

# Assignment Record Sheet

Math Core A

Full Name: \_\_\_\_\_

**Week: 3/2 - 3/6**

Unit Name: Let's Be Rational

Period: 4

Date Assigned	Focus Question??	Homework (IP=in packet)		Meets Expectation (15 points)	Approaching Expectations (5 points)	Below Expectation (0 points)
<b>Monday Mar. 2</b>	<i>How can you use number properties and equivalent fractions to multiply rational numbers?</i>	<b>WU:</b> Five Minute Frenzy (IP) <b>CW:</b> Prob. 2.3 A (IP)  <b>HW:</b> Multiplication Algorithm wksht A&B (IP)		<b>WU:</b>  <b>CW:</b>  <b>HW:</b>		
<b>Tuesday Mar. 3</b>	<i>How can you use number properties and equivalent fractions to multiply rational numbers?</i>	<b>WU:</b> None  <b>CW:</b> Partner Quiz Review (IP) <b>HW:</b> Study for quiz		<b>WU:</b>  <b>CW:</b>  <b>HW:</b>		
<b>Wed. Mar. 4</b>	<i>How can you use number properties and equivalent fractions to multiply rational numbers?</i>	<b>WU:</b> None  <b>CW:</b> Partner Quiz  <b>HW:</b> None		<b>WU:</b>  <b>CW:</b>  <b>HW:</b>		
<b>Thursday Mar. 5</b>	<i>How can you use number properties and equivalent fractions to multiply rational numbers?</i>	<b>WU:</b> None  <b>CW:</b> Math Review  <b>HW:</b> None		<b>WU:</b>  <b>CW:</b>  <b>HW:</b>		
<b>Friday Mar. 6</b>	<i>How can you use number properties and equivalent fractions to multiply rational numbers?</i>	<b>WU:</b> None  <b>CW:</b> DESMOS  <b>HW:</b> None <i>Turn in your math packet</i>		<b>WU:</b>  <b>CW:</b>  <b>HW:</b>		

How are part

**Total Homework Score for the Week: \_\_\_\_\_/75**

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**Daily Materials Score \_\_\_\_\_/25**

w/u

Per. 4  
3/2/20

# Multiplication Five Minute Frenzy (B)

Try to complete the chart in less than five minutes and score 98 out of 100 or better. Write the product of the column and row numbers in each space.

x	3	9	11	1	4	6	12	7	10	2
9										
1										
12										
8										
7										
10										
4										
3										
6										
11										

