



X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144



Name: _____ Class: _____ Date: _____

Adding Fractions

Directions: Use the fraction pieces to find the sum. Write your answer. Put the fraction in lowest terms if possible.

1. $\frac{1}{3} + \frac{1}{3} =$

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

3. $\frac{2}{5} + \frac{1}{5} =$

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

5. $\frac{6}{10} + \frac{2}{10} =$

6. $\frac{7}{8} + \frac{3}{8} =$

7. What do you notice about the denominators in each problem?

8. How do you add fractions when you have a common denominator? **Explain.**

9. Were any of your answers greater than one whole? Explain how you know if the sum is greater than one whole.

Subtracting Fractions

Directions: Use the fraction pieces to find the difference. Write your answer. Put the fraction in lowest terms if possible.

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

2. $\frac{3}{4} - \frac{1}{4} =$

3. $\frac{4}{5} - \frac{1}{5} =$

4. $\frac{8}{12} - \frac{5}{12} =$

5. $\frac{9}{10} - \frac{3}{10} =$

6. $\frac{6}{8} - \frac{5}{8} =$

7. What do you notice about the denominators in each problem?

8. How do you subtract fractions when you have a common denominator? Explain your answer.



Name: _____ Class: _____ Date: _____

Adding Fractions Part 2

Directions: Represent each addition problem using the fraction circles. Find the sum. Put the fraction in lowest terms if possible.

1. $\frac{1}{4} + \frac{2}{8} =$

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

3. $\frac{3}{6} + \frac{5}{12} =$

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

5. $\frac{1}{2} + \frac{1}{3} =$

6. $\frac{2}{5} + \frac{3}{10} =$

7. What do you notice about the denominators in each problem?

8. How do you add fractions that have different denominators?

Explain.

Subtracting Fractions Part 2

Directions: Represent each subtracting problem using the fraction circles. Find the difference. Put your answer in lowest terms if possible.

1. $\frac{7}{8} - \frac{1}{4} =$

2. $\frac{5}{6} - \frac{1}{3} =$

3. $\frac{4}{5} - \frac{3}{10} =$

4. $\frac{5}{8} - \frac{1}{2} =$

5. $\frac{7}{12} - \frac{2}{6} =$

6. $\frac{9}{10} - \frac{3}{5} =$

7. What do you notice about the denominators in each problem?

8. How do you subtract fractions that have different denominators?

Explain.

