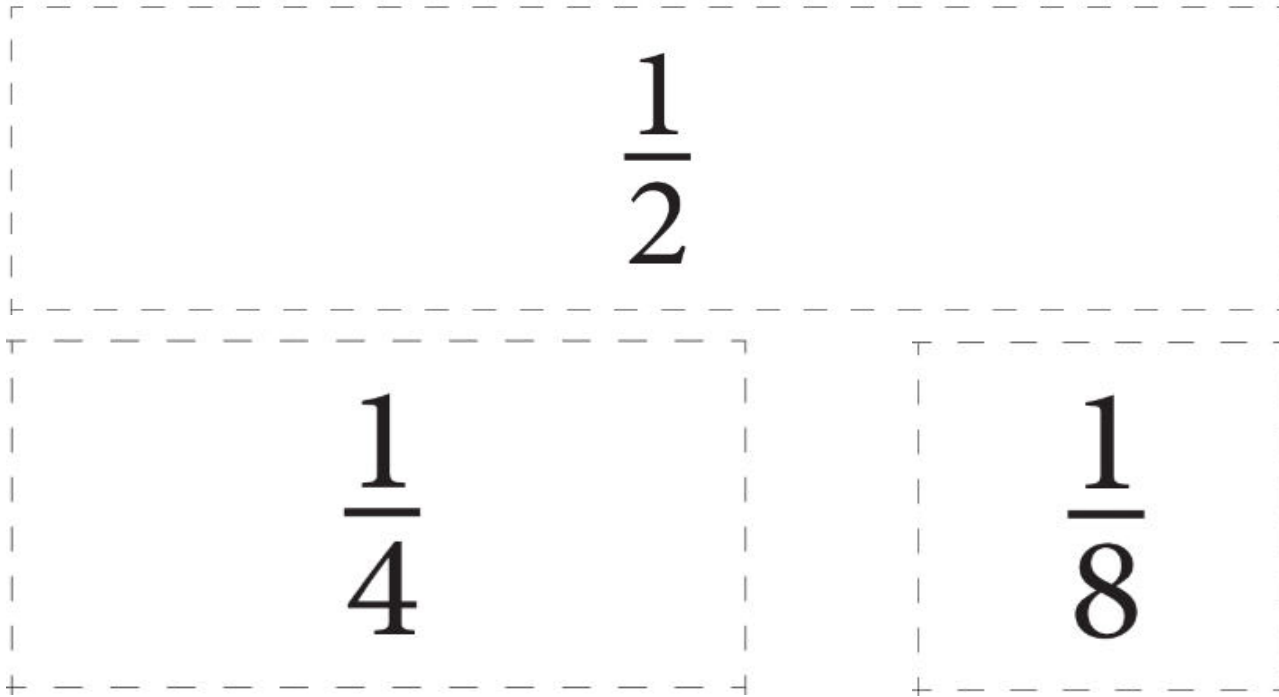
Calendar Collector – The student helper spins the spinners, records the spins on the record sheet, glues the appropriate number of fraction pieces to one of the three number lines, and marks that number line.



November
DAY ONE

Calendar Collector

For this month's Calendar Collector, we will collect unit fractions.



These are all examples of unit fractions. Think about what these fractions have in common. What do you think a unit fraction is?

Vocabulary

unit fraction

$$\frac{1}{a}$$

$$\frac{1}{814}$$

$$\frac{1}{3}$$

$$\frac{1}{23}$$

Working Definition

unit fraction: a fraction with a numerator of 1

Calendar Collector

I have displayed three open number lines in our classroom.

How can I mark $\frac{1}{2}$ and 1 on this open number line using the unit fraction marker we just looked at?

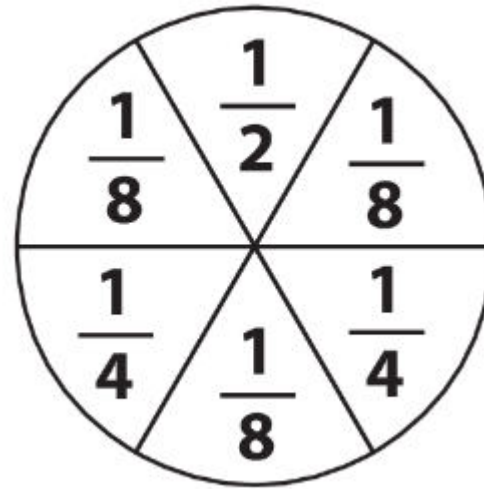
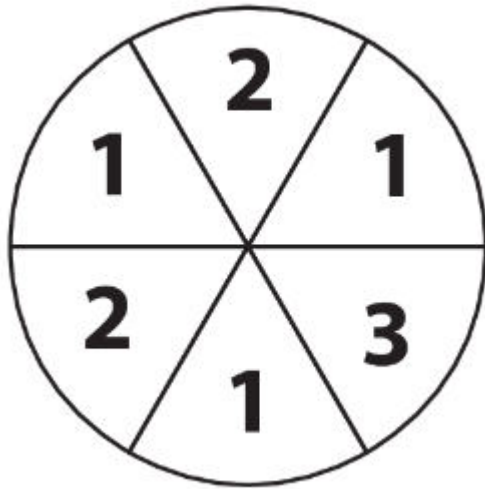
How about $\frac{1}{4}$ up to 1?

How about $\frac{1}{8}$ up to 1?

Calendar Collector

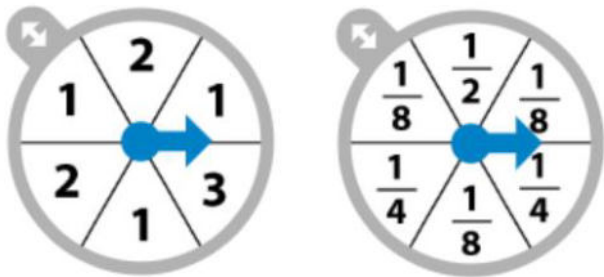
This month for Calendar Collector we will have a Unit Fraction Race! Here is how it will work:

1. Every day I will have a helper spin two spinners. The first will tell how many pieces to collect and the second will tell what size to collect.



Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my first helper to go through the routine we just learned.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

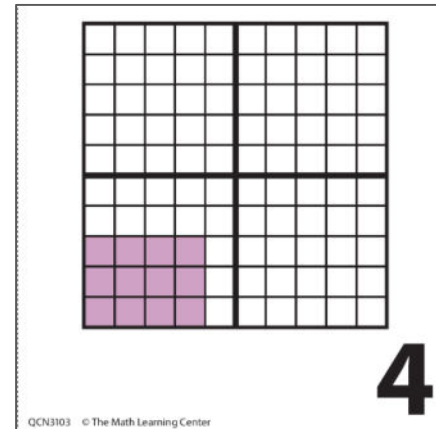
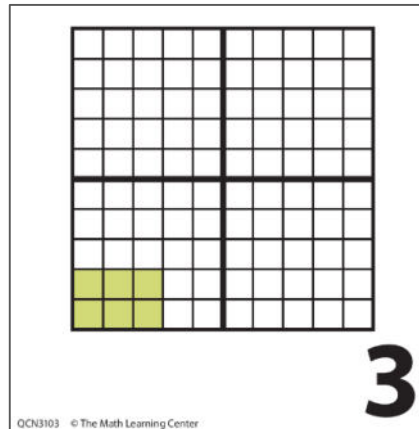
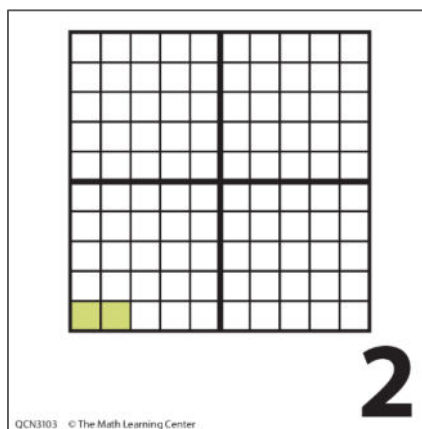
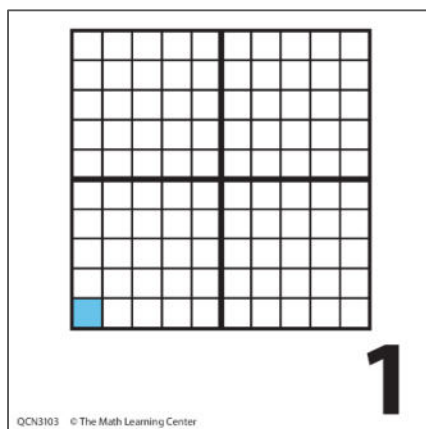


November

DAY TWO

Calendar Grid

November 1-4



This month's Calendar Grid will help us learn more about multiplication by looking at factors and products on arrays. Observe the calendar markers from this month so far. Be ready to share observations.

Vocabulary

area

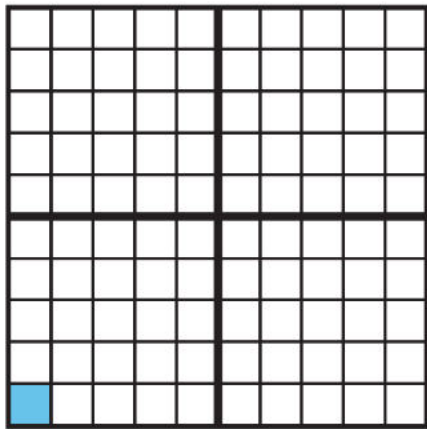


Working Definition

area: the total number of square units needed to cover a two-dimensional surface

Calendar Grid

Do you have any other observations/predictions?



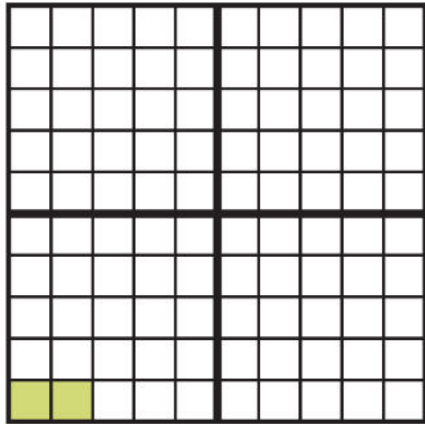
1

Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/1					
11/2					
11/3					
11/4					
11/5					
11/6					
11/7					
11/8					
11/9					
11/10					

Calendar Grid

Do you have any other observations/predictions?



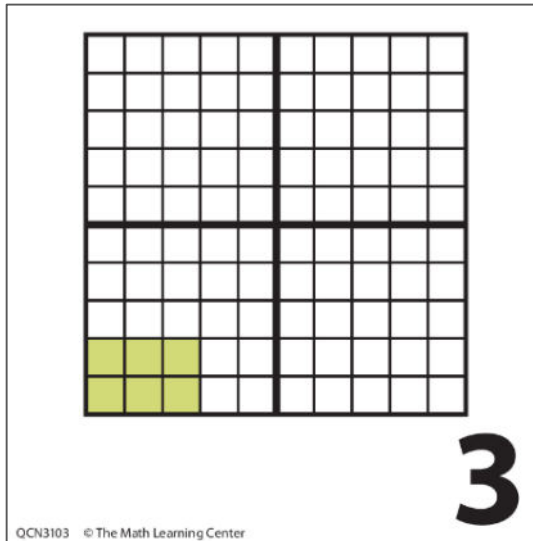
2

Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/1	Blue	1 x 1	1	Yes	
11/2					
11/3					
11/4					
11/5					
11/6					
11/7					
11/8					
11/9					
11/10					

Calendar Grid

Do you have any other observations/predictions?

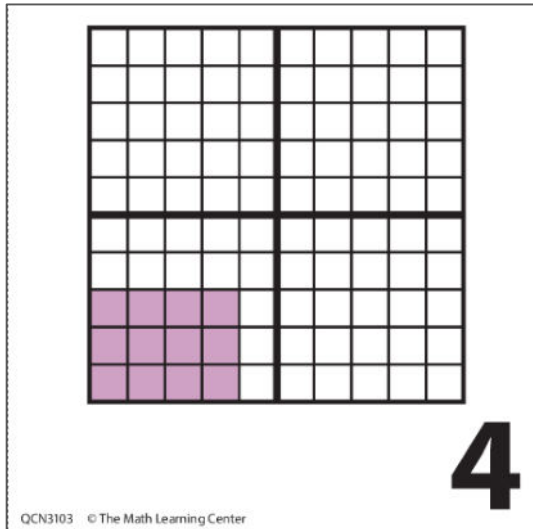


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/1	Blue	1 x 1	1	Yes	
11/2	Green	1 x 2	2	No	
11/3					
11/4					
11/5					
11/6					
11/7					
11/8					
11/9					
11/10					

Calendar Grid

Do you have any other observations/predictions?

