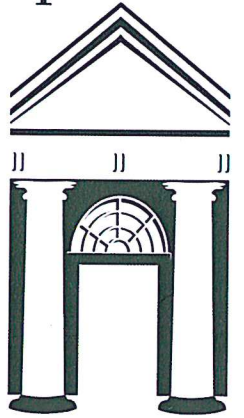| Name: |
|---|
| College: |

4th Grade Math

Week of 3/29-4/1

Spelman College®

1867
HOWARD UNIVERSITY

Monday

Date: March 29

Learning Target: I can use visual models to add and subtract two fractions with the same units, including subtracting from one whole.
Standards: 4.NF.1, 4.NF.3

SuperKids®Math Worksheet

Multiplication using 3 and values between 0 and 10

```
   8          2          5          9          0
 x 3        x 3        x 3        x 3        x 3
_____      _____      _____      _____      _____


   0          9          8          0          6
 x 3        x 3        x 3        x 3        x 3
_____      _____      _____      _____      _____


   9          2          1          6          0
 x 3        x 3        x 3        x 3        x 3
_____      _____      _____      _____      _____


   1          2          0         10          7
 x 3        x 3        x 3        x 3        x 3
_____      _____      _____      _____      _____


   3          8          5          1          4
 x 3        x 3        x 3        x 3        x 3
_____      _____      _____      _____      _____


  10          6          4          0         10
 x 3        x 3        x 3        x 3        x 3
_____      _____      _____      _____      _____
```

Create Answer Sheet #52230
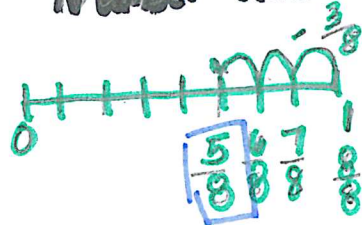
Subtracting a fraction from 1

Example: $1 - \dfrac{3}{8} = \dfrac{5}{8}$

① Regroup 1 as a fraction with the same denominator. (Remember $\dfrac{2}{2}, \dfrac{3}{3}, \dfrac{4}{4}, \dfrac{5}{5}, \dfrac{6}{6}, \dfrac{7}{7}, \dfrac{8}{8}, \dfrac{9}{9}, \dfrac{10}{10}, \dfrac{11}{11}, \dfrac{12}{12}$

All equal 1

$1 \longrightarrow - \dfrac{3}{\boxed{8}}$

Number line

② Subtract $\dfrac{8}{8} - \dfrac{3}{8} = \dfrac{5}{8}$

$1 - \dfrac{3}{8} = \boxed{\dfrac{5}{8}}$

Subtracting a fraction from a Mixed Number

I can't subtract $\dfrac{1}{5}$ from $\dfrac{2}{5}$ → too small

Mixed Number → a whole and fraction

Example: $1\cancel{\dfrac{1}{5}} - \dfrac{2}{5} =$

① Turn the mixed number into a fraction.
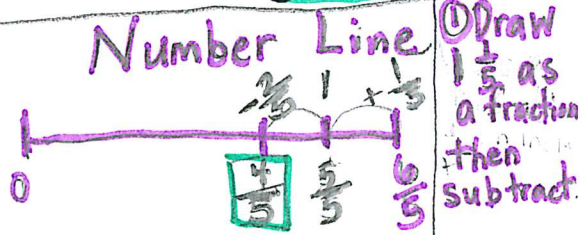
$1\boxed{\dfrac{1}{5}} - \dfrac{2}{5}$

③ Regroup the 1 and add to the fraction

$\dfrac{5}{5} \quad \dfrac{1}{5} - \dfrac{2}{5}$

Add

$\dfrac{5}{5} + \dfrac{1}{5} = \dfrac{6}{5}$ so $\dfrac{6}{5} - \dfrac{2}{5} = \boxed{\dfrac{4}{5}}$

$1\dfrac{1}{5} - \dfrac{2}{5} = \boxed{\dfrac{4}{5}}$

Number Line

① Draw $1\dfrac{1}{5}$ as a fraction then subtract.

Concept Development

Subtract a fraction from 1.

$$1 - \frac{3}{8} =$$

Concept Development
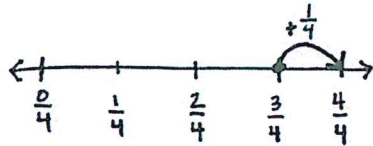
Problem 2: Subtract a fraction from a number between 1 and 2.