Name: _____ Class: _____ Date: _____

Multiplying a Whole Number by a Fraction

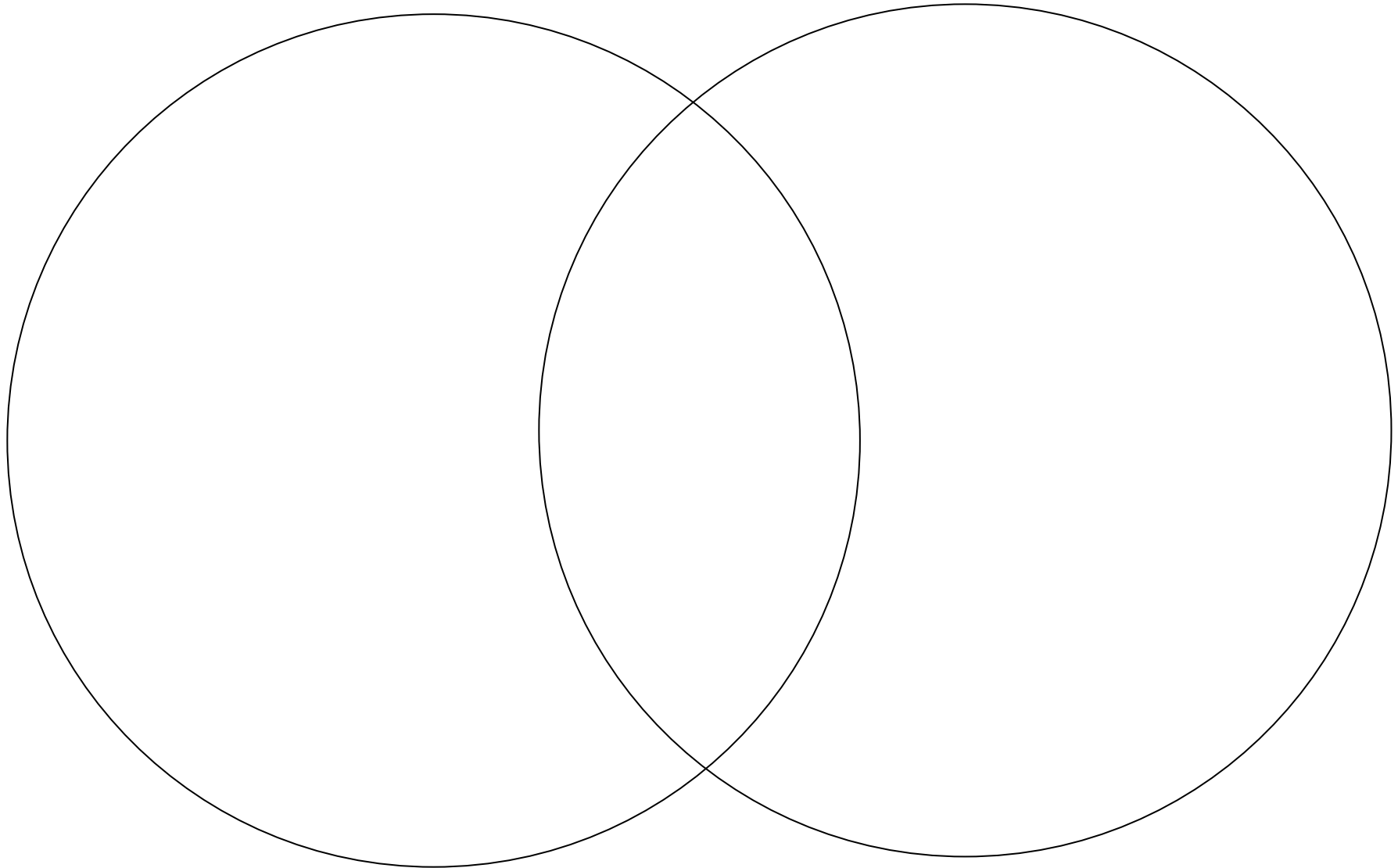
Problem	Drawing	Equation
$1 \times \frac{1}{3} =$		
$2 \times \frac{1}{3} =$		
$3 \times \frac{1}{3} =$		

Problem	Drawing	Equation
$2 \times \frac{2}{3} =$		
$\frac{1}{4} \times 2 =$		
$\frac{1}{4} \times 3 =$		

Problem	Drawing	Equation
$3 \times \frac{1}{5} =$		
$2 \times \frac{2}{5} =$		
$3 \times \frac{2}{8} =$		



Wrap Up: Look at your answers. Do you see any patterns? Can you think of a rule for multiplying a whole number by a fraction that will work for all problems?



Name: _____ Class: _____ Date: _____

Finding the Product of Two Fractions

Directions: Use your fraction strips to help you answer the problems below.

$\frac{1}{2} \times \frac{1}{2}$ <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <p>The product of _____ and _____ is _____.</p>	$\frac{1}{2} \times \frac{1}{3}$ <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <p>The product of _____ and _____ is _____.</p>	$\frac{1}{2} \times \frac{1}{4}$ <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <p>The product of _____ and _____ is _____.</p>	$\frac{1}{2} \times \frac{1}{5}$ <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <p>The product of _____ and _____ is _____.</p>
$\frac{1}{3} \times \frac{1}{2}$ <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <p>The product of _____ and _____ is _____.</p>	$\frac{1}{3} \times \frac{1}{3}$ <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <p>The product of _____ and _____ is _____.</p>	$\frac{1}{3} \times \frac{1}{4}$ <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <p>The product of _____ and _____ is _____.</p>	$\frac{1}{3} \times \frac{1}{5}$ <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <p>The product of _____ and _____ is _____.</p>

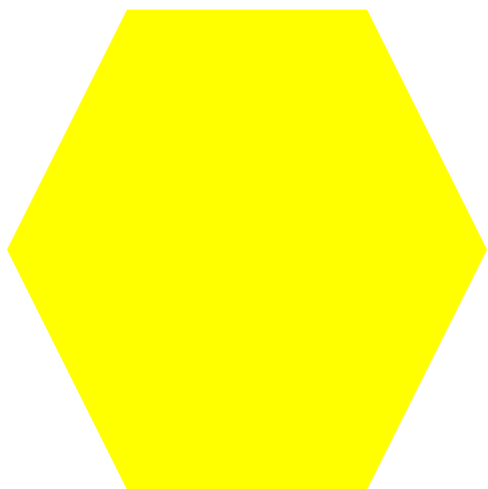
Look at your products. Do you notice a pattern? Can you think of a rule that you can use to find the product of any fractions?

