

4th Grade Modified Math Remote Learning Packet

Name

Week 30



Dear Educator,

My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

(Date)

Parents please note that all academic packets are also available on our website at <u>www.brighterchoice.org</u> under the heading "Remote Learning." All academic packets assignments are mandatory and must be completed by all scholars.



Name:	
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Week 30 Day 1 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How do I multiply whole numbers by a unit fraction?

Objective: I can use what I know about multiplication/repeated addition to multiply a whole by a fraction and rewrite it as a mixed number.

Do Now

Mrs. Wilcox cut quilt squares and then divided them evenly into 8 piles. She decided to sew together 1 pile each night. After 5 nights, what fraction of the quilt squares was sewn together? Draw a tape diagram or a number line to model your thinking, and then write a number sentence to express your answer.

Input

What kind of addition sentence have I written?

2+2+2+2+2+2+2+2+2

What would be a faster way to write and solve this? ______

Now look at this sentence:

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

What do you think would be a faster way to write and solve this number sentence? Take 30 seconds to think write your thought below.

Problem 1: Multiply a whole number times a unit fraction.

Write a repeated addition sentence that represents 6x2. Remember we can read this as 6 groups of 2, how would that look?

Draw a number line that starts at 0 and ends at 12, using our number line lets show 6 twos.

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Howard Morehouse Hampton

Input

6 x ½=____

Rewrite as a repeated addition sentence: _____

Draw a number line that starts at 0 and ends at 6. Label all the 1/2s between 0 and 6, count 6 halves.

Using our repeated addition sentence, how many wholes can we make from the halves? _____

Using parenthesis, show the wholes that we are able to make.

Problem 2: Multiply a whole number times a unit fraction rename the improper fraction

Solve 6 x ½ in standard and unit form, how would we read this equation?

6 x ½=____

Rename this improper fraction as a whole number. Draw a number bond:

Try this one on your own

10 × 1/5=_____

Now, draw a number to show what whole number 10/5 is equal to.

BCCS-B

Input

Try the next one:

8 × 1/4=_____

Problem 3: Express the product of a whole number times a unit fraction as a mixed number.

9 copies of ¼ is the same as what multiplication sentence?

Number Bond

7 × ½=_____

Number Bond

Try the next 2 on your own, draw your number to show how many wholes can be made and what is left.

Number Bond

13 × 1/5=_____

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Number Bond

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Number Bond

Application Problem

Use parentheses to show how to make ones in the following number sentence.

1/4+1/4+1/4+1/4+1/4+1/4+1/4+1/4+1/4+1/4=3

Rewrite this number sentence as a multiplication sentence.

Exit Ticket

Multiply and write the product as a mixed number. Draw a number bond to support your answer.

8 ×1/2=	Number Bond
Repeated addition:	
·	
7 copies of 1 fourth=	Number Bond
Repeated addition:	

Week 30 Day 1 Date: _____

BCCS-B

Howard Morehouse Hampton

Homework

1.

Use parentheses to show how to make ones in the following number sentence.

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

2. Multiply, rename your answer as a whole or mixed number. Use a number bond to support your answer.

a. $6 \times \frac{1}{3}$

b. $10 \times \frac{1}{2}$

c.
$$8 \times \frac{1}{4}$$

3. Multiply, rename your answer as a whole or mixed number. Use a number bond to support your answer.

7 copies of 1 fourth



Week 30 Day 2 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How do I compare fractions greater than 1 in various forms?

Objective: I can compare fractions larger than 1 by referring to benchmark fractions.

Do Now

Rename the improper fractions as mixed numbers or whole numbers. Use a number bond to support your answer.

Number Bond

9/4

14/5

11/3

Problem 1: Compare mixed numbers and fractions on a number line using benchmark fractions.

Barbara needed 13/4 cups of flour, her friend Jeanette needed 9/2 cups, and her friend Robert needed 3 6/8 cups. Let's compare the amounts using a number line.

←------→

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Using the number line that we created together, solve the following comparisons:

13/4	9/2
3 and 6/8	9/2
13/4	3 and 6/8

Try the next one:

Rename the following improper fractions before plotting them on the number line:



←-----→

What are some comparisons we can make using this number line?

_____ and _____

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Input

Problem 2: Compare two mixed numbers or two fractions greater than 1.

Compare the following:

 $\frac{29}{7} - \frac{31}{8}$

Before we compare these, we should rename as mixed numbers to make the comparison easier.

 $\frac{29}{7} =$ _____

31/8=_____

Compare: $5\frac{7}{8}$ _____ $5\frac{9}{10}$

In this case the whole numbers are the _____, therefore we do not need to compare them.

Use the butterfly method to compare the fractions because they are so close in size.

Try the next on your own keeping in mind how we solve the first 2:

43/8 and 35/6.





Application Problem

Barbara needed $3\frac{1}{4}$ cups of flour for her recipe. If she measured $\frac{1}{4}$ cup at a time, how many times did she have to fill the measuring cup?

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Exit Ticket

Compare the fractions given below by writing >, <, or =.

Give a brief explanation for each answer, referring to benchmark fractions

1. $3\frac{2}{3}$ _____ $3\frac{4}{6}$







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							_

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Homework



b. Compare the following by writing >, <, or =.

85	65	 29	65
6	- 8	 4	8



Name:	
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Week 30 Day 3 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How do I make common denominators and numerators in fractions greater than 1?

Objective: I can make common denominators and numerators in fractions greater than 1 to help compare them.

Do Now

Jeremy ran 27 laps on a track that was 1/8 mile long. Jimmy ran 15 laps on a track that was 1/4 mile long. Who ran farther?

Input

Problem 1: Model, using a tape diagram, the comparison of two mixed numbers having related denominators.