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

2. Solve. Model each subtraction problem with a number line, and solve by both counting up and subtracting. Part (a) has been completed for you.

a. $1 - \frac{3}{4}$

$$\frac{4}{4} - \frac{3}{4} = \frac{1}{4}$$

b. $1 - \frac{8}{10}$
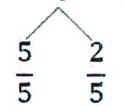
c. $1 - \frac{3}{5}$

d. $1 - \frac{5}{8}$

e. $1\frac{2}{10} - \frac{7}{10}$

f. $1\frac{1}{5} - \frac{3}{5}$

6

You Try!

3. Find the difference in two ways. Use number bonds to decompose the total. Part (a) has been completed for you.

a. $1\frac{2}{5} - \frac{4}{5}$

Number bond: $1\frac{2}{5}$ decomposes into $\frac{5}{5}$ and $\frac{2}{5}$

$\frac{5}{5} + \frac{2}{5} = \frac{7}{5}$

$\frac{7}{5} - \frac{4}{5} = \left(\frac{3}{5}\right)$

$\frac{5}{5} - \frac{4}{5} = \frac{1}{5}$

$\frac{1}{5} + \frac{2}{5} = \left(\frac{3}{5}\right)$

b. $1\frac{3}{6} - \frac{4}{6}$

c. $1\frac{6}{8} - \frac{7}{8}$

d. $1\frac{1}{10} - \frac{7}{10}$

e. $1\frac{3}{12} - \frac{6}{12}$

EXIT TICKET

Name:_____	Date:_____
BCCSG	Howard / Spelman

Learning Target: I can use visual models to add and subtract two fractions with the same units, including subtracting from one whole.
Standards: 4.NF.1, 4.NF.3

Directions: Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

1. Solve. Model the problem with a number line, and solve by both counting up and subtracting.

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

2. Find the difference in two ways. Use a number bond to show the decomposition.

    $1\frac{2}{7} - \frac{5}{7}$

Grade:	

8

Tuesday

Date: March 30

Learning Target: I can add and subtract more than two fractions.

Standards: 4.NF.1, 4.NF.3

.

Name _____   Date _____

SuperKids® Math Worksheet

Multiplication using 3 and
values between 0 and 10

6 x 3	8 x 3	0 x 3	4 x 3	4 x 3
5 x 3	9 x 3	2 x 3	2 x 3	4 x 3
0 x 3	6 x 3	7 x 3	3 x 3	5 x 3
2 x 3	4 x 3	4 x 3	4 x 3	1 x 3
7 x 3	5 x 3	10 x 3	5 x 3	5 x 3
9 x 3	7 x 3	8 x 3	8 x 3	6 x 3

Create Answer Sheet #79840

Make your own SuperKids Math Worksheets at: http://www.superkids.com/aweb/tools/math/

<u>Concept Development</u>

Problem A:	$\frac{1}{8}+\frac{3}{8}+\frac{4}{8}$	
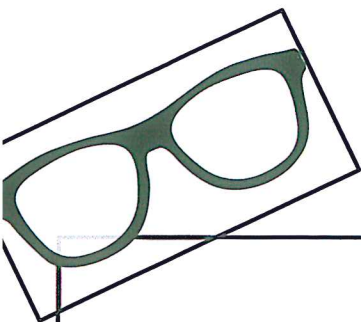
$$\frac{1}{6} + \frac{4}{6} + \frac{2}{6}$$

$$\frac{11}{10} - \frac{4}{10} - \frac{1}{10}$$

$1 - \dfrac{3}{12} - \dfrac{5}{12}$

$\dfrac{5}{8} + \dfrac{4}{8} + \dfrac{1}{8}$

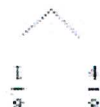$1\dfrac{1}{5} - \dfrac{2}{5} - \dfrac{3}{5}$

You Try!

