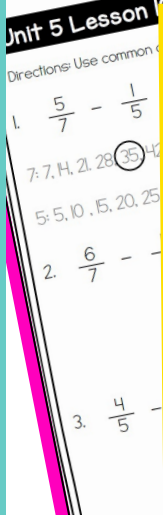




# Decimal Operations

15 full days of math lesson plans, PowerPoints, & activities



Unit 4 Lesson 5 Problem Set

Directions: Use the standard algorithm to find the difference.

1. $\begin{array}{r} 6.43 \\ - 5.26 \\ \hline \end{array}$	2. $\begin{array}{r} 4.32 \\ - 2.08 \\ \hline \end{array}$	3. $\begin{array}{r} 9.23 \\ - 4.5 \\ \hline \end{array}$
4. $\begin{array}{r} 12.35 \\ - 7.6 \\ \hline \end{array}$	5. $\begin{array}{r} 25.44 \\ - 18.54 \\ \hline \end{array}$	6. $\begin{array}{r} 24.37 \\ - 7.68 \\ \hline \end{array}$
7. $5.63 - 3.9 = \underline{\hspace{2cm}}$	8. $19.43 - 13.88 = \underline{\hspace{2cm}}$	

## Warm Up

Find the lowest common denominator between the two fractions

$$\frac{7}{12} \text{ \& \ } \frac{1}{4}$$

## Fact Fluency

**QUICK THINK!**

Whisper-shout the quotient.

## Common Denominators

Multiply each fraction to have a denominator of 12.

$$\frac{2}{3} + \frac{1}{4} =$$

3: 3, 6, 9, 12, 15, 18, 21

4: 4, 8, 12, 16, 20, 24

## SUBTRACTING FRACTIONS & MIXED NUMBERS

$$9\frac{4}{5} - 3\frac{1}{6} = 6\frac{19}{30}$$

FIND COMMON DENOMINATOR

SUBTRACT EQUIVALENT FRACTIONS

$$\frac{4}{5} \times \frac{6}{6} = \frac{24}{30}$$

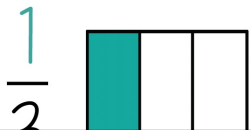
$$\frac{24}{30} - \frac{5}{30} = \frac{19}{30}$$