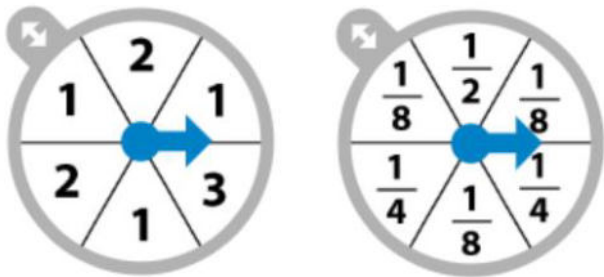


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/1	Blue	1 x 1	1	Yes	
11/2	Green	1 x 2	2	No	
11/3	Green	2 x 3	6	No	
11/4					
11/5					
11/6					
11/7					
11/8					
11/9					
11/10					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



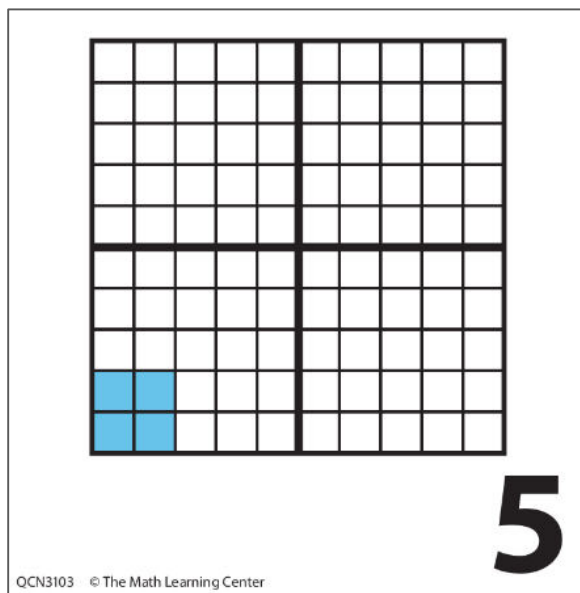
Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
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9			
10			
11			
12			
13			
14			
15			



November
DAY THREE

Calendar Grid

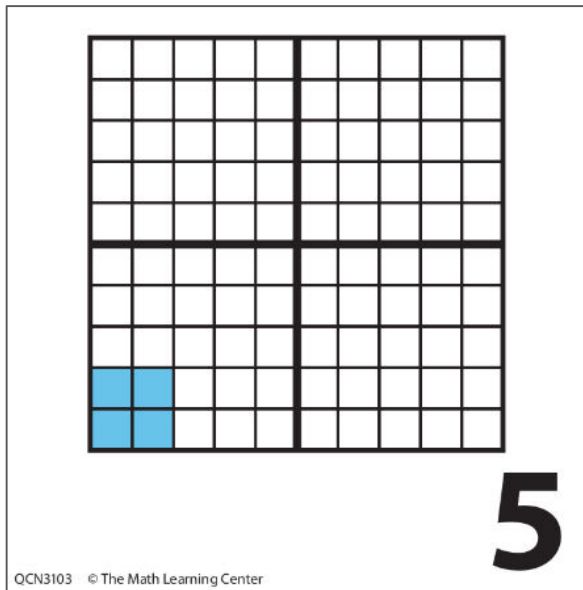
November 5



After observing today's array, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?

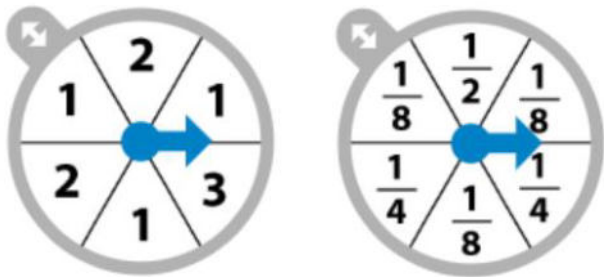


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/1	Blue	1 x 1	1	Yes	
11/2	Green	1 x 2	2	No	
11/3	Green	2 x 3	6	No	
11/4	Purple	3 x 4	12	No	
11/5					
11/6					
11/7					
11/8					
11/9					
11/10					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Solving Problems

What does it mean to solve a problem in math?

This month we will focus on solving story problems. We will locate the information we need to solve the problem and develop a strategy to solve the problem.

When we solve a problem we can use an **equation** to first represent the problem and then solve it.

Vocabulary

equation

$$4 = 2 + 2$$

$$3 + 1 = 4$$

$$3 + 1 = 2 + 2$$

$$25 + \underline{\quad} = 40$$

$$50 = a \times 2$$

Working Definition

equation: a mathematical statement asserting that two quantities have the same value

Solving Problems

$$4 \times 6 = t$$

What do you notice about this equation?
How would we determine what t is worth?

Vocabulary

variable

$$x + 3$$

Working Definition

variable: a quantity that can change or have different values; also a symbol (often a letter) that stands for a variable

Solving Problems

Let's practice solving a few more equations with variables.

$$4 \times t = 24$$

$$t \times 6 = 24$$

$$3 \times m = 15$$

$$c - 7 = 10$$

$$25 + 25 = f$$

Solving Problems

Read the following story problem. Discuss with a neighbor: How would you solve the problem? What equation would you use?

November | Solving Problems Activity 1 *1 copy for display*



Story Problems with Equations

Brian has \$24. He wants to buy a new game that costs \$50. How much more money does Brian need to be able to buy the game?

1 Choose the equation that best matches the problem.

a $24 \times m = 50$

b $24 + m = 50$

c $24 + 50 = m$

d $50 - m = 24$

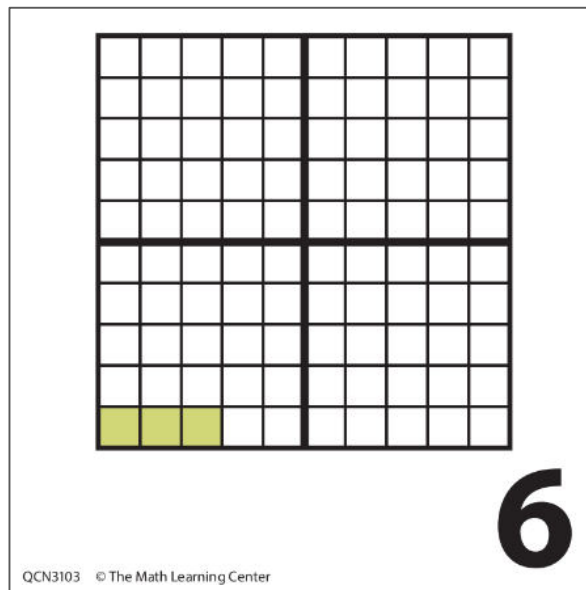
Now that you have multiple choice options, which option(s) would you choose to solve the problem?



November
DAY FOUR

Calendar Grid

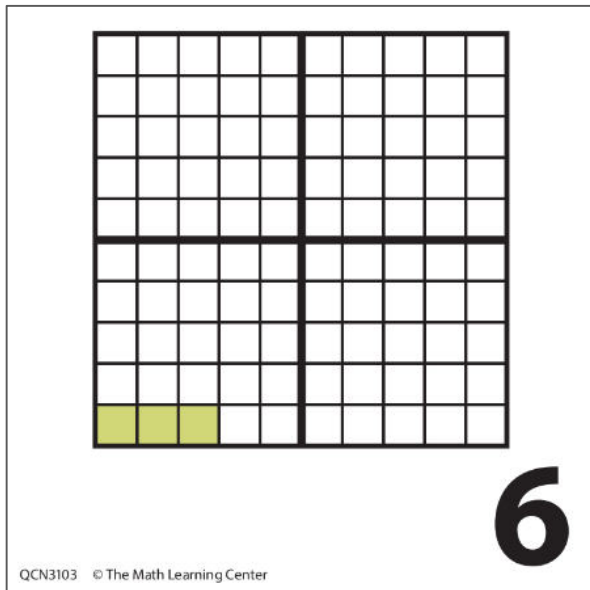
November 6



After observing today's array, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?

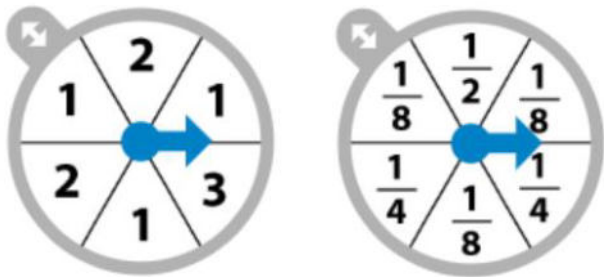


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/1	Blue	1 x 1	1	Yes	
11/2	Green	1 x 2	2	No	
11/3	Green	2 x 3	6	No	
11/4	Purple	3 x 4	12	No	
11/5	Blue	2 x 2	4	Yes	
11/6					
11/7					
11/8					
11/9					
11/10					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Number Line

Take a minute to observe the number line below. What do you notice?
How would you fill in the missing lines on the number line?

Where would you place the number 48 on this number line? Why?

Number Line

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Number Line Activities 1 & 3 1 or 2 copies for display, as ne

November

Number Corner Grade 3 Teacher Masters

17

Number Line

Today we are going to practice rounding to the nearest ten.

Let's round the following numbers to the nearest ten:

- 23
- 44
- 57
- 96
- 92

What would we do if a number had a 5 in the ones place (exactly halfway between ten)?

Number Line

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Number Line Activities 1 & 3 1 or 2 copies for display, as ne

November

Number Corner Grade 3 Teacher Masters

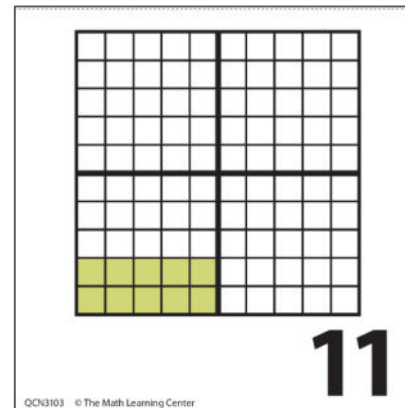
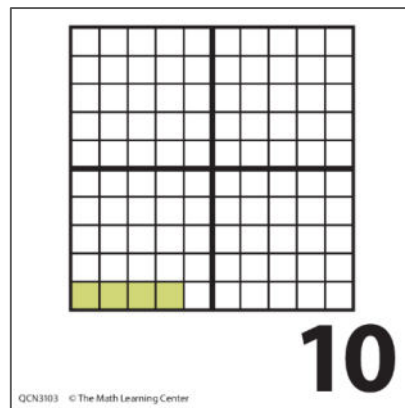
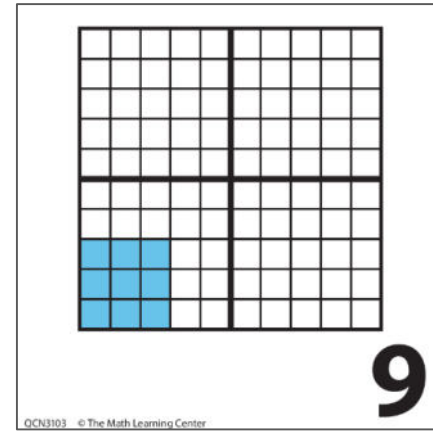
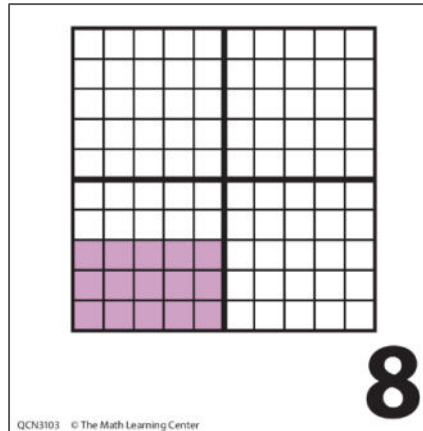
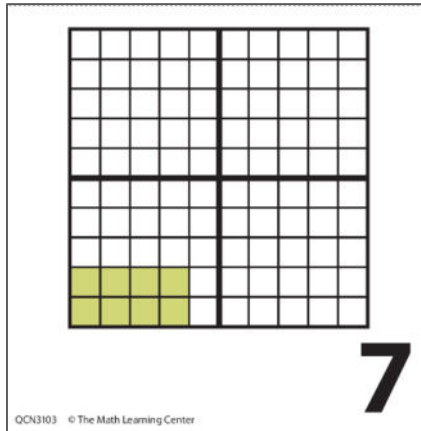
17



November
DAY FIVE

Calendar Grid

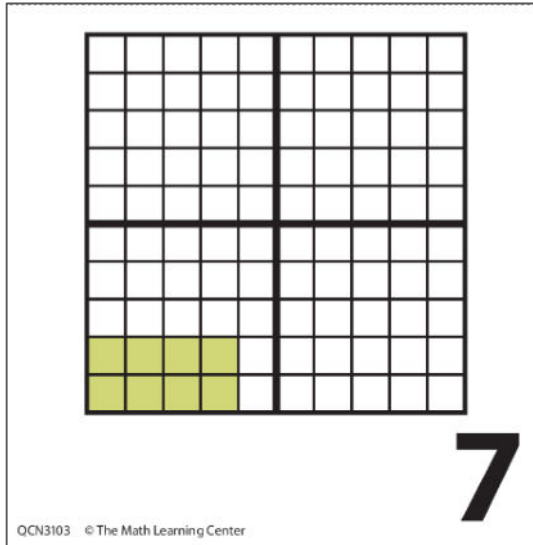
November 7-11



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

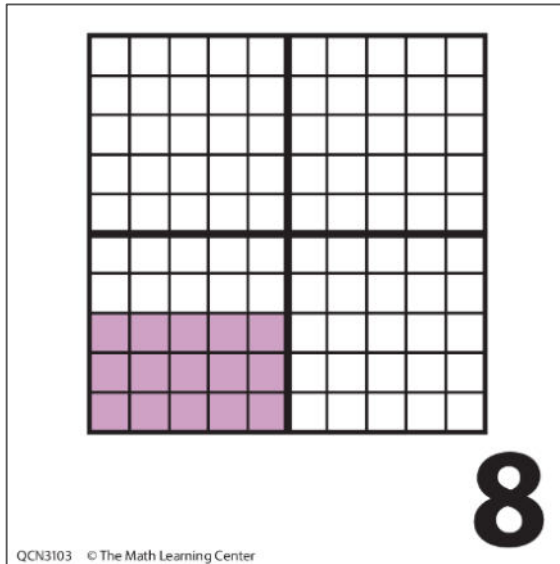
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/1	Blue	1 x 1	1	Yes	
11/2	Green	1 x 2	2	No	
11/3	Green	2 x 3	6	No	
11/4	Purple	3 x 4	12	No	
11/5	Blue	2 x 2	4	Yes	
11/6	Green	1 x 3	3	No	
11/7					
11/8					
11/9					
11/10					