1. Show one way to solve each problem. Express sums and differences as a mixed number when possible. Use number bonds when it helps you. Part (a) is partially completed.
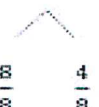
a. $\frac{2}{5} + \frac{2}{5} + \frac{1}{5}$ $= \frac{5}{5} + \frac{1}{5} = 1 + \frac{1}{5}$ $= \underline{\hspace{2cm}}$	b. $\frac{2}{6} + \frac{1}{6} + \frac{3}{6}$	c. $\frac{5}{7} + \frac{7}{7} + \frac{2}{7}$
d. $\frac{7}{8} - \frac{2}{8} - \frac{1}{8}$	e. $\frac{7}{9} + \frac{1}{9} + \frac{4}{9}$	f. $\frac{4}{10} + \frac{11}{10} + \frac{5}{10}$
g. $1 - \frac{3}{12} - \frac{4}{12}$	h. $1\frac{2}{3} - \frac{1}{3} - \frac{1}{3}$	i. $\frac{10}{12} + \frac{5}{12} + \frac{2}{12} + \frac{7}{12}$

2. Monica and Stuart used different strategies to solve $\frac{5}{8}+\frac{2}{8}+\frac{5}{8}$.

<div style="display:flex">

Monica's Way

$$\frac{5}{8}+\frac{2}{8}+\frac{5}{8}=\frac{7}{8}+\frac{5}{8}=\frac{8}{8}+\frac{4}{8}=1\frac{4}{8}$$

$$\frac{1}{8} \qquad \frac{4}{8}$$

Stuart's Way

$$\frac{5}{8}+\frac{2}{8}+\frac{5}{8}=\frac{12}{8}=1+\frac{4}{8}=1\frac{4}{8}$$

$$\frac{8}{8} \qquad \frac{4}{8}$$

</div>

Whose strategy do you like best? Why?

3. You gave one solution for each part of Problem 1. Now, for each problem indicated below, give a different solution method.

1(c) $\quad \frac{5}{7}+\frac{7}{7}+\frac{2}{7}$

1(f) $\quad \frac{4}{10}+\frac{11}{10}+\frac{5}{10}$

1(g) $\quad 1-\frac{3}{12}-\frac{4}{12}$

Name:_____   Date:_____

BCCSG   Howard / Spelman

Learning Target: I can add and subtract more than two fractions.

Standards: 4.NF.1, 4.NF.3

Directions: Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

Grade:

Wednesday

Date: March 31

Learning Target: I can solve word problems involving addition and subtraction of fractions.

Standards: 4.NF.1, 4.NF.3

Name _____

Date _____

SuperKids® Math Worksheet

Multiplication using 3 and
values between 0 and 10

8 x 3	8 x 3	8 x 3	2 x 3	3 x 3
3 x 3	5 x 3	3 x 3	9 x 3	6 x 3
8 x 3	6 x 3	4 x 3	2 x 3	0 x 3
1 x 3	8 x 3	5 x 3	7 x 3	3 x 3
1 x 3	6 x 3	0 x 3	9 x 3	7 x 3
4 x 3	7 x 3	1 x 3	2 x 3	4 x 3

Create Answer Sheet #19625

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Concept Development

Problem 1: Use the RDW process to solve a word problem involving the addition of fractions.

Sue ran $\frac{9}{10}$ mile on Monday and $\frac{7}{10}$ mile on Tuesday. How many miles did Sue run in the 2 days?

Concept Development!

Problem 2: Use the RDW process to solve a word problem involving the addition and subtraction of fractions.

Mr. Salazar cut his son's birthday cake into 8 equal pieces. Mr. Salazar, Mrs. Salazar, and the birthday boy each ate 1 piece of cake. What fraction of the cake was left?

Let's Work Together!

Problem 3: Use the RDW process to solve a word problem subtracting a fraction from 1.

Maria spent $\frac{4}{7}$ of her money on a book and saved the rest. What fraction of her money did Maria save?

You Try!

Use the RDW process to solve.

1. Sue ran $\frac{9}{10}$ mile on Monday and $\frac{7}{10}$ mile on Tuesday. How many miles did Sue run in the 2 days?

2. Mr. Salazar cut his son's birthday cake into 8 equal pieces. Mr. Salazar, Mrs. Salazar, and the birthday boy each ate 1 piece of cake. What fraction of the cake was left?

3. Maria spent $\frac{4}{7}$ of her money on a book and saved the rest. What fraction of her money did Maria save?

4. Mrs. Jones had $1\frac{4}{8}$ pizzas left after a party. After giving some to Gary, she had $\frac{7}{8}$ pizza left. What fraction of a pizza did she give Gary?

5. A baker had 2 pans of corn bread. He served $1\frac{1}{4}$ pans. What fraction of a pan was left?

6. Marius combined $\frac{4}{8}$ gallon of lemonade, $\frac{3}{8}$ gallon of cranberry juice, and $\frac{6}{8}$ gallon of soda water to make punch for a party. How many gallons of punch did he make in all?