Name: _____ Class: _____ Date: _____

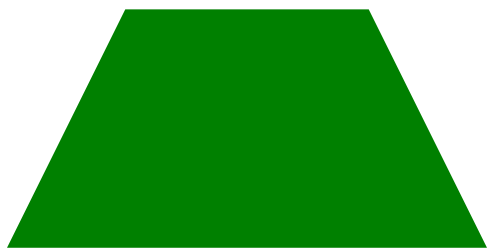
Student Activity Sheet 13

Directions: Use the pattern blocks to answer the questions below.

1. If the yellow hexagon block represents 1 whole pizza, fill in the blank with the amount of pizza that each pattern block represents.



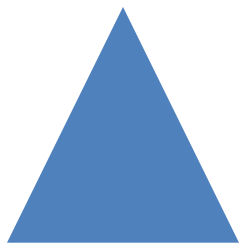
= 1 whole pizza.



= _____



= _____



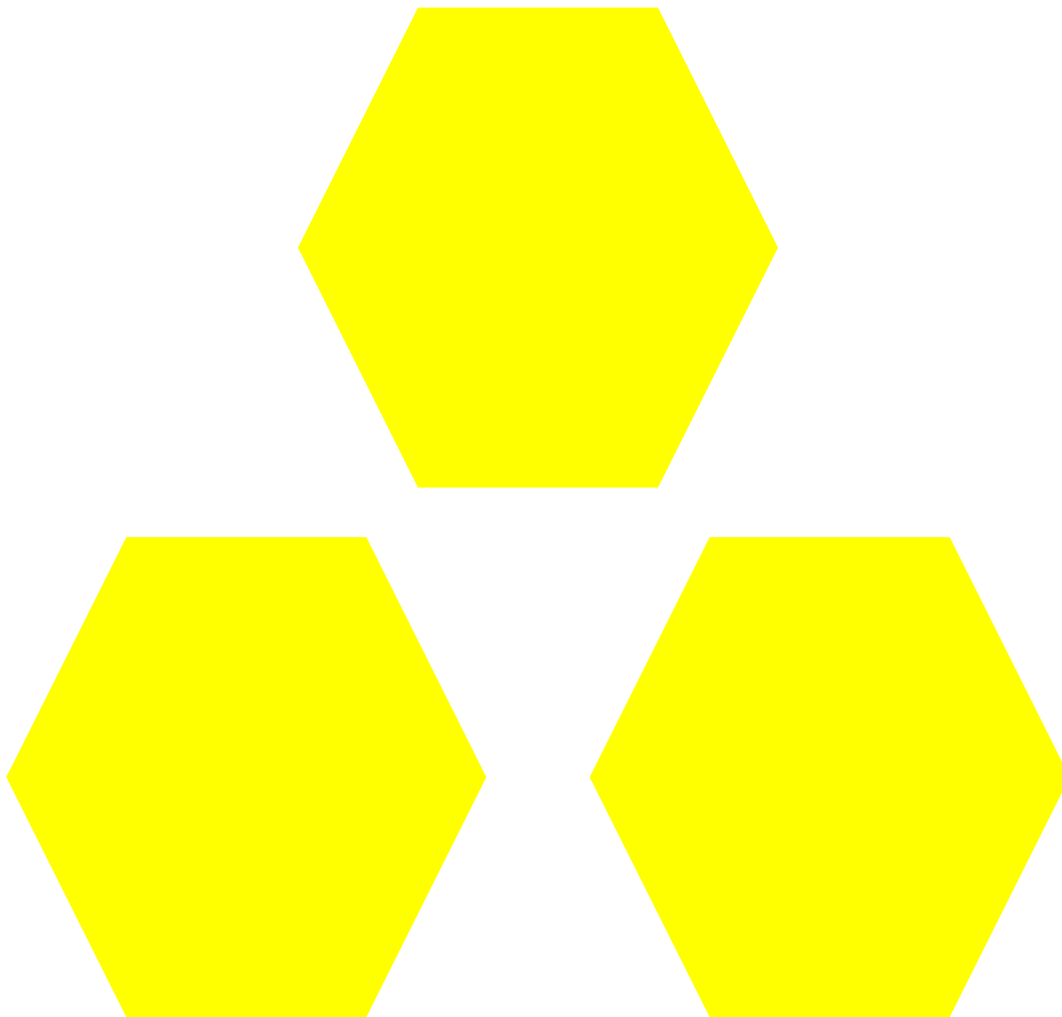
= _____

2. What fraction of a pizza is represented by 2 blue rhombus blocks?

3. What fraction of a pizza is represented by 3 blue triangle blocks?

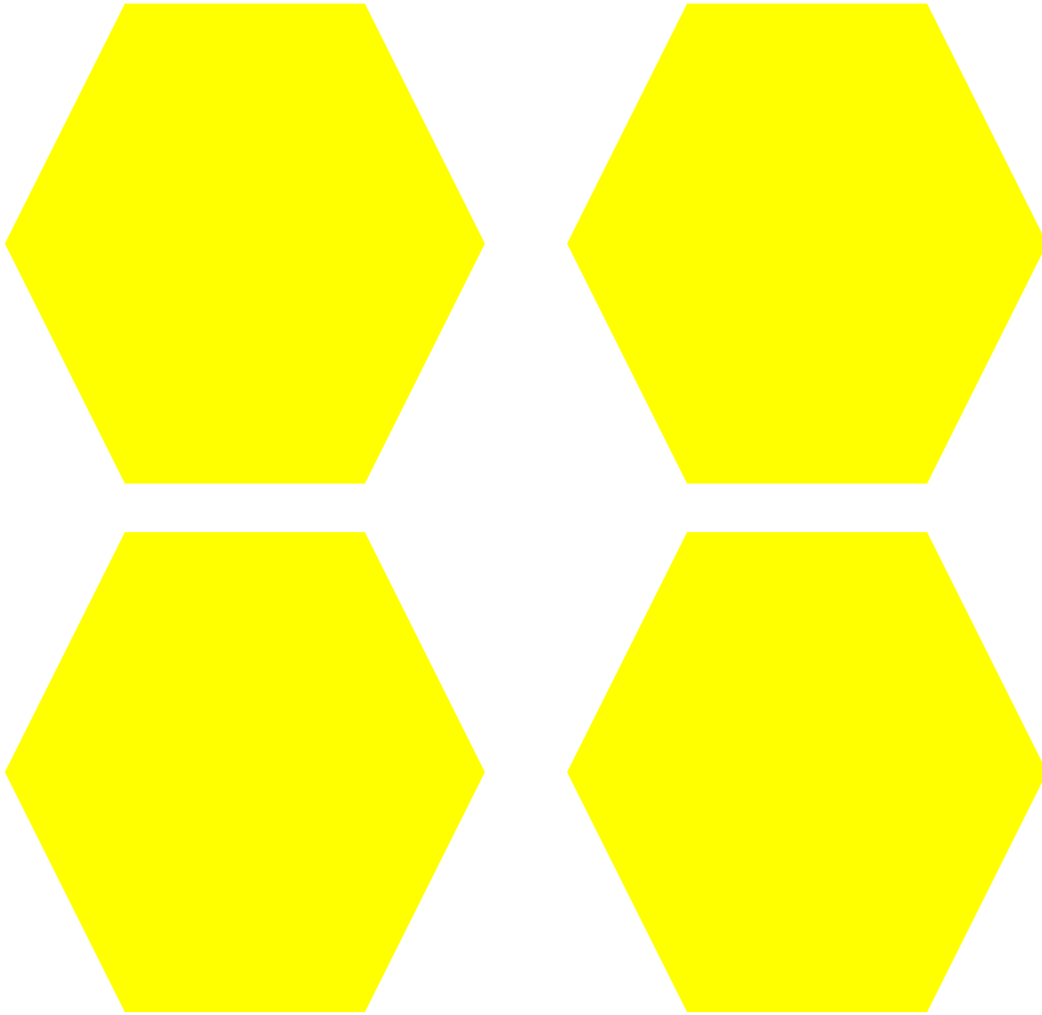
Directions: Use the blocks to answer the following questions. Draw a picture to represent how you solved the problem. Then, write the answer to the equation.