$$\frac{1}{6} \times \frac{5}{5} = \frac{5}{30}$$

SUBTRACT WHOLE NUMBERS

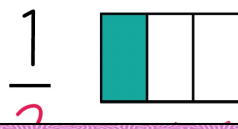
## NUMERATOR

the number of parts we have



## DENOMINATOR

the number of parts in all



## MIXED NUMBER

represents a whole number and fraction together

$$5\frac{2}{3}$$

## ADDING FRACTIONS & MIXED NUMBERS

$$2\frac{1}{4} + 5$$

FIND COMMON DENOMINATOR

$$\frac{1}{4} \times \frac{3}{3} = \frac{3}{12}$$

$$1\frac{4}{4} + \frac{3}{4} = 1\frac{7}{4} = 2\frac{3}{4}$$

# UNIT 5: ADD & SUBTRACT FRACTIONS *at a glance*

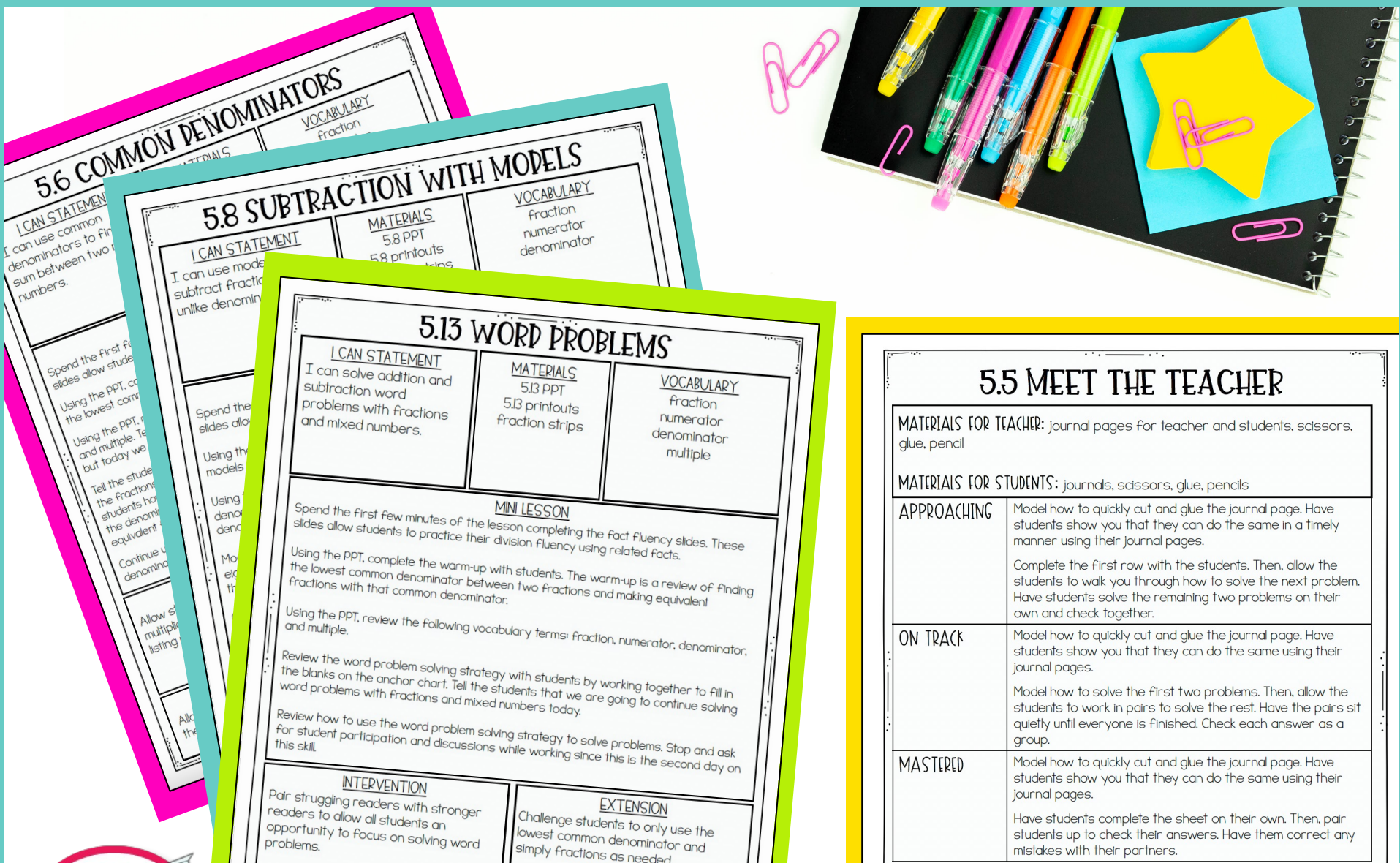
Day 1 Estimating Sums with Benchmarks	Day 2 Addition with Models	Day 3 Addition with Models (mixed numbers)	Day 4 Finding Common Denominators	Day 5 Addition Using Common Denominators
Day 6 Addition Using Common Denominators (mixed numbers)	Day 7 Estimating Differences with Benchmarks	Day 8 Subtraction with Models	Day 9 Subtraction with Models (mixed numbers)	Day 10 Subtraction with Common Denominators
Day 11 Subtraction with Common Denominators (mixed numbers)	Day 12 Word Problems	Day 13 Word Problems	Day 14 Review	Day 15 Assessment

THIS UNIT COVERS THE FOLLOWING COMMON CORE MATH STANDARDS: 5.NF.1 & 5.NF.2

Notes:



Includes a pacing guide so you can see the whole unit at a glance.



## 5.6 COMMON DENOMINATORS

**I CAN STATEMENT**  
I can use common denominators to find the sum between two numbers.

**VOCABULARY**  
fraction

## 5.8 SUBTRACTION WITH MODELS

**I CAN STATEMENT**  
I can use models to subtract fractions with unlike denominators.

**MATERIALS**  
5.8 PPT  
5.8 printouts

**VOCABULARY**  
fraction  
numerator  
denominator

## 5.13 WORD PROBLEMS

**I CAN STATEMENT**  
I can solve addition and subtraction word problems with fractions and mixed numbers.

**MATERIALS**  
5.13 PPT  
5.13 printouts  
fraction strips

**VOCABULARY**  
fraction  
numerator  
denominator  
multiple

### MINI LESSON

Spend the first few minutes of the lesson completing the fact fluency slides. These slides allow students to practice their division fluency using related facts.

