PLEASE WRITE YOUR NAME IN THE LINE ABOVE

Homework

We are covering word problems in dividing and multiplying fractions. We will have a TEST on Thursday March 30 that will cover multiplying and dividing fractions word problems. The **Homework is due on Friday March 30.**

Reminders

Please remember that homework is just a reinforcement of what we do in class. When a scholar completes homework, they are retaining the information. A scholar who does not complete the homework is more likely to forget what was learned in class.

Notes

Scholars should use a separate sheet of paper if they need additional space. **Points will be lost for late work and for failure to show work**. Late homework will only be accepted up to Friday of the week that it was due. Please feel free to contact me with any questions or concerns at natalie.roman@archimedean.org.

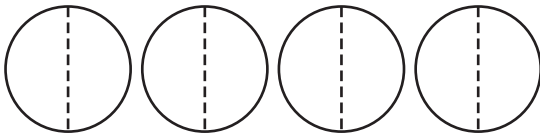|			
☐	Monday	March 27	Reteach 11.2
☐	Tuesday	March 28	Multiply or Division?
☐	Wednesday	March 29	Reteach 10.1
☐	Thursday	March 30	NONE TEST TODAY!!!
☐	Friday	March 31	NONE – HOMEWORK DUE!

Relate Multiplication and Division of Fractions

Nathan makes 4 batches of soup and divides each batch into halves. How many $\frac{1}{2}$-batches of soup does he have?

Read the Problem	Solve the Problem
What do I need to find? I need to find _the number of $\frac{1}{2}$-batches_ _of soup Nathan has_ _____.	Since Nathan makes 4 batches of soup, my diagram needs to show 4 circles to represent the 4 batches. I can divide each of the 4 circles in half.
What information do I need to use? I need to use the size of each _batch of_ _soup_ and the total number of _batches_ of soup Nathan makes.	
How will I use the information? I can _make a diagram_ to organize the information from the problem. Then I can use the diagram to find _the number of $\frac{1}{2}$-batches of soup_ _Nathan has after he divides the_ _4 batches of soup._.	To find the total number of halves in the 4 batches, I can multiply 4 by the number of halves in each circle. $4 \div \frac{1}{2} = 4 \times \underline{\ 2\ } = \underline{\ 8\ }$ So, Nathan has _8_ one-half-batches of soup.

Draw a diagram to help you solve the problem.

1. A nearby park has 8 acres of land to use for gardens. The park divides each acre into fourths. How many $\frac{1}{4}$-acre gardens does the park have?

2. Clarissa has 3 pints of ice tea that she divides into $\frac{1}{2}$-pint servings. How many $\frac{1}{2}$-pint servings does she have?

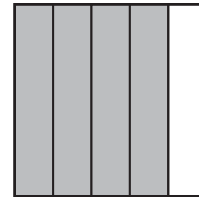Indicate if the question is asking you to multiply or to divide. Write the equation and solve.

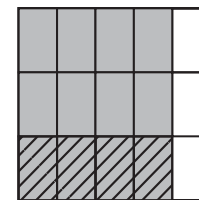|	
Jackson's mother buys 4 packs of hamburger meat. Each pack contains 4/6 of a pound of meat. How much total meat did she buy?	Mrs. Diego has 3 cups of sugar. She needs to divide the sugar equally into containers of 1/3 of a cup of sugar. How many containers will Mrs. Diego be able to fill?
Mr. Simpson feeds his dog ½ of a cup of dog food each day. How long will 4 cups of dog food last?	After a party, 1/3 of a pizza remains. Rachel eats 1/2 of the remaining pizza. What fraction of a pizza does she eat?
Anu has 9 problems to solve for his math homework. He has solved 2/3 of the problems already. How many of his problems has he solved?	A fudge company makes 4 pounds of fudge. A worker separates the fudge into packages of ¼ of a pound of fudge each. How many packages does he make?
A chef has ½ of a pound of flour to divide equally into two containers. How much flour will be in each container?	Keisha is making potato casserole for a dinner party. She needs ½ of a potato per guest. How many potatoes will she need for 9 guests?
Meandre has 8 pints of milk. If he drinks ¼ of a pint of milk each day, how long will the 8 pints of milk last him?	Tyreick wants to fill six containers with ¾ of a cup of lemonade. How much lemonade will he need to fill the six containers?

Multiply Fractions

You can use a model to help you multiply two fractions.

Multiply. $\frac{1}{3} \times \frac{4}{5}$

Step 1 Draw a rectangle. Divide it into 5 equal columns. To represent the factor $\frac{4}{5}$, shade 4 of the 5 columns.

Step 2 Since the denominator of the factor $\frac{1}{3}$ is 3, divide the rectangle into 3 equal rows. Shade $\frac{1}{3}$ of the $\frac{4}{5}$ you already shaded.

The rectangle is divided into 15 smaller rectangles. This is the denominator of the product.
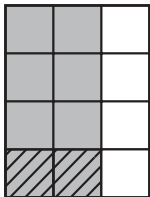
There are 4 smaller rectangles that contain both types of shading. So, 4 is the numerator of the product.

So $\frac{4}{15}$ of the rectangles contain both types of shading.

$\frac{1}{3} \times \frac{4}{5} = \underline{\frac{4}{15}}$.
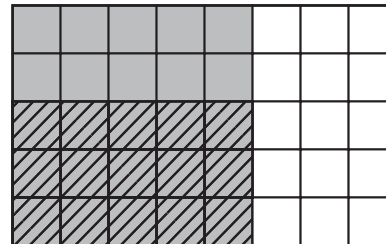
Think: What is $\frac{1}{3}$ of $\frac{4}{5}$?

Find the product. Draw a model.

1

$\frac{1}{4} \times \frac{2}{3} = $ _____

2

$\frac{3}{5} \times \frac{5}{8} = $ _____

3

$\frac{2}{5} \times \frac{3}{4} = $ _____

4

$\frac{2}{3} \times \frac{3}{8} = $ _____