Calendar Grid

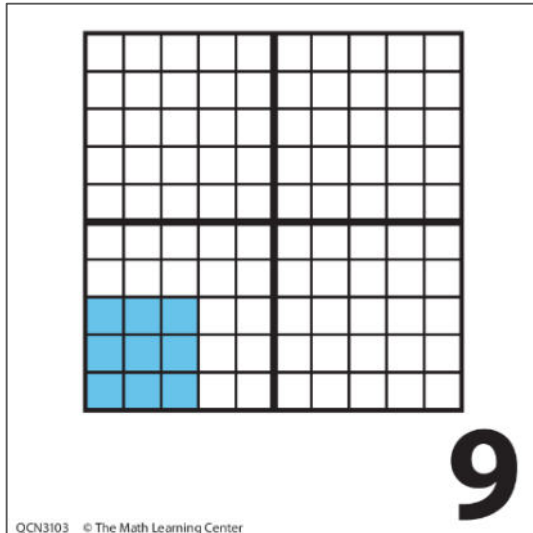
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
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11/4	Purple	3 x 4	12	No	
11/5	Blue	2 x 2	4	Yes	
11/6	Green	1 x 3	3	No	
11/7	Green	2 x 4	8	No	
11/8					
11/9					
11/10					

Calendar Grid

Do you have any other observations/predictions?

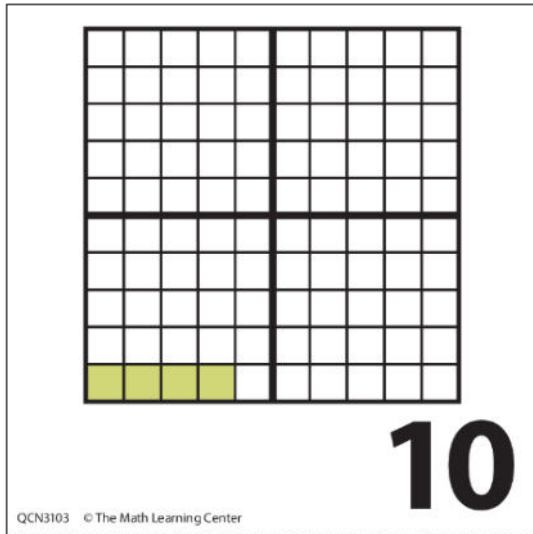


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/1	Blue	1 x 1	1	Yes	
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11/3	Green	2 x 3	6	No	
11/4	Purple	3 x 4	12	No	
11/5	Blue	2 x 2	4	Yes	
11/6	Green	1 x 3	3	No	
11/7	Green	2 x 4	8	No	
11/8	Purple	3 x 5	15	No	
11/9					
11/10					

Calendar Grid

Do you have any other observations/predictions?

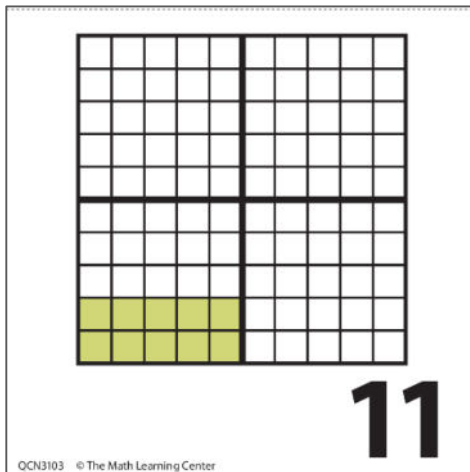


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/1	Blue	1 x 1	1	Yes	
11/2	Green	1 x 2	2	No	
11/3	Green	2 x 3	6	No	
11/4	Purple	3 x 4	12	No	
11/5	Blue	2 x 2	4	Yes	
11/6	Green	1 x 3	3	No	
11/7	Green	2 x 4	8	No	
11/8	Purple	3 x 5	15	No	
11/9	Blue	3 x 3	9	Yes	
11/10					

Calendar Grid

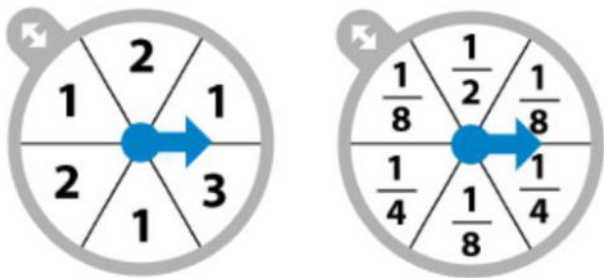
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/11					
11/12					
11/13					
11/14					
11/15					
11/16					
11/17					
11/18					
11/19					
11/20					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



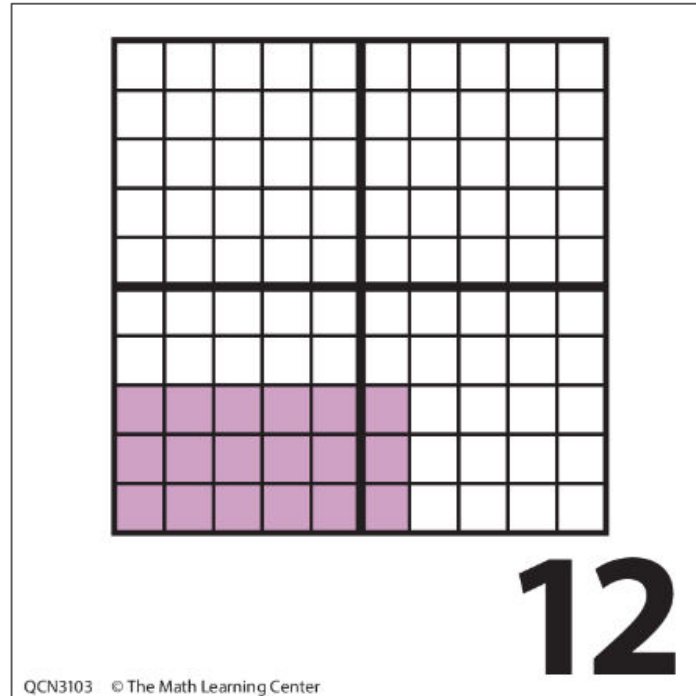
Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
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12			
13			
14			
15			



November
DAY SIX

Calendar Grid

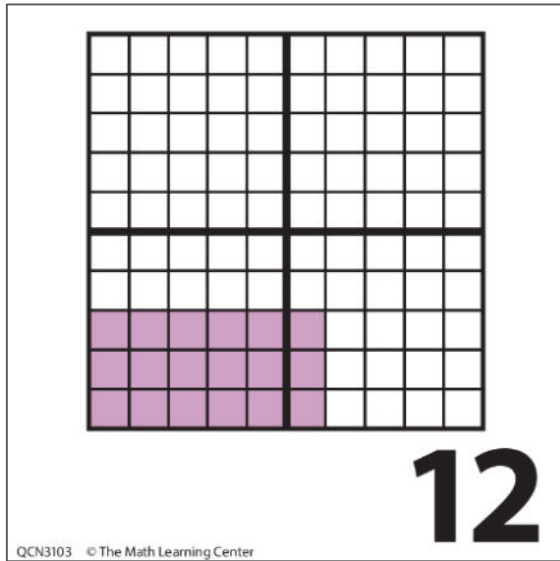
November 12



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

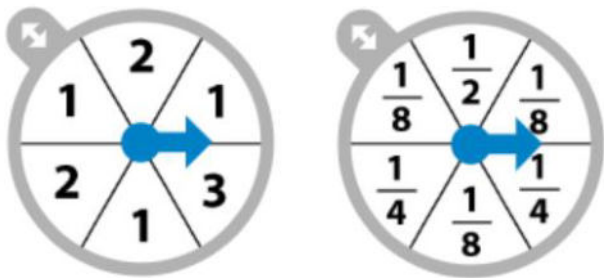
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12					
11/13					
11/14					
11/15					
11/16					
11/17					
11/18					
11/19					
11/20					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Calendar Collector

Today we will determine the running total for each of our number lines. We will count the unit fraction pieces to help us label each point.

You may notice that some of the fractions we have collected so far total up to greater than the whole number one. We are going to learn two new vocabulary words to help us describe fractions greater than one: **mixed numbers** and **improper fractions**.

Vocabulary

**mixed
number**

$$1\frac{1}{2}$$

$$1\frac{1}{107}$$

$$3\frac{4}{7}$$

$$1\frac{1}{4}$$

Working Definition

mixed number: a number greater than 1 expressed as a whole number plus a fraction whose value is less than 1

Vocabulary

**improper
fraction**

$$\frac{3}{2}$$

$$\frac{108}{107}$$

$$\frac{25}{7}$$

$$\frac{5}{4}$$

Working Definition

improper fraction: a fraction greater than 1 that is not expressed as a mixed number; a fraction in which the numerator is larger than the denominator

Calendar Collector

Let's label our number lines to see how far we've gotten so far.

Now that we have labeled how far our fractions have went, let's make some predictions.

Which number line will be the most full by the end of the month?

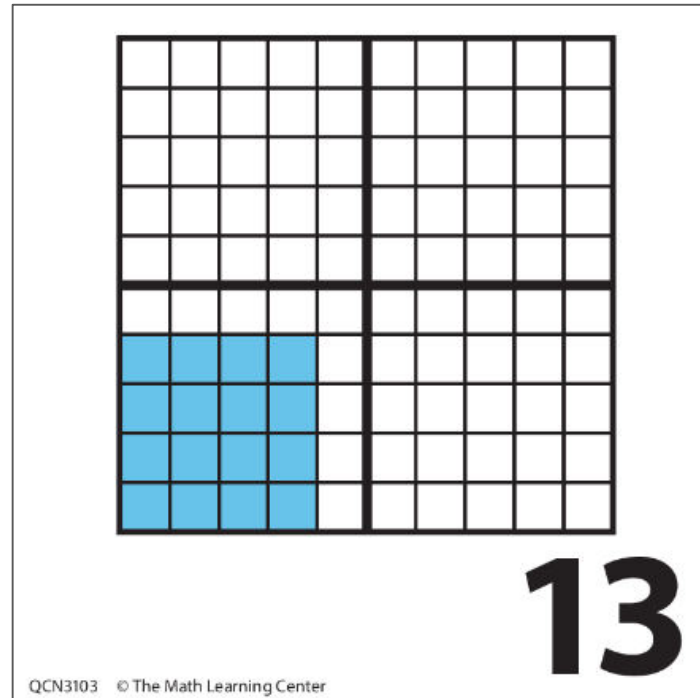
About how far do you think we will get on each number line?



November
DAY SEVEN

Calendar Grid

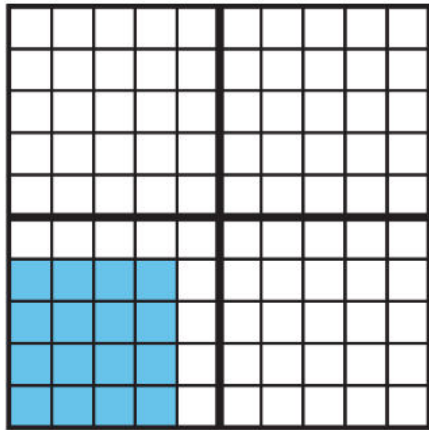
November 13



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?



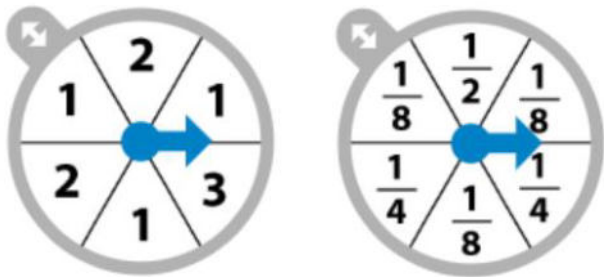
13

Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12	Purple	3 x 6	18	No	
11/13					
11/14					
11/15					
11/16					
11/17					
11/18					
11/19					
11/20					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
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6			
7			
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11			
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15			

Solving Problems

Let's review how to solve problems with variables. How would you solve for m in the following equation?

$$3 \times m = 24$$

Solving Problems

We are going to solve problems about field trips today. We will complete the first problem together.

November | Solving Problems Activity 1

NAME _____

DATE _____



Field Trips page 1 of 2

Tanika's third grade class is going on a field trip to the science museum. Help Tanika answer the following questions. For each question, be sure to show your work using pictures, numbers, or words.