Using the PPT, complete the warm-up with students. The warm-up is a review of finding the lowest common denominator between two fractions and making equivalent fractions with that common denominator.

Using the PPT, review the following vocabulary terms: fraction, numerator, denominator, and multiple.

Review the word problem solving strategy with students by working together to fill in the blanks on the anchor chart. Tell the students that we are going to continue solving word problems with fractions and mixed numbers today.

Review how to use the word problem solving strategy to solve problems. Stop and ask for student participation and discussions while working since this is the second day on this skill.

### INTERVENTION

Pair struggling readers with stronger readers to allow all students an opportunity to focus on solving word problems.

### EXTENSION

Challenge students to only use the lowest common denominator and simplify fractions as needed.

## 5.5 MEET THE TEACHER

**MATERIALS FOR TEACHER:** journal pages for teacher and students, scissors, glue, pencil

**MATERIALS FOR STUDENTS:** journals, scissors, glue, pencils

### APPROACHING

Model how to quickly cut and glue the journal page. Have students show you that they can do the same in a timely manner using their journal pages.

Complete the first row with the students. Then, allow the students to walk you through how to solve the next problem. Have students solve the remaining two problems on their own and check together.

### ON TRACK

Model how to quickly cut and glue the journal page. Have students show you that they can do the same using their journal pages.

Model how to solve the first two problems. Then, allow the students to work in pairs to solve the rest. Have the pairs sit quietly until everyone is finished. Check each answer as a group.

### MASTERED

Model how to quickly cut and glue the journal page. Have students show you that they can do the same using their journal pages.

Have students complete the sheet on their own. Then, pair students up to check their answers. Have them correct any mistakes with their partners.



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# Subtraction with Models

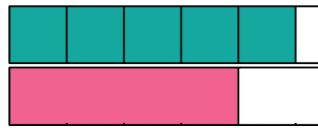
Use models to find the difference.

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

# Subtraction with Models

Next, model 1 half with fraction strips.

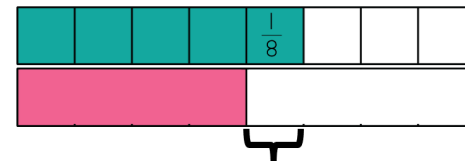
$$\frac{5}{8} - \frac{1}{2}$$



# Subtraction with Models

We can see that the difference is 1 eighth.