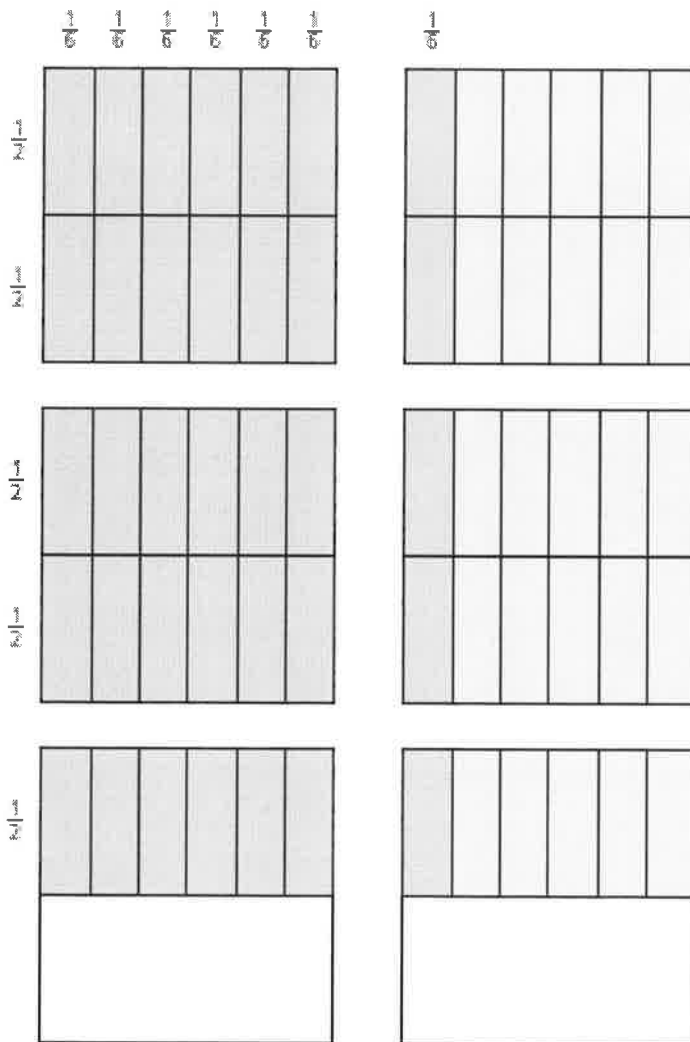
**Problem 2.3**

**Diagrams for Question B, part (3)**

(For Class Discussion)

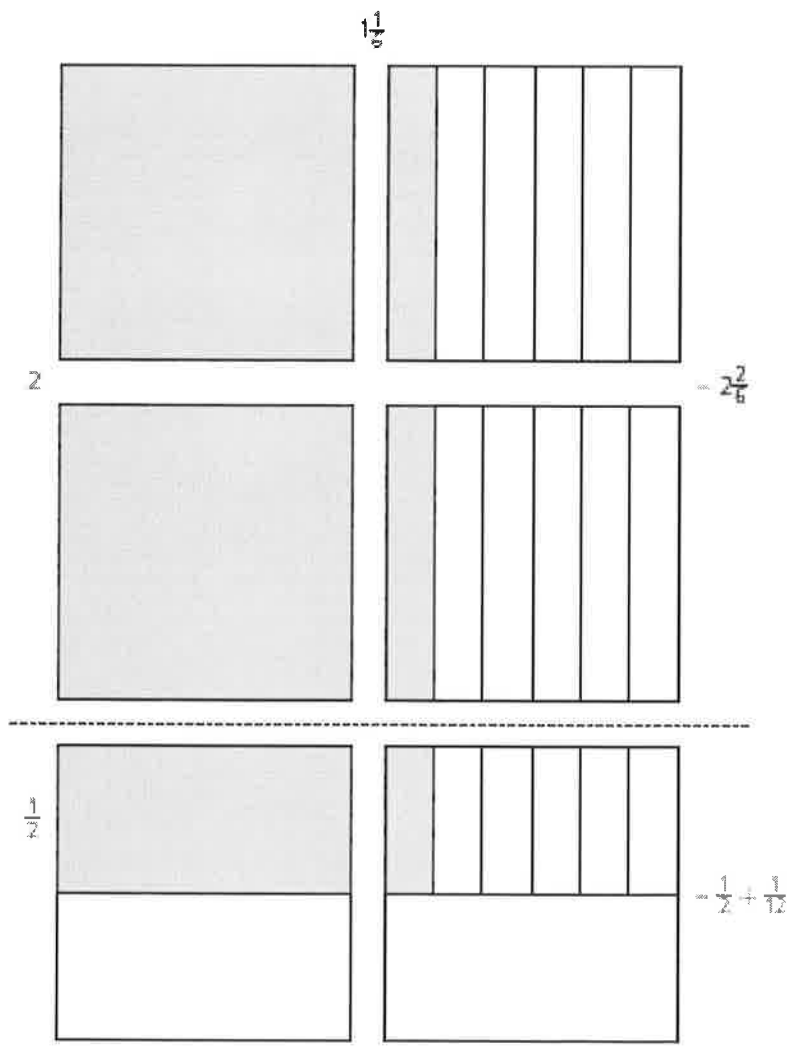
In the diagram below, a student converted each mixed number into an improper fraction.

For  $2\frac{1}{2} \times 1\frac{1}{6}$ ,  $2\frac{1}{2}$  was converted into  $\frac{5}{2}$ , and  $1\frac{1}{6}$  was converted into  $\frac{7}{6}$ .



**Problem 2.3** Diagrams for Question B, part (3)  
 (For Class Discussion)

In the diagram below, a student used the Distributive Property and separated  $2\frac{1}{2}$  into  $2 + \frac{1}{2}$ . The student then multiplied both 2 and  $\frac{1}{2}$  by  $1\frac{1}{6}$ , then combined those separate products.