- 1** Tickets to the museum cost \$7 each. There are 8 students in Tanika's group. How much does it cost for Tanika's group to go to the science museum?
 - a** What is this problem asking you to figure out? Underline any information that can help you solve the problem.
 - b** Write an equation that represents the problem. Write your equation with a letter that stands for the unknown quantity.
 - c** Solve the problem. Show your work.

Solving Problems

Now that we have practiced, complete problems 2 and 3 with a partner.

November | Solving Problems Activity 1

NAME _____

DATE _____

Field Trips page 2 of 2

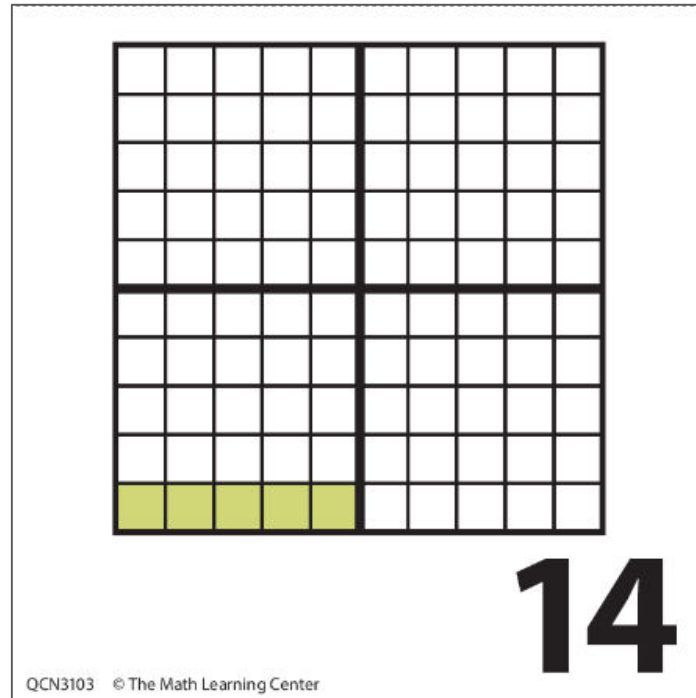
- 2** Tanika's group is studying animals. They visit two exhibits with turtles. There are 51 turtles in all. There are 25 turtles in one exhibit. How many turtles are in the other exhibit?
- a** What is this problem asking you to figure out? Underline any information that can help you solve the problem.
 - b** Write an equation that represents the problem. Write your equation with a letter that stands for the unknown quantity.
 - c** Solve the problem. Show your work.
- 3** There are 27 students in Tanika's class. At lunch, they sit at 3 tables. If the same number of students sits at each table, how many students are at each table?
- a** What is this problem asking you to figure out? Underline any information that can help you solve the problem.
 - b** Write an equation that represents the problem. Write your equation with a letter that stands for the unknown quantity.
 - c** Solve the problem. Show your work.



November
DAY EIGHT

Calendar Grid

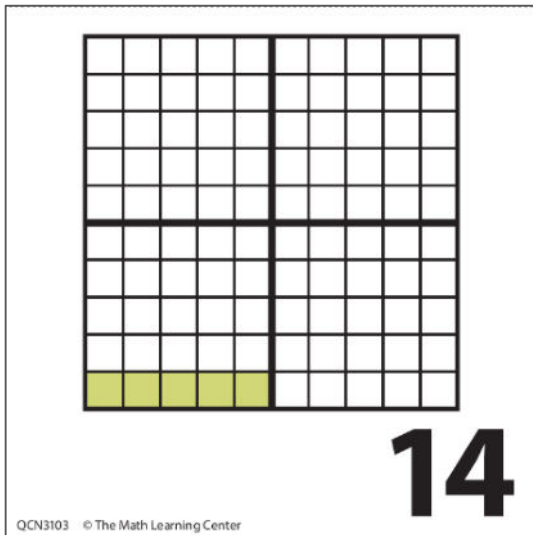
November 14



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

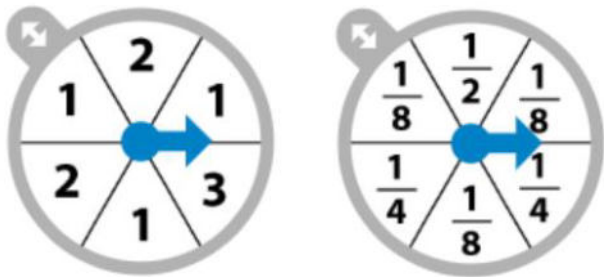
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12	Purple	3 x 6	18	No	
11/13	Blue	4 x 4	16	Yes	
11/14					
11/15					
11/16					
11/17					
11/18					
11/19					
11/20					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Number Line

Today we are going to play a game called Round and Add.

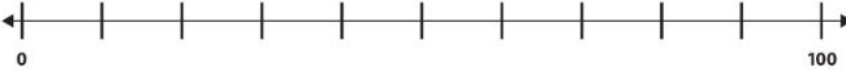
First we need to label the blank lines on the number line.

Game Rules:

1. Player one will roll two dice (1-6 and 4-9).
2. Player one will arrange the dice to make a two digit number.
3. Player one will place the number on the number line and claim the multiple of ten to which that number rounds. Once a multiple of ten has been claimed, it cannot be claimed again.
4. Player two will do steps 1-3.
5. When all multiples of ten have been claimed, estimate both players' scores. Then figure out the exact score.

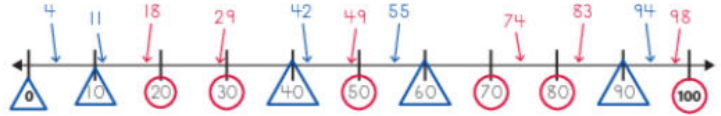
Today we will play teacher vs. class.

Round & Add



Teacher	Students
Estimated Score:	Estimated Score:
Exact Score:	Exact Score:

Round & Add



Number Line Activities 2.8.3 (copy for display)

Number Center Grade 3 Teacher Masters

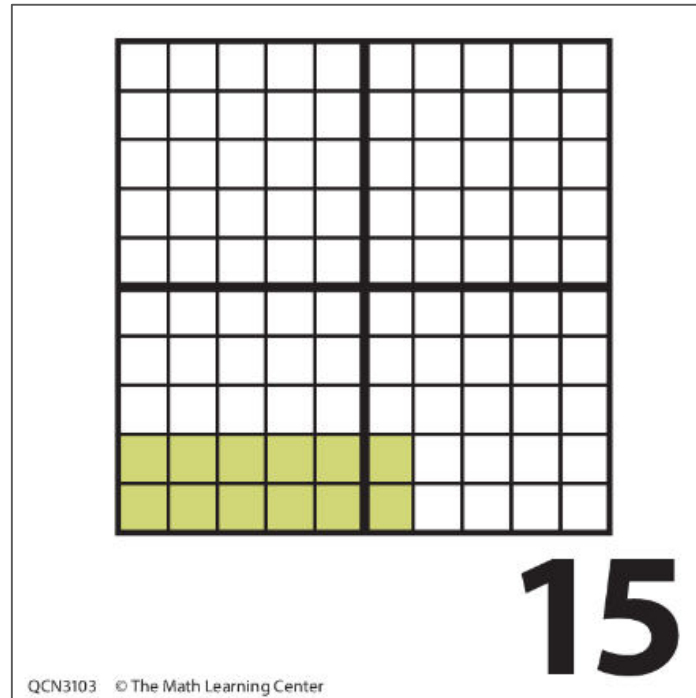
blue triangle - Mr. Bollinger red circle - class



November
DAY NINE

Calendar Grid

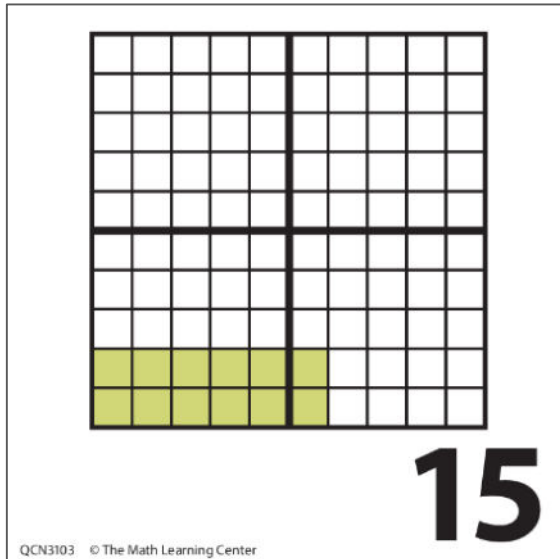
November 15



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?



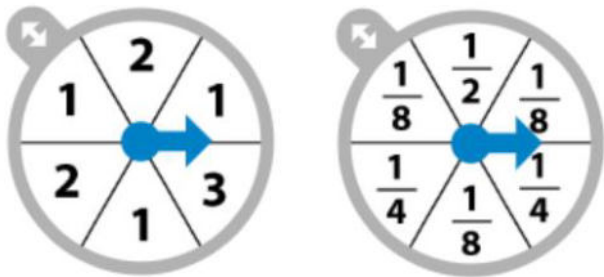
QCN3103 © The Math Learning Center

Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12	Purple	3 x 6	18	No	
11/13	Blue	4 x 4	16	Yes	
11/14	Green	1 x 5	5	No	
11/15					
11/16					
11/17					
11/18					
11/19					
11/20					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Solving Problems

Today we are going to go through our “Field Trips” assignment. We will discuss our answers for questions 2 and 3 and share about how we found the answers.

Raise your hand to share about how you solved number two.

Raise your hand to share about how you solved number three.

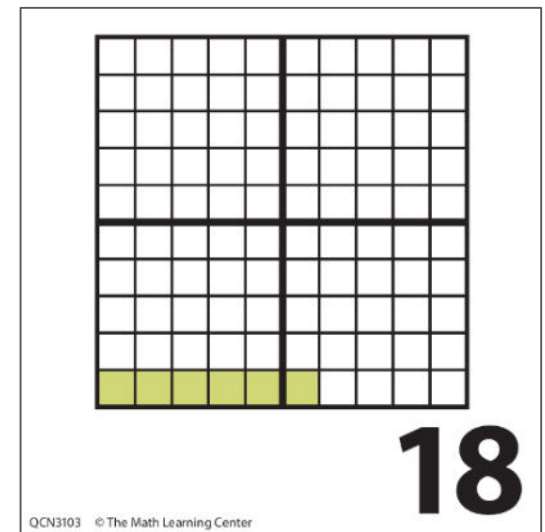
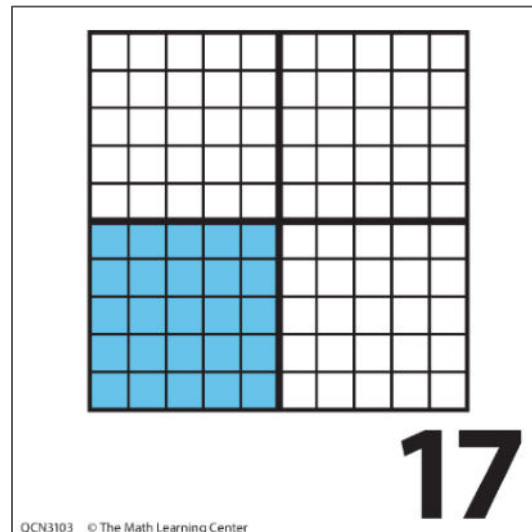
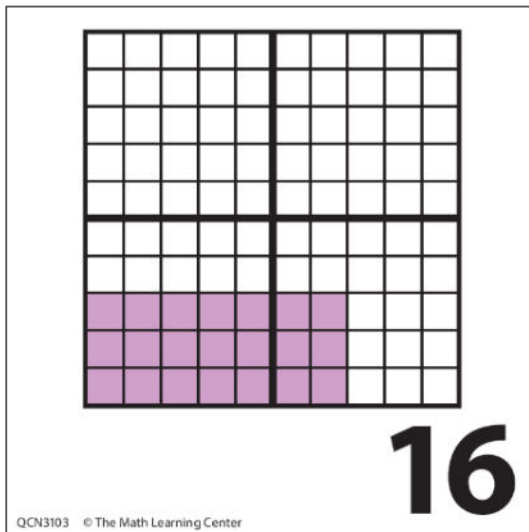
What do you know about writing equations that you didn't before? What is still confusing for you about this approach to problem solving?



November
DAY TEN

Calendar Grid

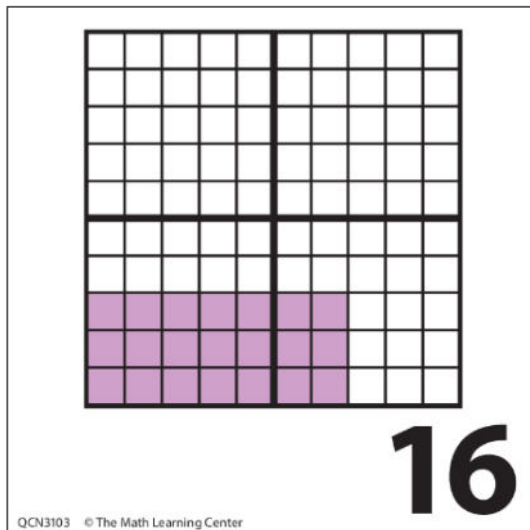
November 16-18



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?