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

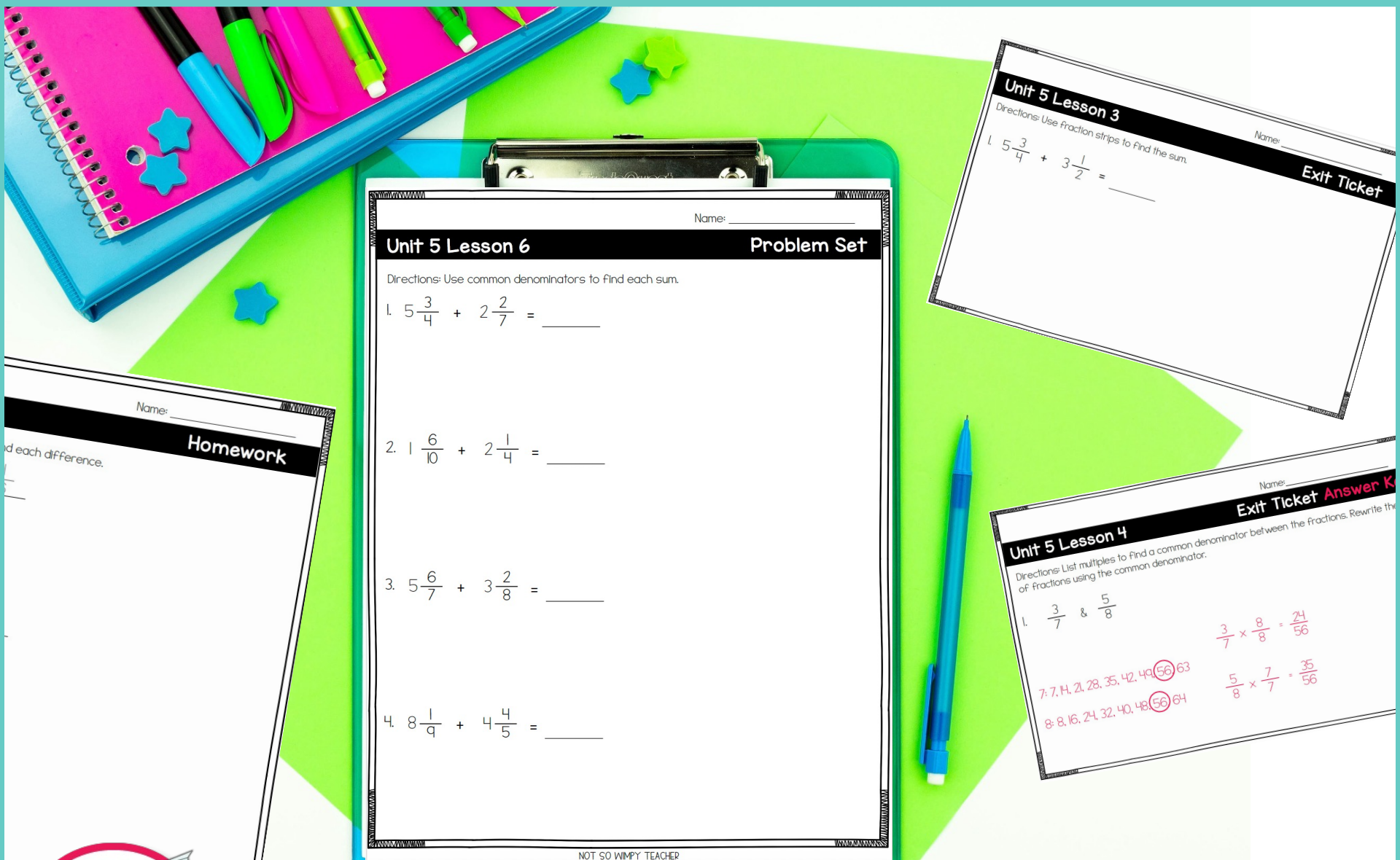


NOT SO WIMPY TEACHER

Deliver great lessons with step-by-step PowerPoints for teaching math skills.







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

**Unit 5 Lesson 6 Problem Set**

Directions: Use common denominators to find each sum.

1.  $5\frac{3}{4} + 2\frac{2}{7} = \underline{\hspace{2cm}}$

2.  $1\frac{6}{10} + 2\frac{1}{4} = \underline{\hspace{2cm}}$

3.  $5\frac{6}{7} + 3\frac{2}{8} = \underline{\hspace{2cm}}$

4.  $8\frac{1}{9} + 4\frac{4}{5} = \underline{\hspace{2cm}}$

NOT SO WIMPY TEACHER

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

**Unit 5 Lesson 3 Exit Ticket**

Directions: Use fraction strips to find the sum.

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

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

**Unit 5 Lesson 4 Exit Ticket Answer Key**

Directions: List multiples to find a common denominator between the fractions. Rewrite the fractions using the common denominator.

1.  $\frac{3}{7}$  &  $\frac{5}{8}$

7: 7, 14, 21, 28, 35, 42, 49, **(56)**, 63

8: 8, 16, 24, 32, 40, 48, **(56)**, 64

$\frac{3}{7} \times \frac{8}{8} = \frac{24}{56}$

$\frac{5}{8} \times \frac{7}{7} = \frac{35}{56}$



Includes problem sets, homework, and exit tickets for each day.

Unit 5 Assessment An

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

Directions: Find the sum or difference using common denominators.