4. Sally is having a pizza party. She has 3 pizzas. She wants to give each of her friends $\frac{1}{2}$ of a pizza to eat. How many friends can she serve pizza?



$$3 \div \frac{1}{2} = \underline{\hspace{2cm}}$$

5. Sally decides she wants to be able to invite more friends to her party. She orders 4 pizzas. Each person at the party will get $\frac{1}{3}$ of the pizza. How many people will eat pizza at Sally's party?



$$4 \div \frac{1}{3} = \underline{\hspace{2cm}}$$

Look at your answers from problems 2 -5. What **patterns** do you notice?

Additional Practice:

Use your pattern blocks or fraction circles to help you solve the following problems:

Problem	Drawing	Answer
$1 \div \frac{1}{3}$		
$2 \div \frac{1}{3}$		
$3 \div \frac{1}{3}$		

Problem	Drawing	Answer
$1 \div \frac{1}{2}$		
$2 \div \frac{1}{2}$		
$3 \div \frac{1}{2}$		
$1 \div \frac{1}{4}$		

Problem	Drawing	Answer
$2 \div \frac{1}{4}$		
$3 \div \frac{1}{4}$		

Name: _____ Class: _____ Date: _____

Finding the Quotient of Two Fractions

Directions: Use your fraction strips to help you answer the problems below.

$\frac{1}{2} \div \frac{1}{2}$	$\frac{1}{2} \div \frac{1}{3}$	$\frac{1}{2} \div \frac{1}{4}$	$\frac{1}{2} \div \frac{1}{5}$												
<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>			<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>			<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>			<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>						
The quotient of _____ and _____ is _____.	The quotient of _____ and _____ is _____.	The quotient of _____ and _____ is _____.	The quotient of _____ and _____ is _____.												
$\frac{1}{3} \div \frac{1}{2}$	$\frac{1}{3} \div \frac{1}{3}$	$\frac{1}{3} \div \frac{1}{4}$	$\frac{1}{3} \div \frac{1}{5}$												
<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>				<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>				<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>				<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> </table>			
The quotient of _____ and _____ is _____.	The quotient of _____ and _____ is _____.	The quotient of _____ and _____ is _____.	The quotient of _____ and _____ is _____.												

Look at your quotients. Do you notice a pattern? Can you think of a rule that you can use to find the quotient of any fractions?

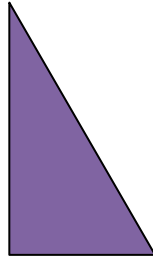
Name: _____ Class: _____ Date: _____

Cooperative Learning Roles

1. **Reader**: As the ***Reader***, your job is to read the problem out loud to your group. You may need to read the problem more than once as you work to solve the problem.
2. **Information Gatherer**: As the ***Information Gatherer***, your job is to highlight or underline the important information from the problem. Look for key signal words and numbers. Report the important information to your group members.
3. **Question Master**: As the ***Question Master***, your job is to find out what the problem is asking you to solve. Be careful, sometimes there may be more than one question. Report the question or questions to your group members.
4. **Recorder**: As the ***Recorder***, your job is to write down the important information and question for your group. Write down all the steps your group took to solve the problem. You will also be in charge of writing the answer to the problem in a complete sentence.

Fraction Word Problem Cards

1.



Marissa must find the perimeter of a triangle. The sides of the triangle measure $\frac{5}{8}$ meters, $\frac{1}{4}$ meters, and $\frac{3}{4}$ meters long. What is the perimeter?

2.



Of all the students, $\frac{2}{3}$ got to school by car, $\frac{1}{5}$ took the bus, and $\frac{1}{8}$ walked. How many more students came by car than walked?

3.



A recipe for 1 batch of sugar cookies calls for $\frac{8}{12}$ tablespoon of vanilla. If Lorena needs to triple the recipe, how many tablespoons of vanilla will she need?

4.



Tom had $1\frac{4}{16}$ yards of ribbon. He cut it into pieces $\frac{1}{8}$ of a yard long. How many pieces did he cut?

5.