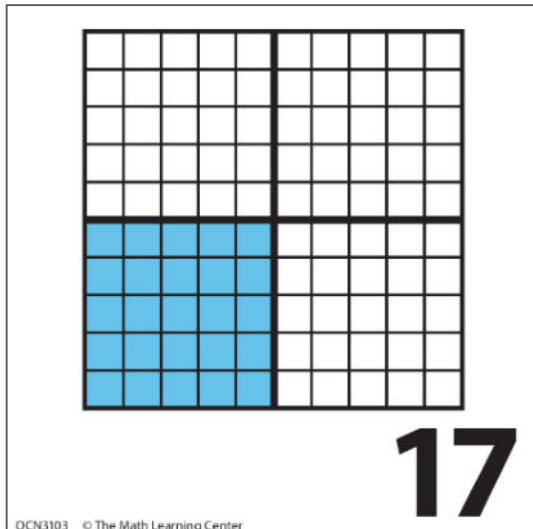
QCN3103 © The Math Learning Center

Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12	Purple	3 x 6	18	No	
11/13	Blue	4 x 4	16	Yes	
11/14	Green	1 x 5	5	No	
11/15	Green	2 x 6	12	No	
11/16					
11/17					
11/18					
11/19					
11/20					

Calendar Grid

Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12	Purple	3 x 6	18	No	
11/13	Blue	4 x 4	16	Yes	
11/14	Green	1 x 5	5	No	
11/15	Green	2 x 6	12	No	
11/16	Purple	3 x 7	21	No	
11/17					
11/18					
11/19					
11/20					

Calendar Grid

What patterns are you noticing now that so many calendar markers have been added?

Share what you notice with a neighbor. Then, be ready to share your answer with the class.

Some math words that may help you explain your observations are:

- dimension
- area
- factor
- product
- array

Calendar Grid

Let's take another look at our Observation Chart. Look at the height and length column and the area column. What relationship do you notice between these columns?

Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12	Purple	3 x 6	18	No	
11/13	Blue	4 x 4	16	Yes	
11/14	Green	1 x 5	5	No	
11/15	Green	2 x 6	12	No	
11/16	Purple	3 x 7	21	No	
11/17	Blue	5 x 5	25	Yes	
11/18					
11/19					
11/20					

Calendar Grid

You are going to use these small number charts to make predictions about future markers.

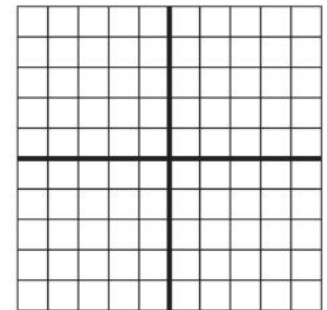
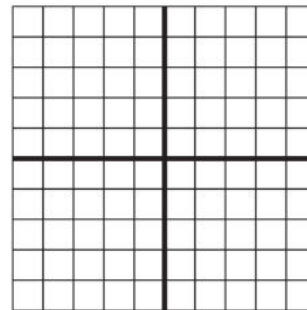
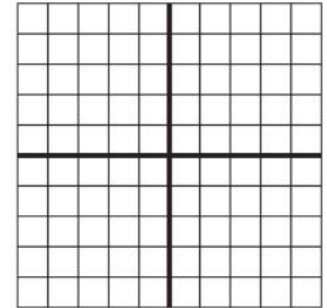
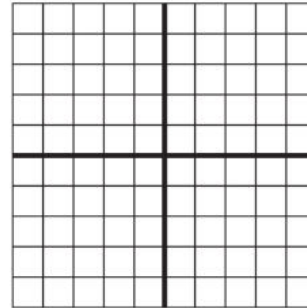
Be sure to label the dimensions and the area. Color the array with the color you believe it would be.

Be ready to share about your predictions. I will put them on display so we can check on them as the month progresses.

November | Calendar Grid Activities 2 & 3 *half-class set, cut apart into individual grids*



Small Number Charts



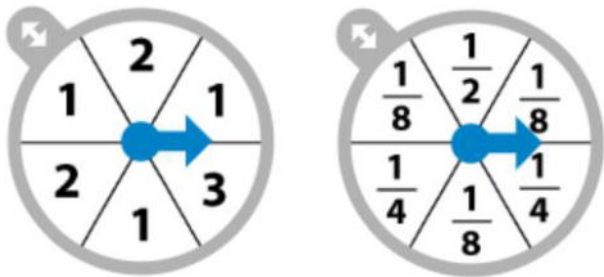
Calendar Grid

Do you have any other observations/predictions?

Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12	Purple	3 x 6	18	No	
11/13	Blue	4 x 4	16	Yes	
11/14	Green	1 x 5	5	No	
11/15	Green	2 x 6	12	No	
11/16	Purple	3 x 7	21	No	
11/17	Blue	5 x 5	25	Yes	
11/18					
11/19					
11/20					

Calendar Collector

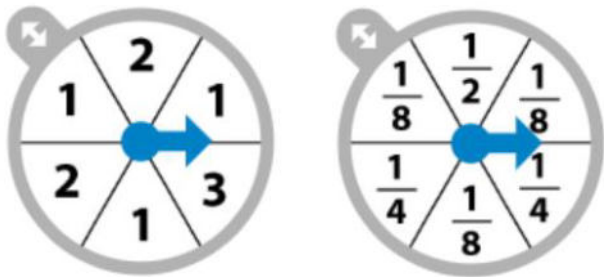
We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
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Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



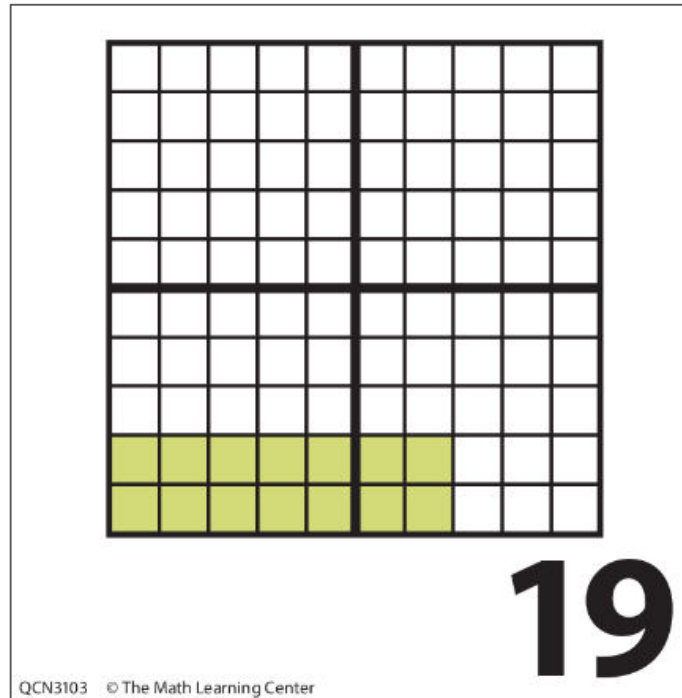
Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
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15			



November
DAY ELEVEN

Calendar Grid

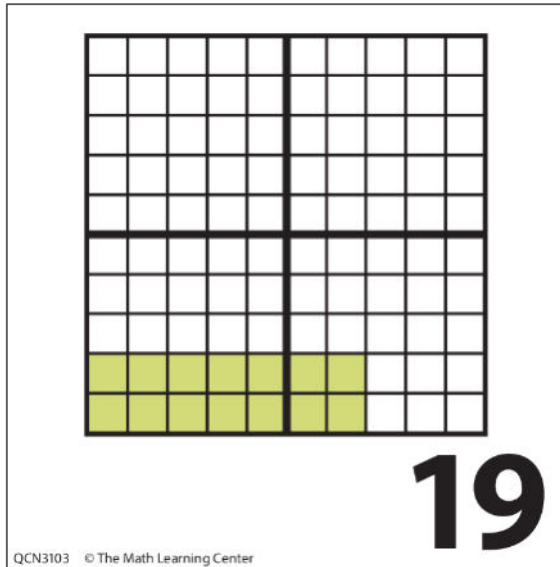
November 19



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

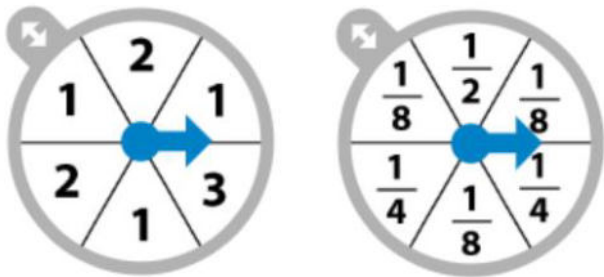
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12	Purple	3 x 6	18	No	
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11/14	Green	1 x 5	5	No	
11/15	Green	2 x 6	12	No	
11/16	Purple	3 x 7	21	No	
11/17	Blue	5 x 5	25	Yes	
11/18	Green	1 x 6	6	No	
11/19					
11/20					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
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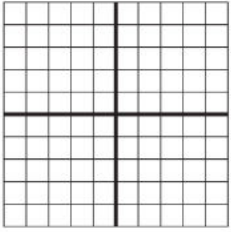
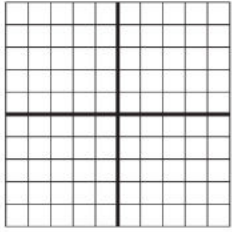
Computational Fluency

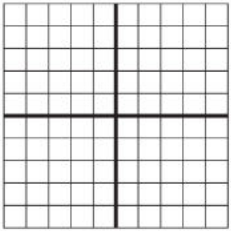
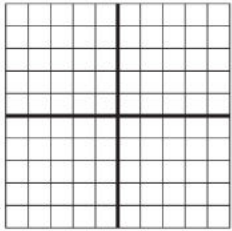
Today we are going to learn a game called Array Race to help us learn our multiplication facts.

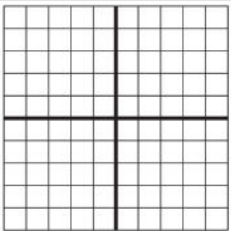
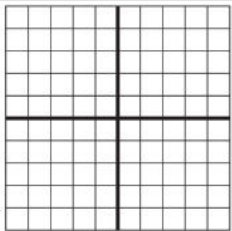
Take a look at the game board. What do you notice about the grids?

Introducing Array Race

Player 1 _____ Player 2 _____

Round 1		
	★ Equation:	★ Equation:

Round 2		
	★ Equation:	★ Equation:

Round 3		
	★ Equation:	★ Equation:

Score: Add the products from each round to find your score.

Player 1's Score	Player 2's Score

Computational Fluency

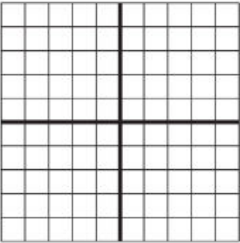
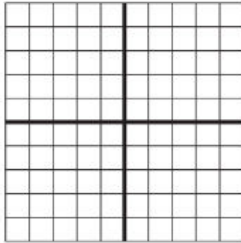
This game will be similar to the Loops and Groups game we learned in September. Instead of drawing loops and groups to represent multiplication, you will draw arrays.

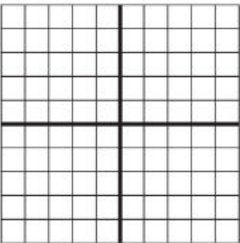
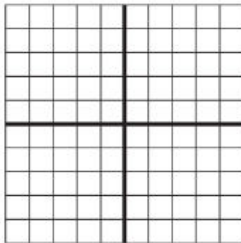
1. Players will take turns rolling two dice, 1-6 die and a 4-9 die, to see what size array to sketch.
2. Then, they sketch an outline of the array on the 10 by 10 grid and shade it in.
3. Finally, they write an equation to show the dimension (factors) and area (product).
4. When each player has had three turns, they add their three products to get a final score.
5. Then they roll a More or Less die to see if the high score or the low score wins.

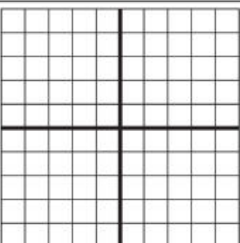
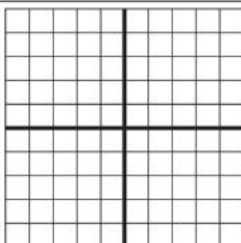
Today we will practice by playing teacher versus class.

 **Introducing Array Race**

Player 1 _____ Player 2 _____

Round 1		
	★ Equation:	★ Equation:

Round 2		
	★ Equation:	★ Equation:

Round 3		
	★ Equation:	★ Equation:

Score: Add the products from each round to find your score.