5.  $\frac{2}{3} + \frac{4}{5} = \frac{22}{15}$       $\frac{2}{3} \times \frac{5}{5} = \frac{10}{15}$   
 3: 3, 6, 9, 12, 15, 18, 21

6.  $\frac{2}{5} + \frac{3}{7} = \frac{29}{35}$       $\frac{4}{5} \times \frac{3}{3} = \frac{12}{15}$   
 5: 5, 10, 15, 20, 25

7.  $9\frac{1}{3} + 4\frac{5}{6} = 14\frac{1}{6}$       $\frac{2}{5} \times \frac{7}{7} = \frac{14}{35}$   
 3: 3, 6, 9, 12, 15, 18, 21, 24

8.  $7\frac{3}{4} + 2\frac{1}{7} = 9\frac{25}{28}$       $\frac{3}{7} \times \frac{5}{5} = \frac{15}{35}$   
 4: 4, 8, 12, 16, 20, 24, 28, 32

Unit 5 Preassessment

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

Directions: Find the sum or difference of each equation. Write your answer as a mixed number or improper fraction.

1.  $\frac{6}{12} + \frac{8}{12} = \underline{\hspace{2cm}}$      2.  $\frac{3}{8} + \frac{2}{8} = \underline{\hspace{2cm}}$

3.  $\frac{18}{9} - \frac{10}{9} = \underline{\hspace{2cm}}$      4.  $\frac{7}{7} - \frac{2}{7} = \underline{\hspace{2cm}}$

5.  $\frac{7}{8} + \frac{2}{4} = \underline{\hspace{2cm}}$      6.  $\frac{3}{5} + \frac{2}{15} = \underline{\hspace{2cm}}$

Assessment

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

Directions: Find the sum or difference using common denominators.

$\frac{4}{5} =$

Skill	Estimating Sums and Differences	Using Models to Add	Finding Sums	Finding Differences	Word Problems	
Student:	1-2	3-4	5-8	9-12	13-15	TOTAL
	___/2	___/2	___/4	___/4	___/3	___/15
	___/2	___/2	___/4	___/4	___/3	___/15
	___/2	___/2	___/4	___/4	___/3	___/15
	___/2	___/2	___/4	___/4	___/3	___/15
	___/2	___/2	___/4	___/4	___/3	___/15
	___/2	___/2	___/4	___/4	___/3	___/15
	___/2	___/2	___/4	___/4	___/3	___/15
	___/2	___/2	___/4	___/4	___/3	___/15



Track student progress with pre- & post-assessments and recording sheet.

Unit 5 Lesson 10 Problem Set

Directions: Use common denominators to find the difference.

1.  $\frac{2}{3} - \frac{1}{8}$

2.  $\frac{6}{10} -$

3.  $\frac{4}{5}$

4.  $\frac{9}{12}$

### 5.9 SUBTRACTION WITH MODELS

<b>ICAN STATEMENT</b> I can use models to subtract mixed numbers with unlike denominators.	<b>MATERIALS</b> 5.9 PPT 5.9 printouts fraction strips	<b>VOCABULARY</b> fraction numerator denominator
-----------------------------------------------------------------------------------------------	-----------------------------------------------------------------	-----------------------------------------------------------

**MINI LESSON**

Spend the first few minutes of the lesson completing the fact fluency slides. These slides allow students to practice their division fluency using related facts.

Using the PPT, complete the warm-up with students. The warm-up is a review of drawing models to represent mixed numbers.

Using the PPT, review the following vocabulary terms: fraction, numerator, and denominator. Tell the students that we will be using our knowledge of numerators and denominators to draw models of mixed numbers today.

Tell the students that we will be subtracting mixed numbers today using models. We can use the same strategy as when we were subtracting fractions, and then we subtract the whole numbers. Model how to subtract 2 and 7 ninths and 1 and 2 sixths using models.

Continue using the PPT to model subtracting mixed numbers with fractions.

<b>INTERVENTION</b> Have students focus on problems where the denominators are related so they will not need to switch to a new unit fraction to find the difference.	<b>EXTENSION</b> Challenge students to subtract the mixed numbers without using fraction strips.
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**BENCHMARK**  
a commonly used fraction

used  $\frac{1}{2}$

**MIXED NUMBER**  
represents a whole number and fraction together

$5 \frac{2}{3}$

**EQUIVALENT**  
equal to



**UNIT 5: ADD & SUBTRACT FRACTIONS at a glance**

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Teach with confidence; each day is fully planned for you with all the tools you