Samuel walked on the treadmill for $\frac{5}{6}$ hour and rode a bike for $\frac{7}{12}$ hour. Then he did floor exercises for half an hour. How long did he work out in all?

6.



A rectangle has a length of $4\frac{1}{8}$ inches and a width of $2\frac{3}{16}$ inches. What is the area of the rectangle?

7.



Mr. Smith ordered 1 pizza for his students. Joel ate $\frac{2}{3}$ of the pizza and Youssef ate $\frac{1}{6}$ of the pizza. How much of the pizza is left?

8.



Jane is making cupcakes for her friends. She has $1\frac{7}{9}$ cups of sugar to use at home. If she needs to make 4 batches of cupcakes, how many cups of sugar can she use for each batch?



Name: _____ Class: _____ Date: _____

Fraction Word Problems Answer Sheet

Directions: Work with your group to solve the word problems using the *Cooperative Learning Roles*. Show all your work and write your answer in a complete sentence.

1.

Answer: _____

2.

Answer: _____

3.

Answer: _____



4.

Answer: _____

5.

Answer: _____

6.

Answer: _____

7.

Answer: _____



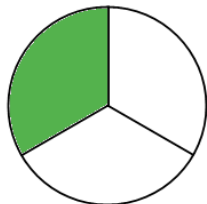
8.

Answer: _____

Name: _____ Class: _____ Date: _____

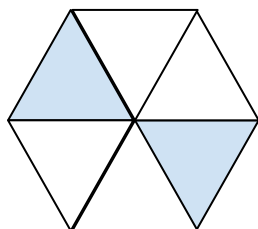
Mid-Unit Assessment

Directions: Identify the fraction for each picture below. Then identify the numerator and the denominator.



1.

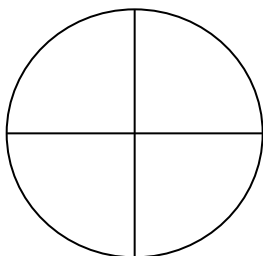
Fraction: _____ Numerator: _____ Denominator: _____



2.

Fraction: _____ Numerator: _____ Denominator: _____

3. Color in the fraction $\frac{3}{4}$



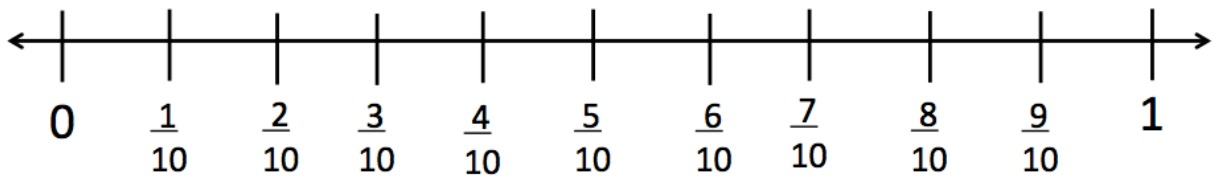
Directions: Compare the fractions. Use $<$, $>$, or $=$. Then complete the sentence using the words *less than*, *greater than*, or *equal to*.

4. $\frac{1}{5}$ ○ $\frac{1}{3}$ One-fifth is _____ one-third.

5. $\frac{3}{6}$ ○ $\frac{1}{2}$ Three-sixths is _____ one-half.

6. $\frac{3}{4}$ ○ $\frac{3}{8}$ Three-fourths is _____ three-eighths.

7. First, pick 2 points on the number line and label them with the correct fraction. Then, write an equivalent fraction.



8. Create equivalent fractions by completing the ratio table below.

	2	4		
	10		30	

Directions: Draw a model. Find the answer. Check your work using the calculator.

9. $\frac{3}{5} + \frac{1}{5} =$

Model	Equation

10. $\frac{7}{8} - \frac{2}{8} =$

Model	Equation

11. $\frac{1}{3} + \frac{3}{6} =$

Model	Equation

12. $\frac{1}{2} - \frac{1}{4} =$

Model	Equation

13. $\frac{1}{3} \times 4 =$

Model	Equation

14. $3 \div \frac{1}{4} =$

Model	Equation



15. Ally has four-tenths cups of sugar in her jar. She needs double the amount of sugar in her jar to make a birthday cake. How much sugar does she need to make the birthday cake?