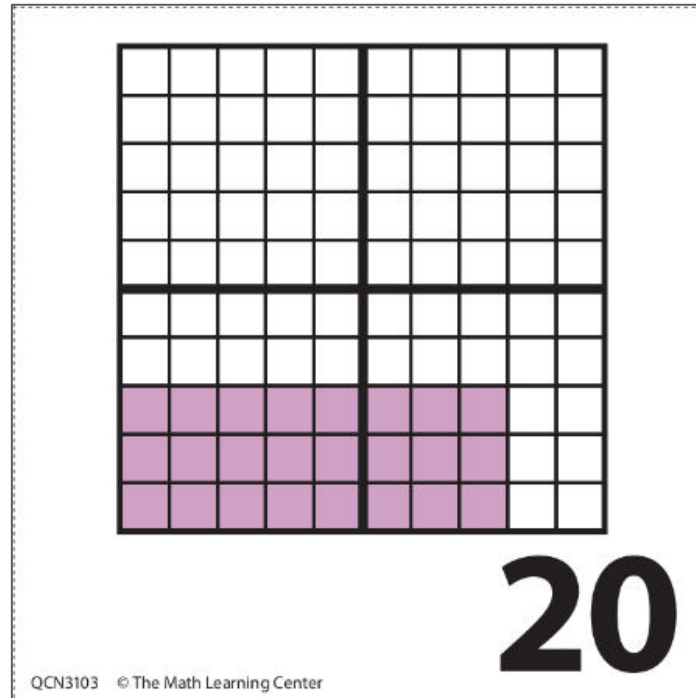
Player 1's Score	Player 2's Score



November
DAY TWELVE

Calendar Grid

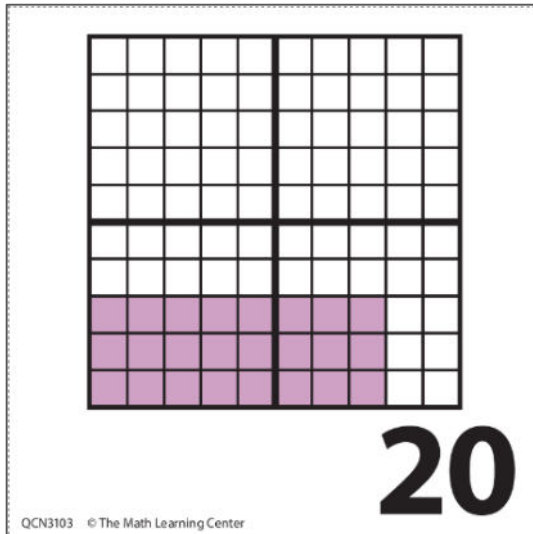
November 20



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?

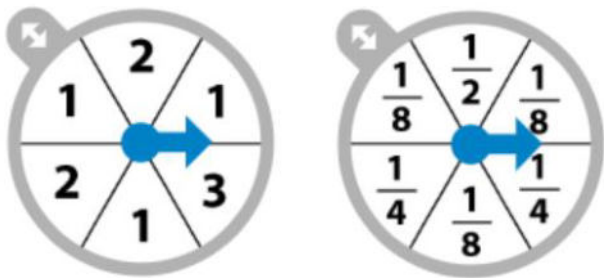


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/11	Green	2 x 5	10	No	
11/12	Purple	3 x 6	18	No	
11/13	Blue	4 x 4	16	Yes	
11/14	Green	1 x 5	5	No	
11/15	Green	2 x 6	12	No	
11/16	Purple	3 x 7	21	No	
11/17	Blue	5 x 5	25	Yes	
11/18	Green	1 x 6	6	No	
11/19	Green	2 x 7	14	No	
11/20					

Calendar Collector

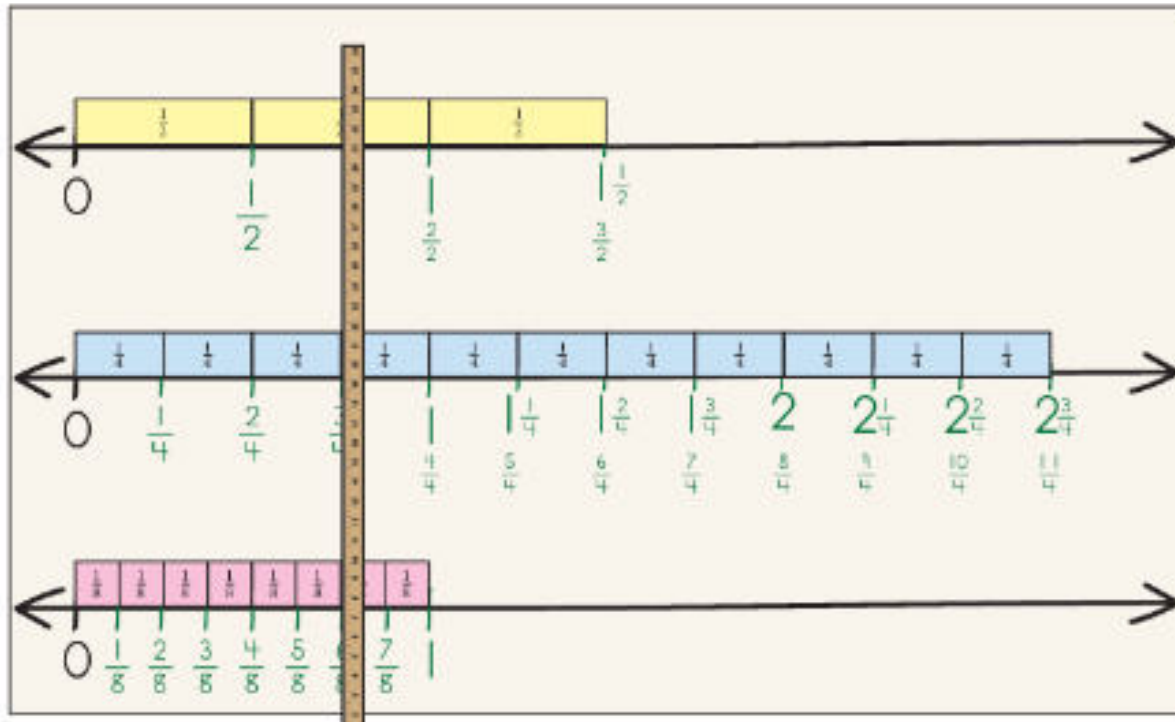
We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
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13			
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15			

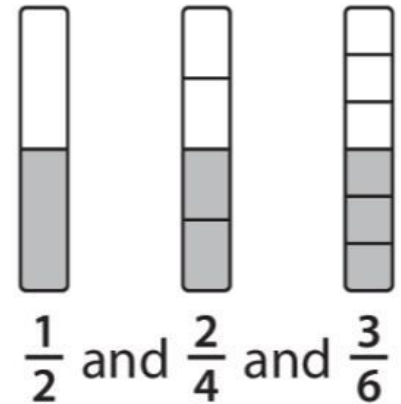
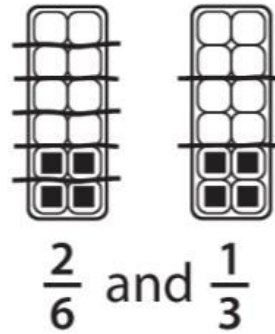
Calendar Collector

Let's take a look at our number lines. We are going to explore some equivalent fractions on the number lines. Equivalent fractions are fractions that are worth the same. Does anyone see any fractions that are worth the same?



Vocabulary

equivalent fractions



Working Definition

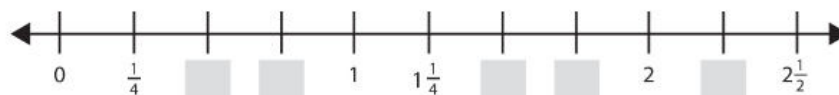
equivalent fractions: two or more different fractions that represent the same quantity

Calendar Collector

Complete Fractions on a Number Line assignment.

Fractions on a Number Line

- 1 Label the missing numbers on these number lines. You can use improper fractions or mixed numbers (or both) to label the numbers greater than 1.



- 2 Use the number lines to help complete this table.

Improper Fraction	Mixed Number	How many $\frac{1}{2}$ s?	How many $\frac{1}{4}$ s?	How many $\frac{1}{8}$ s?
$\frac{10}{4}$	$2\frac{2}{4}$	5	10	$\frac{20}{8}$
$\frac{12}{8}$				
$\frac{4}{2}$				

- 3 Use the number lines above to help answer the following questions.

- How many fourths are equal to $1\frac{1}{2}$?
- How many eighths are equal to $\frac{3}{4}$?
- How many fourths are equal to $2\frac{2}{8}$?

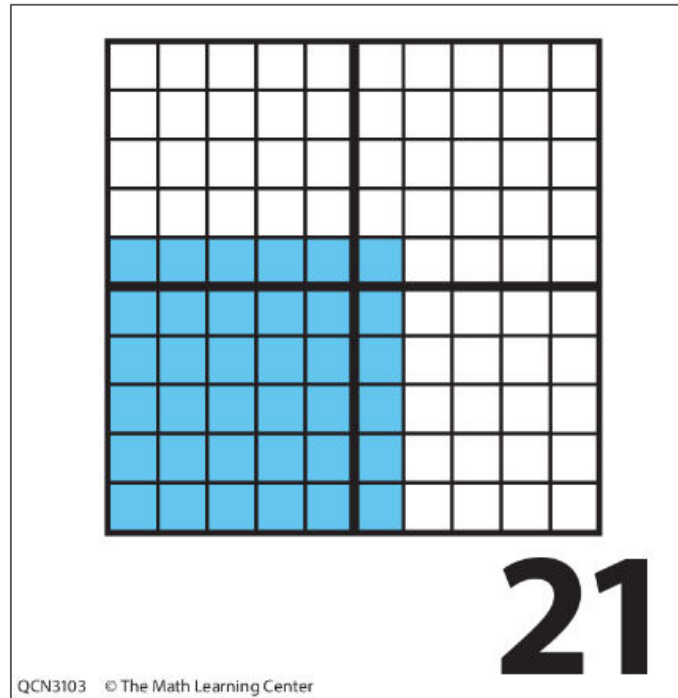
- 4 Write as many fractions and mixed numbers as you can think of that are equal to $2\frac{1}{2}$.



November
DAY THIRTEEN

Calendar Grid

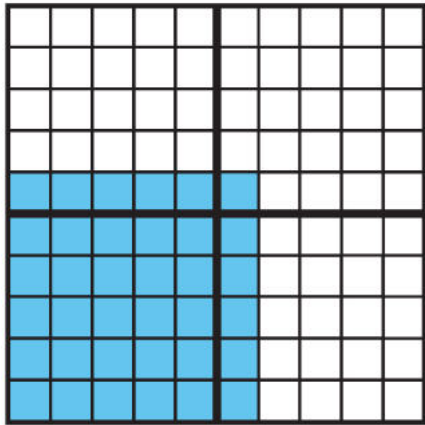
November 21



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?



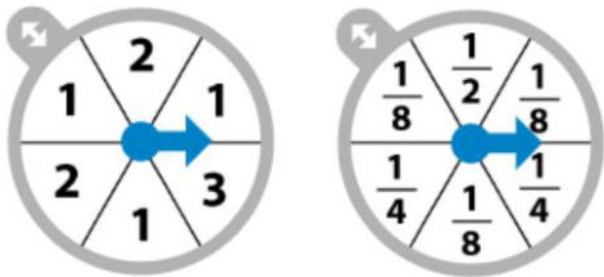
21

Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/21					
11/22					
11/23					
11/24					
11/25					
11/26					
11/27					
11/28					
11/29					
11/30					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Number Line

Last time during Number Line we played Round and Add. Let's review the rules.

Game Rules:

1. Player one will roll two dice (1-6 and 4-9).
2. Player one will arrange the dice to make a two digit number.
3. Player one will place the number on the number line and claim the multiple of ten to which that number rounds. Once a multiple of ten has been claimed, it cannot be claimed again.
4. Player two will do steps 1-3.
5. When all multiples of ten have been claimed, estimate both players' scores. Then figure out the exact score.

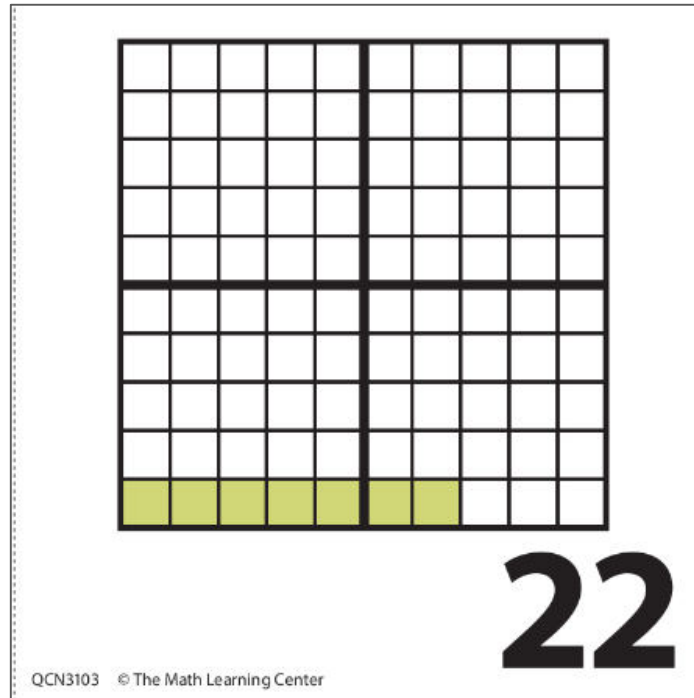
Today you will have the chance to play Round and Add with a partner!



