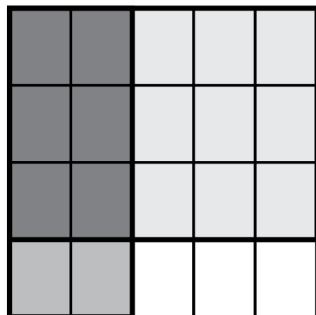


MULTIPLYING FRACTIONS

The area models below represent two multiplication problems. Use your understanding of example A to complete examples B and C.

$$\frac{2}{5} \cdot \frac{3}{4} = \frac{6}{20} = \frac{3}{10}$$



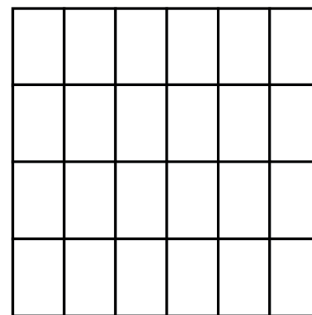
A

$$\frac{2}{3} \cdot \frac{3}{5} = \square$$



B

$$\frac{5}{6} \cdot \frac{1}{4} = \square$$



C

MULTIPLYING FRACTIONS

- In order to multiply fractions and mixed numbers, each number must be written as a proper or _____ fraction.
- Mixed numbers must be _____ to improper fractions, and whole numbers must be written over _____.
- Steps for multiplying fractions:
 1. Change each mixed number to an _____.
 2. _____ numerators.
 3. Multiply _____.
 4. Simplify.

Practice multiplying fractions below.

1. $\frac{2}{3} \cdot \frac{4}{5} = \underline{\hspace{2cm}}$

2. $\frac{6}{7} \cdot \frac{2}{7} = \underline{\hspace{2cm}}$

3. What do you notice about the product when multiplying two fractions that are less than one?

COMMON FACTORS

Common factors between the fractions can be _____ before or after multiplying.

Ex: (before) $\frac{2}{3} \cdot \frac{3}{4} =$

(after) $\frac{2}{3} \cdot \frac{3}{4} =$

Practice multiplying fractions and mixed numbers below. Be sure to simplify your answer.

<p>4. $\frac{4}{9} \cdot \frac{3}{4} =$ _____</p>	<p>5. $2\frac{1}{2} \cdot 3\frac{3}{5} =$ _____</p>
<p>6. A recipe requires $2\frac{1}{2}$ cups of sugar. If Mrs. Marina is going to make one half of the recipe, then how much sugar does she need?</p>	<p>7. A rectangle has a height of $1\frac{1}{4}$ inches and a base of $\frac{5}{6}$ inches. What is the area of the rectangle?</p>

Using the information below, mark each statement as true or false. Justify your choices.

8. Four students were each given a card with a fraction on it. They were then asked to pair up with another student and multiply the fractions.

OMAR

$1\frac{3}{4}$

ELLIE

$2\frac{2}{7}$

ANDRE

$1\frac{5}{6}$

IRA

$\frac{1}{5}$

STATEMENT	T/F?	JUSTIFY
a. When Omar and Andre multiplied their fraction cards, they got a product greater than 4.		
b. If Ira multiplies her fraction card by any of the other cards, the product will always be less than one.		
c. When Ellie and Omar multiplied their fraction cards, their solution was between 2 and 3.		