

Name: Key
Date: _____

Mr. Johnson
Math 8

Lesson 3.2 – Using Models to Multiply Fractions

Think it out:

What does $\frac{1}{2} \times \frac{4}{6}$ really mean? And, what is the solution to it?

(answers may vary)

Notes:

In this section we will use the models we learned last class to assist us in finding our solutions. One helpful hint is to think of the multiplication sign between the two proper or improper fractions as the word 'of'.

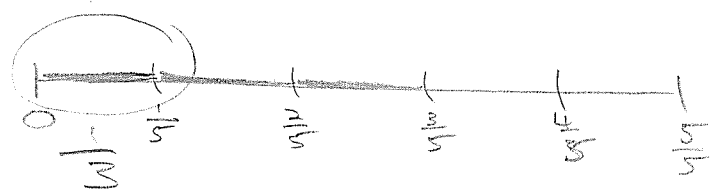
For instance, $\frac{1}{2} \times \frac{4}{6}$ is really asking what is $\frac{1}{2}$ of $\frac{4}{6}$.

Examples:

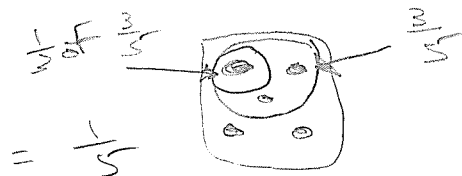
#1 Multiply: $\frac{1}{3} \times \frac{3}{5}$ read as: what is $\frac{1}{3}$ of $\frac{3}{5}$

Using a number line:

$$= \frac{1}{5}$$

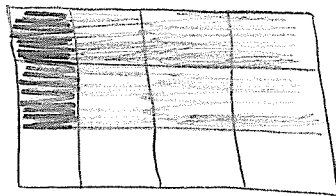


Using counters



#2 Multiply: $\frac{1}{4} \times \frac{2}{3}$ read as: what is $\frac{1}{4}$ of $\frac{2}{3}$

Using a
rectangle

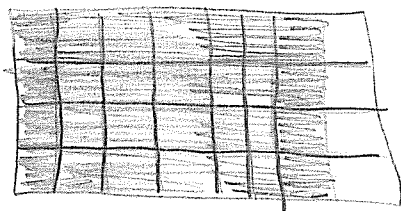


← $\frac{2}{3}$ shaded
then find $\frac{1}{4}$ of
shaded

$$= \frac{2}{12}$$
$$= \frac{1}{6}$$

#3 Multiply: $\frac{7}{8} \times \frac{1}{4}$ read as: what is $\frac{7}{8}$ of $\frac{1}{4}$

Using a
rectangle



28 shaded
 $\frac{1}{4}$ of 28 is

$$= \frac{7}{32}$$

Assignment:

Pg. 112-114
#s 5-12, 16