November
DAY FOURTEEN

Calendar Grid

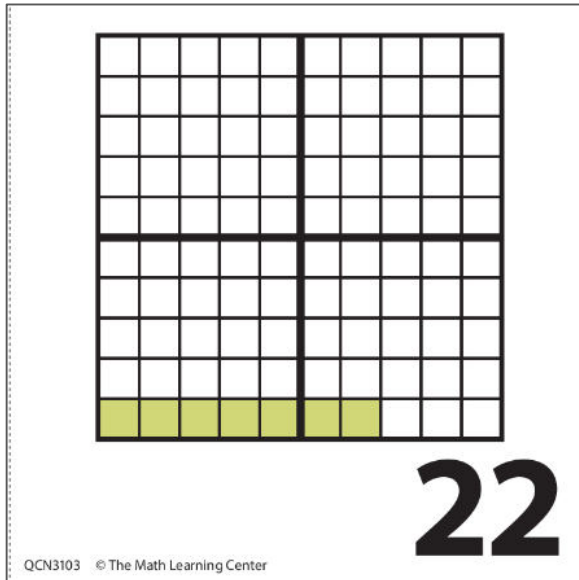
November 22



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

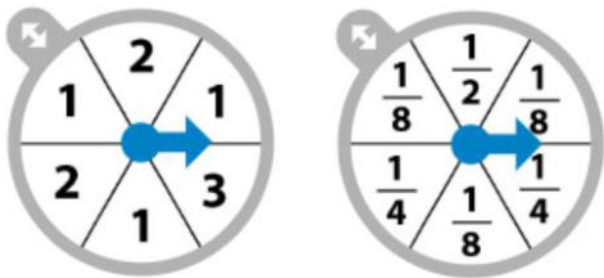
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/21	Blue	6 x 6	26	Yes	
11/22					
11/23					
11/24					
11/25					
11/26					
11/27					
11/28					
11/29					
11/30					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

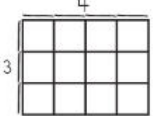
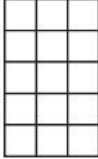
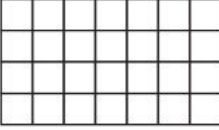
Calendar Grid

Complete the Rectangular Arrays assignment.

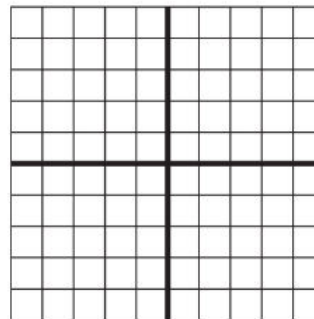


Rectangular Arrays

- Label the dimensions of each array. Then find the total area of each rectangle. Try to find the area without counting every square. Finally, write a multiplication equation using the dimensions and area of the array.

<p>ex</p> 	<p>a</p> 	<p>b</p> 
<p>Total Area:</p>	<p>Total Area:</p>	<p>Total Area:</p>
<p>Multiplication Equation:</p>	<p>Multiplication Equation:</p>	<p>Multiplication Equation:</p>

- Color in a 7-by-6 array on the grid. Label each dimension.
- Then find the total area of the array. See if you can find a way to do it without counting each square one by one. Show your work below. You can use pictures, numbers, or words to show how you found the area.

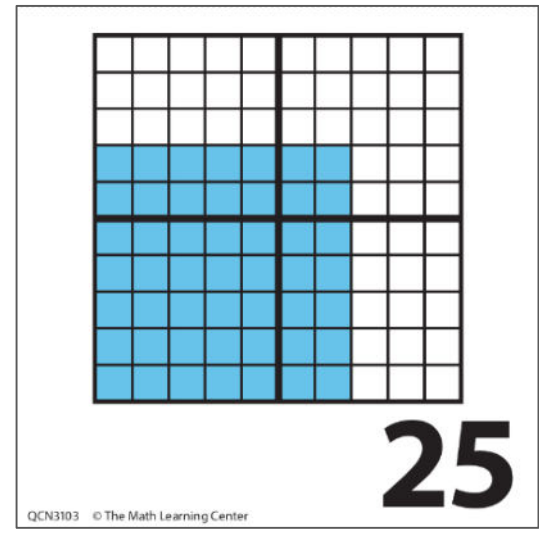
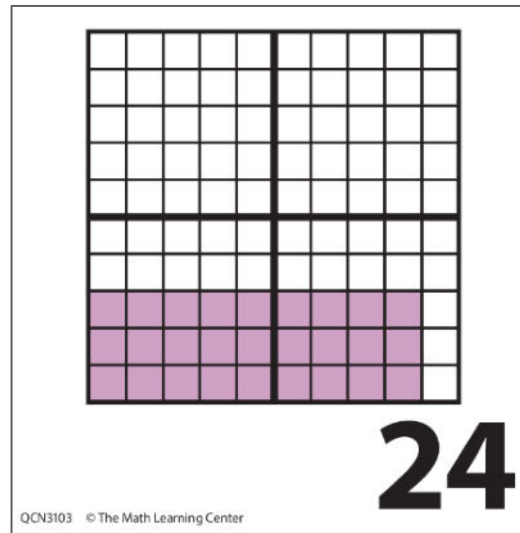
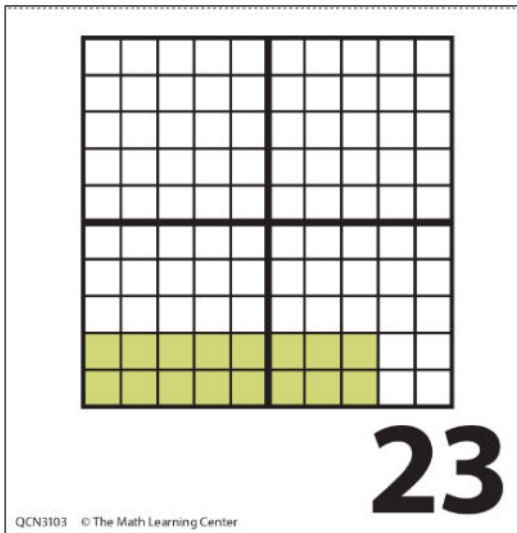




November
DAY FIFTEEN

Calendar Grid

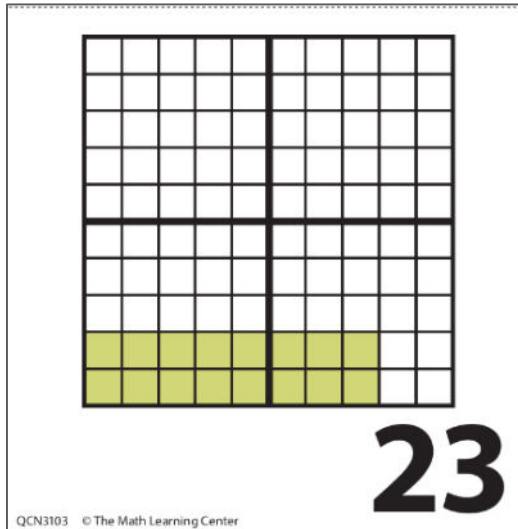
November 23-25



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

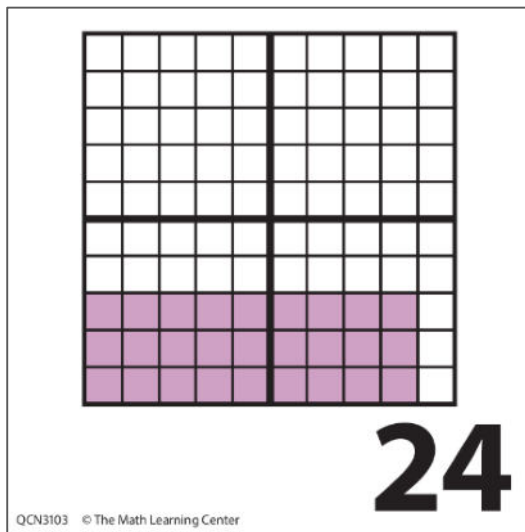
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/21	Blue	6 x 6	26	Yes	
11/22	Green	1 x 7	7	No	
11/23					
11/24					
11/25					
11/26					
11/27					
11/28					
11/29					
11/30					

Calendar Grid

Do you have any other observations/predictions?

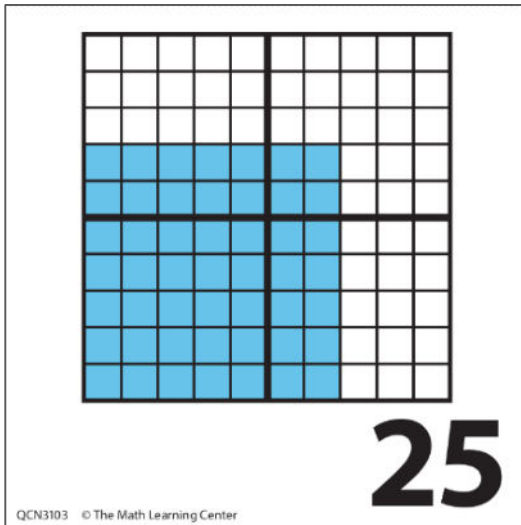


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/21	Blue	6 x 6	26	Yes	
11/22	Green	1 x 7	7	No	
11/23	Green	2 x 8	16	No	
11/24					
11/25					
11/26					
11/27					
11/28					
11/29					
11/30					

Calendar Grid

Do you have any other observations/predictions?

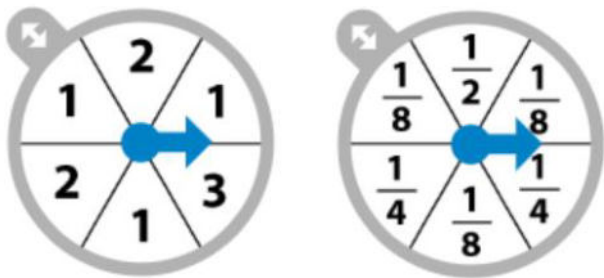


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/21	Blue	6 x 6	26	Yes	
11/22	Green	1 x 7	7	No	
11/23	Green	2 x 8	16	No	
11/24	Purple	3 x 9	27	No	
11/25					
11/26					
11/27					
11/28					
11/29					
11/30					

Calendar Collector

We will now update our Unit Fraction Race Record Sheet for today. I will choose my helper to go through the routine.



Unit Fractions Race Record Sheet			
Day	Number of Pieces	Size of Pieces	Equations
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Computational Fluency

Today you will play Array Race with a partner!

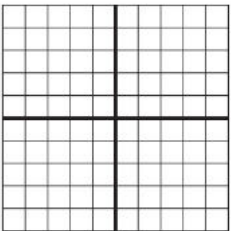
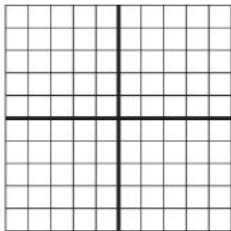
NAME _____

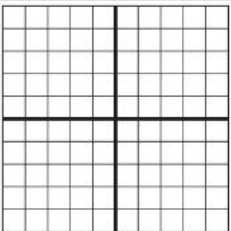
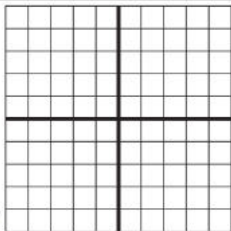
DATE _____

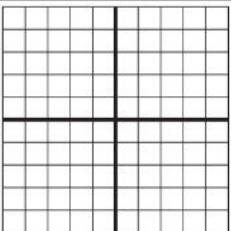
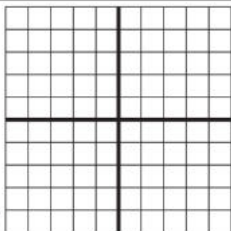
 **Array Race** page 1 of 2

Player 1 _____

Player 2 _____

Round 1		
	★ Equation: _____	★ Equation: _____

Round 2		
	★ Equation: _____	★ Equation: _____

Round 3		
	★ Equation: _____	★ Equation: _____

Score: Add the products from each round to find your score.