## Problem 2.3A

## Takoda's and Yuri's Strategies

**Takoda's Strategy**

I used what I know about fractions to rewrite  $2\frac{2}{3}$  as  $\frac{8}{3}$  to make the problem easier to solve.

$$\begin{aligned}\frac{1}{2} \times 2\frac{2}{3} &= \frac{1}{2} \times \frac{8}{3} \\ &= \frac{8}{6} \\ &= 1\frac{2}{6} \\ &= 1\frac{1}{3}\end{aligned}$$

**Yuri's Strategy**

I wrote  $2\frac{2}{3}$  as  $\left(2 + \frac{2}{3}\right)$  and used the Distributive Property to make the problem easier to solve.

$$\begin{aligned}\frac{1}{2} \times 2\frac{2}{3} &= \frac{1}{2} \times \left(2 + \frac{2}{3}\right) \\ &= \left(\frac{1}{2} \times 2\right) + \left(\frac{1}{2} \times \frac{2}{3}\right) \\ &= 1 + \frac{2}{6} \\ &= 1\frac{2}{6} \\ &= 1\frac{1}{3}\end{aligned}$$

- Does each strategy work? How do you know?
- How are the strategies similar? How are they different?
- Use one of the strategies to solve  $1\frac{1}{3} \times \frac{4}{5}$

h/w

# Labsheet

## Writing a Multiplication Algorithm

A. For each of the following products:

- Estimate the sum or product.
- Use an algorithm to find the exact product.
- Compare your estimate to the exact answer.

1.  $\frac{1}{3} \times \frac{3}{4}$       2.  $\frac{2}{5} \times 12$       3.  $3\frac{2}{3} \times 1\frac{1}{2}$

4.  $2\frac{1}{4} \times 2\frac{5}{6}$       5.  $6 \times 1\frac{3}{8}$       6.  $\frac{1}{4} \times \frac{2}{5}$

7.  $\frac{2}{3} \times \frac{5}{7}$       8.  $1\frac{1}{5} \times 2\frac{2}{3}$       9.  $2 \times 1\frac{7}{8}$

B. 1. Sort the problems from Question A into two groups:

- Group 1: problems that require less work than the others to solve
- Group 2: problems that require more work than the others to solve

2. Explain why you put each problem into the group you chose.

~~C. Write some new problems that belong in each group.~~

~~D. Describe an algorithm for finding the products in each group.~~

## Partner Quiz Review for use after Investigation 2

1. Bob is making treat bags for his daughter's birthday party. He decided to use the recipe below for each bag. He needs to make 6 bags so each friend can have one, and he wants to make  $\frac{1}{2}$  bag for his two-year-old to have.

How much of each ingredient will he need to make the  $6\frac{1}{2}$  bags? Write number sentences to support your answer.

### Recipe for 1 Bag

$\frac{1}{3}$  cup of peanuts

$\frac{3}{4}$  cup of pretzels

$\frac{1}{5}$  cup of raisins

$\frac{2}{3}$  cup of popcorn

2. On a particular map of Denmark, 1 inch represents 12 miles.

 = 12 miles

- a. What does  $2\frac{1}{2}$  inches on the map represent? Write a number sentence and show your work.

- b. What does  $3\frac{3}{4}$  inches on the map represent? Write a number sentence and show your work.

# Partner Quiz Review (continued)

3. a. Caroline had a pan of lasagna  $\frac{3}{4}$  full. Some friends visited her and ate  $\frac{2}{3}$  of what was in the pan. How much lasagna did her friends eat? Use a drawing and a number sentence to support your answer.

b. Savannah had a lasagna pan  $\frac{2}{3}$  full. Some friends visited her and ate  $\frac{3}{4}$  of what was in the pan. How much lasagna did her friends eat? Use a drawing and a number sentence to support your answer.

c. How is what happened with Savannah's pan of lasagna different from what happened with Caroline's pan of lasagna? How is what happened with Savannah's pan of lasagna the same as what happened with Caroline's pan of lasagna?

4. Write a story problem to fit the calculation below. Explain why the calculation matches the story.

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