EXIT TICKET

Name:_____   Date:_____
BCCSG   Howard / Spelman

Learning Target: I can solve word problems involving addition and subtraction of fractions.
Standards: 4.NF.1, 4.NF.3

Directions: Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

Use the RDW process to solve.

1. Mrs. Smith took her bird to the vet. Tweety weighed $1\frac{3}{10}$ pounds. The vet said that Tweety weighed $\frac{4}{10}$ pound more last year. How much did Tweety weigh last year?

2. Hudson picked $1\frac{1}{4}$ baskets of apples. Suzy picked 2 baskets of apples. How many more baskets of apples did Suzy pick than Hudson?

Grade:

23

Thursday

Date: April 1

Learning Target: I can use visual models to add two fractions with related units using the denominators 2, 3, 4, 5, 6, 8, 10, and 12.
Standards: 4.NF.2

Name _____

Date _____

SuperKids®Math Worksheet

Multiplication using 3 and
values between 0 and 10

10 x 3	8 x 3	2 x 3	5 x 3	7 x 3
1 x 3	6 x 3	4 x 3	10 x 3	9 x 3
7 x 3	6 x 3	0 x 3	9 x 3	7 x 3
4 x 3	7 x 3	7 x 3	0 x 3	4 x 3
8 x 3	4 x 3	6 x 3	6 x 3	10 x 3
8 x 3	1 x 3	1 x 3	9 x 3	2 x 3

Create Answer Sheet #46258

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Concept Development

Problem 1: Add unit fractions with related denominators using tape diagrams.

$$\frac{1}{3} \quad + \quad \frac{1}{6} \quad = \quad \underline{\hspace{2cm}}$$

Problem 2: Add fractions with related denominators using tape diagrams.

$$\frac{2}{3} \quad + \quad \frac{3}{12} \quad = \quad \underline{\hspace{2cm}}$$

Problem 3: Add fractions with related denominators using a number line.

$$\frac{1}{6} + \frac{3}{12} = \underline{\qquad}$$
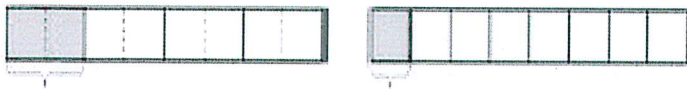
Problem 4: Add fractions with related denominators without using a model.

$$\frac{2}{5} + \frac{3}{10} = \underline{\qquad}$$

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You Try!

1. Use a tape diagram to represent each addend. Decompose one of the tape diagrams to make like units. Then, write the complete number sentence. Part (a) is partially completed.

a. $\frac{1}{4} + \frac{1}{8}$

b. $\frac{1}{4} + \frac{1}{12}$

$$\frac{}{8} + \frac{}{8} = \frac{}{8}$$

c. $\frac{2}{6} + \frac{1}{3}$
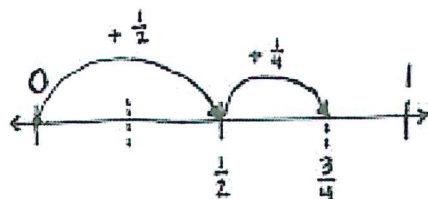
d. $\frac{1}{2} + \frac{3}{8}$

e. $\frac{3}{10} + \frac{3}{5}$

f. $\frac{2}{3} + \frac{2}{9}$

2. Estimate to determine if the sum is between 0 and 1 or 1 and 2. Draw a number line to model the addition. Then, write a complete number sentence. Part (a) has been completed for you.

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

b. $\frac{1}{2} + \frac{4}{10}$

c. $\frac{6}{10} + \frac{1}{2}$

d. $\frac{2}{3} + \frac{3}{6}$

e. $\frac{3}{4} + \frac{6}{8}$

f. $\frac{4}{10} + \frac{6}{5}$

3. Solve the following addition problem without drawing a model. Show your work.

$$\frac{2}{3} + \frac{4}{6}$$

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Name:_____	Date:_____
BCCSG	Howard / Spelman

Learning Target: I can use visual models to add two fractions with related units using the denominators 2, 3, 4, 5, 6, 8, 10, and 12.
Standards: 4.NF.2