Player 1's Score	Player 2's Score



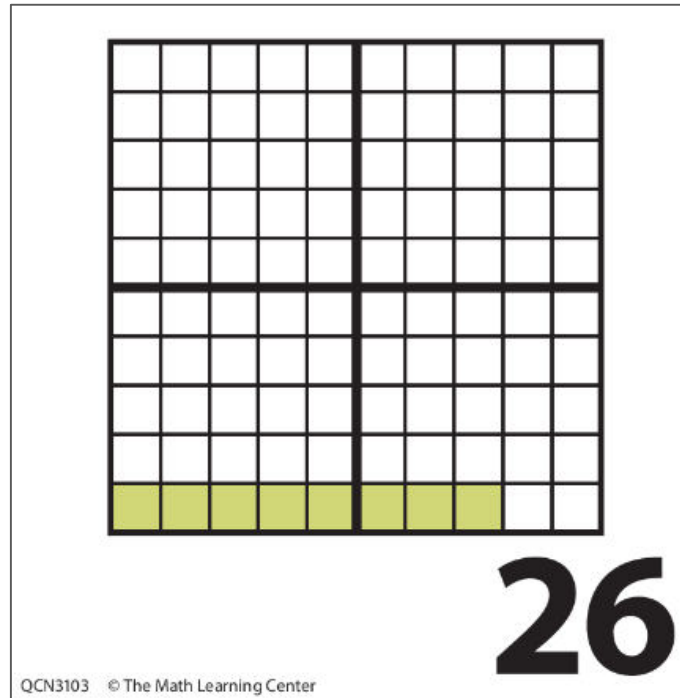
November

CALENDAR GRID

**26-30 (Use if
needed)**

Calendar Grid

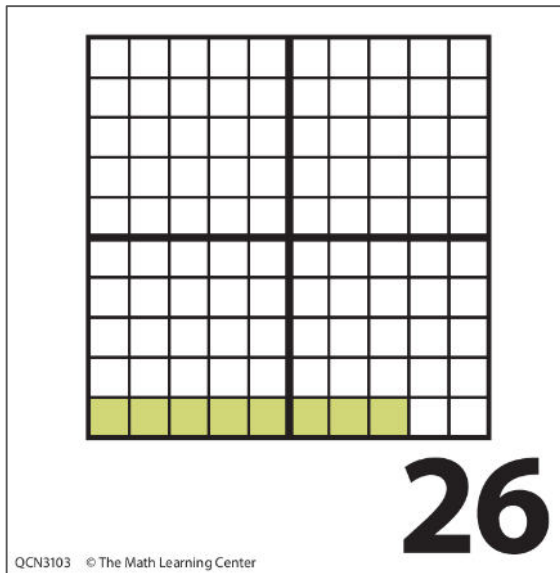
November 26



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

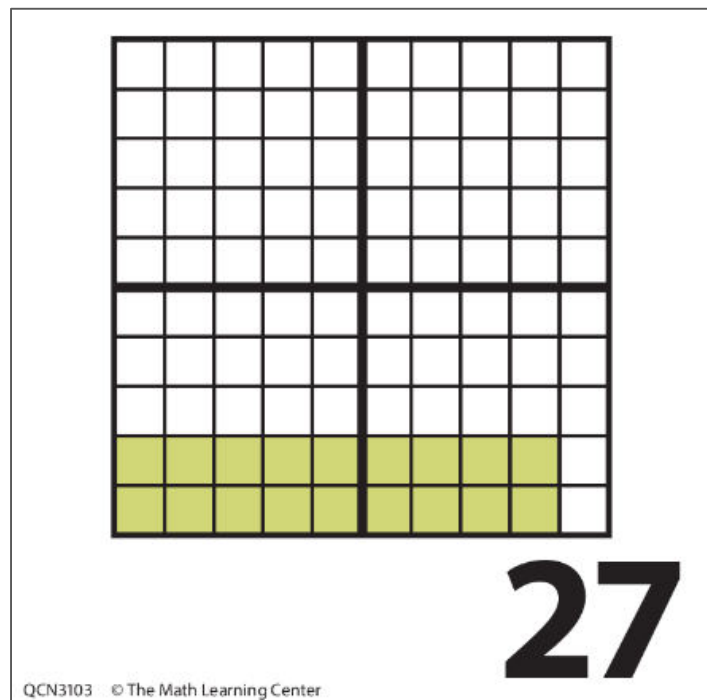
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/21	Blue	6 x 6	26	Yes	
11/22	Green	1 x 7	7	No	
11/23	Green	2 x 8	16	No	
11/24	Purple	3 x 9	27	No	
11/25	Blue	7 x 7	49	Yes	
11/26					
11/27					
11/28					
11/29					
11/30					

Calendar Grid

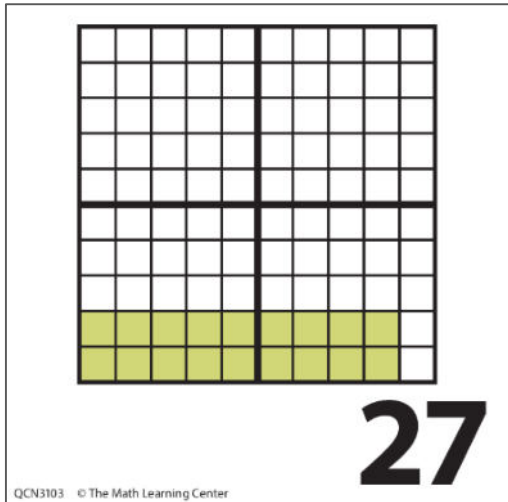
November 27



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?

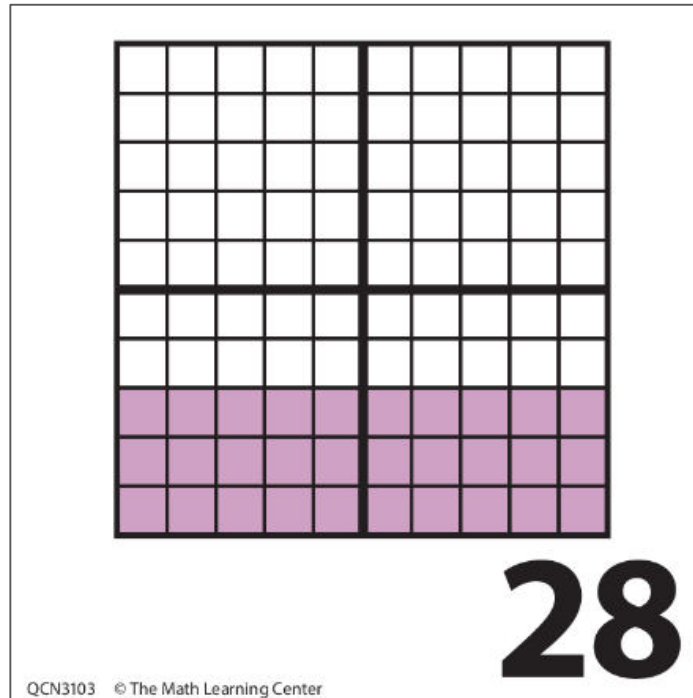


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/21	Blue	6 x 6	26	Yes	
11/22	Green	1 x 7	7	No	
11/23	Green	2 x 8	16	No	
11/24	Purple	3 x 9	27	No	
11/25	Blue	7 x 7	49	Yes	
11/26	Green	1 x 8	8	No	
11/27					
11/28					
11/29					
11/30					

Calendar Grid

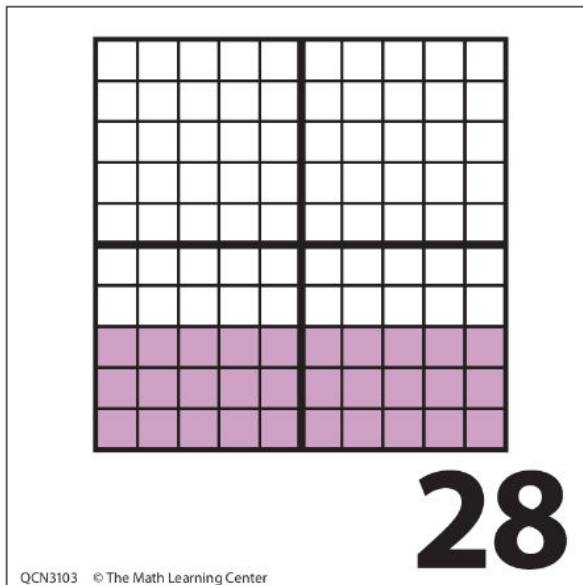
November 28



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

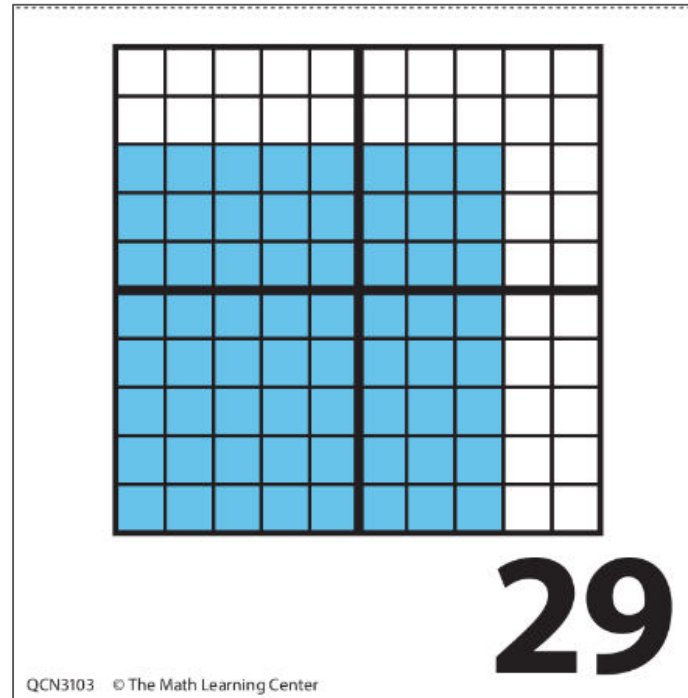
Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/21	Blue	6 x 6	26	Yes	
11/22	Green	1 x 7	7	No	
11/23	Green	2 x 8	16	No	
11/24	Purple	3 x 9	27	No	
11/25	Blue	7 x 7	49	Yes	
11/26	Green	1 x 8	8	No	
11/27	Green	2 x 9	18	No	
11/28					
11/29					
11/30					

Calendar Grid

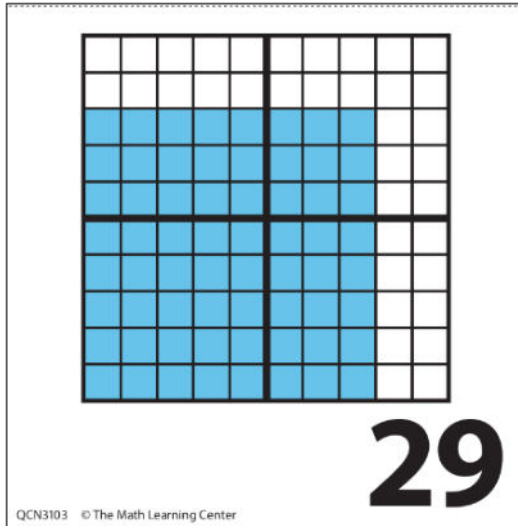
November 29



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?

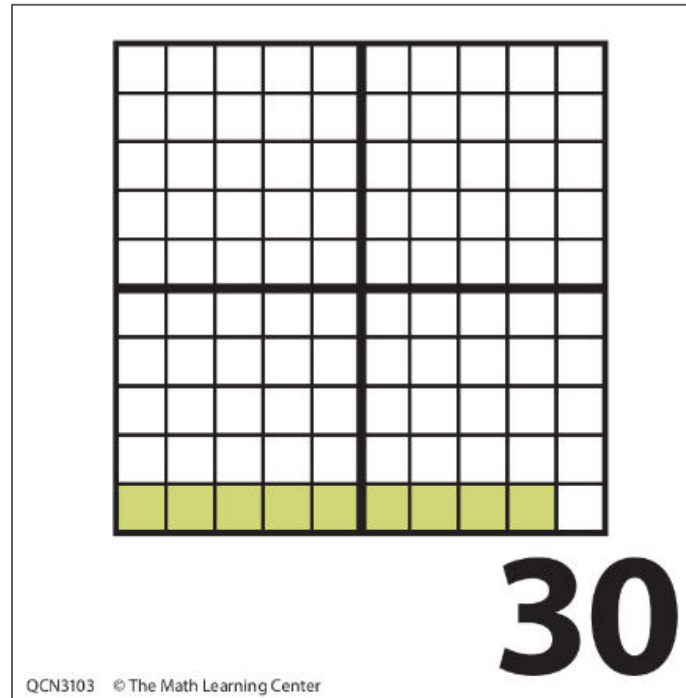


Calendar Grid Observation Chart

Date	Color	Height x Length	Area	Square?	Other Observations
11/21	Blue	6 x 6	26	Yes	
11/22	Green	1 x 7	7	No	
11/23	Green	2 x 8	16	No	
11/24	Purple	3 x 9	27	No	
11/25	Blue	7 x 7	49	Yes	
11/26	Green	1 x 8	8	No	
11/27	Green	2 x 9	18	No	
11/28	Purple	3 x 10	30	No	
11/29					
11/30					

Calendar Grid

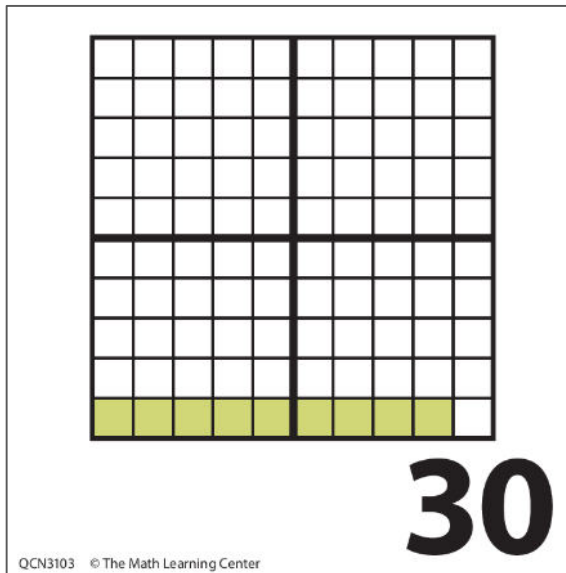
November 30



After observing today's arrays, what are your mathematical observations/predictions?

Calendar Grid

Do you have any other observations/predictions?



Calendar Grid Observation Chart					
Date	Color	Height x Length	Area	Square?	Other Observations
11/21	Blue	6 x 6	26	Yes	
11/22	Green	1 x 7	7	No	
11/23	Green	2 x 8	16	No	
11/24	Purple	3 x 9	27	No	
11/25	Blue	7 x 7	49	Yes	
11/26	Green	1 x 8	8	No	
11/27	Green	2 x 9	18	No	
11/28	Purple	3 x 10	30	No	
11/29	Blue	8 x 8	84	No	
11/30					