Directions: Answer the questions below. Make sure you show work for every question. Record your answer on Google Classroom

1. Draw a number line to model the addition. Solve, and then write a complete number sentence.

$$\frac{5}{8} + \frac{2}{4}$$

2. Solve ~~without~~ with drawing a model.

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

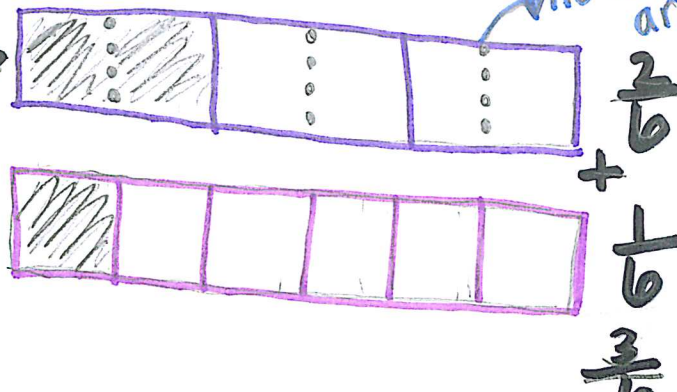# Adding Fractions with related denominators using Tape Diagrams

$$\frac{1}{3} + \frac{1}{6}$$ ← related denominators

↓

one denominator is a multiple of another

1. Draw both fractions using 2 same size tape diagrams.
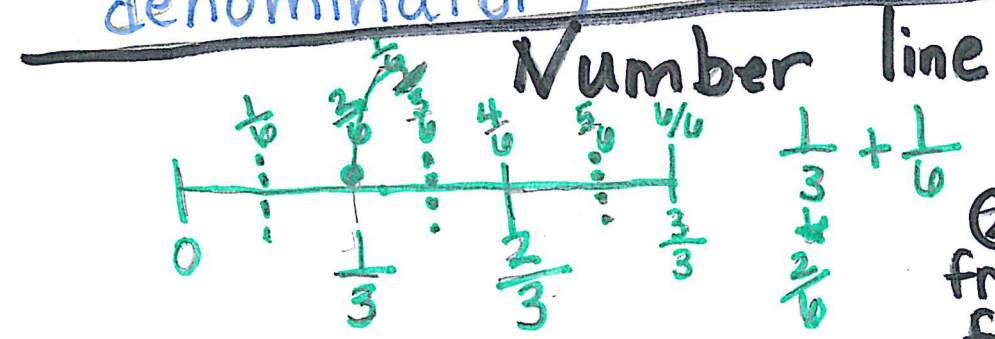
2. Look at the larger fraction.

now there are 6 parts

$$\frac{2}{6}$$

This is my denominator.

$$+$$

$$\frac{1}{6}$$

$$\frac{3}{6}$$

3. Use dotted lines to create a fraction with the same amount of parts.

4. Write the new fractions next to the tape diagram and add together. (Both fractions now have the same denominator)

$$\frac{1}{3} + \frac{1}{6} = \frac{3}{6}$$

Number line

$$\frac{1}{3} + \frac{1}{6}$$

① Draw a number with the largest fraction first.

② Find the equivalent fraction then add the fraction addend

Adding fractions with related denominators
↳ no model

Example

$$\frac{2}{\boxed{5}} + \frac{3}{\boxed{10}} =$$

not the same

① Circle the denominators.

② Think what factor can you use to multiply and make the denominator the same.

$$\frac{2\times}{2\times} \frac{2}{\boxed{5}} + \frac{3}{\boxed{10}}$$

FACTORS

✗ 5 × 1 = 5
✓ 5 × 2 = 10

③ Multiply the denominator and numerator by this factor and now you can add

$$\frac{2\times}{2\times}\frac{2}{5} = \frac{4}{10} \text{ so } \frac{4}{10} + \frac{3}{10} = \frac{7}{10}$$

Adding/Subtracting fractions with the same denominators

FRACTIONS

addition:

#1. Set Up The Problem

$$\frac{6}{12} + \frac{3}{12} = \frac{9}{12}$$

#2. Add the numerators   6+3=9

#3. DRAG THE DENOMINATOR

Subtraction:

#1. Set Up the Problem *bigger number goes first!!*

$$\frac{8}{10} - \frac{3}{10} = \frac{5}{10}$$

#2. Subtract the numerators   8-3=5

#3. DRAG THE DENOMINATOR