One way to compare the mixed numbers in the do now was to think about the ______ of the pieces. Another way could have been to make ______ denominators. Fourths and eighths are ______, therefore we can change one to the other. It easier for us to change fourths to eighths using ______. What can we multiply 4 by to get 8?

Model this using the tape diagrams below:

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Input

Try comparing the next 2 sets of mixed numbers using tape diagrams

 $4\frac{1}{3}$ and $4\frac{2}{9}$

 $5\frac{1}{4}$ and $5\frac{3}{8}$

Problem 2: Compare two fractions with unrelated denominators.

$$4\frac{3}{4}$$
 and $\frac{23}{5}$

How do you think we should compare the numbers above? What do you notice?

To make common denominators of fractions that do not have related denominators we can multiply them together.

What would the common denominator of these 2 fractions be? _____

We also have to make sure that they are both written the same way. Would it be easier to make them both mixed numbers or both improper fractions?

Show your work

Draw area models to support your work.

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Input

Try the next on your own using the same strategy as we did in the first one

2 and 2/3 and 2 and 3/5.



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Exit Ticket

Compare each pair of fractions using >, <, or = using any strategy.

1.
$$4\frac{3}{8}$$
 _____ $4\frac{1}{4}$

2.
$$3\frac{4}{5}$$
 _____ $3\frac{9}{10}$

3.
$$2\frac{1}{3}$$
 _____ $2\frac{2}{5}$

Name:Week 30 Day 3 Date:BCCS-BHoward Morehouse HamptonHomework

1. Draw a tape diagram to model each comparison. Use >, <, or = to compare.

a.
$$2\frac{3}{4}$$
 _____2 $\frac{7}{8}$ b. $10\frac{2}{6}$ _____1 $0\frac{1}{3}$





Week 30 Day 4 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: What is a line plot and how do I create one?

Objective: I can create a line plot and answer questions about the data given.

Do Now

Compare the following fractions using an method that you have learned:

13/4 and 14/3

Input

What is a line plot? _____

Problem 1: reading a line plot

When reading a ______, the data is organized typically from ______ to greatest and the more x's that are ______ an amount the more that it happened.

Let's take a look at the line plot on the next page and see how the data has been organized.

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Input

Mr. Bradley is very proud of all the students in his science class. They all studied hard and did an excellent job on last week's science test. Everyone in the class scored an 88% or higher! The line plot below shows the score distribution.



Looking at the line plot above, we can see that the data has been organized from least to greatest and also has used x's to show how many people scored a certain grade on a test.

Let's answer some questions based on the line plot above.

1.	How many students received a score of 94%?	
2.	What was the highest score in the class?	
3.	What was the lowest score in the class?	
4.	How many students received a score in the 80s?	
5.	How many students received a score in the 90s?	
6.	How many students scored 93% or less?	
7.	How many students are in Mr. Bradley's science class?	

8. Mr. Bradley decides to give each student two percentage bonus points on their last test for participating in class. Explain how you could change the graph to show the new test scores.

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Howard Morehouse Hampton

Input

Problem 2: plotting data on a line plot

Next, we want to practice how we can create our own line plot. Let's take a look at the data that we are given below and analyze what the data is telling us.

Miss Smith is a music teacher. She gave her students a 6-question quiz about famous composers. The list below shows the scores her students received on the quiz.

6, 6, 5, 4, 6, 4, 5, 3, 6, 0, 1, 6, 3, 3, 6, 5

Use the data on the above to make a line plot. Be sure you write numbers on the axis, label the axis, write a title, and use Xs to represent students.



One thing that we have to do when creating a line plot is name the line plot by given it a title and then also label the axis where the numbers go. Based on the data table above, what title do you think that we can give to this line plot?

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Input

Now that we gave in a title, what can we name the numbers at the bottom? What was our data about?

We have now given our line the plot a name and a label the axis, next is plotting the data. The best way to plot the data is one at a time and make sure to cross the numbers out as we use them.

Answer the questions below based on the line plot on the previous page that we just completed.

How many students scored exactly 3?	
How many students scored higher than 3?	
How many students scored less than 3?	
What score did the highest number of students receive?	

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BCCS-B

Howard Morehouse Hampton

Application Problem



- 1. How many students completed all of the assignments?
- 2. How many students did not complete any homework assignments?
- 3. How many students missed only one assignment?
- 4. How many students missed one or more assignments?



How many 6-year-olds are in the aerobics class?

How many more 8-year-olds than 7-year-olds are in the class?

Last Monday, five kids did not come to class. Which fact might possibly be true?

- a. All of the students in the class on Monday were 8 years old.
- b. There were no 7-year-olds in the class on Monday.
- c. On Monday, all of the students in class were less than 8 years old.

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Homework

Miss Finnigan played a social studies review game with her class. She asked each student 10 questions. For each question answered correctly, she would award the student one point. The line plot below shows the scores.



- 1. How many students earned exactly 6 points?
- 2. How many students earned less than 6 points?
- Miss Finnigan awarded a gold star sticker to each student who earned more than 6 points. How many gold star stickers did she hand out?
- 4. How many students answered exactly two questions incorrectly?
- 5. How many students answered three or more questions incorrectly?
- 6. How many students played the social studies review game?



Name:	
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Week 30 Day 5 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can I prove my understanding of Topic E?

Objective: I can prove my understanding of Topic E by scoring an 80% or better on my quiz

Today your will be taking a quiz on what we have learned in fractions so. Log into your google classroom and find the assessment called:

Module 5 Topic E quiz.

You will have the entire class period to complete your work and submit your google form.

Good luck! 🙂

There is **NO HOMEWORK tonight** and **NO EXIT TICKET TODAY.**

The space on the next page will be used to submit your open response questions on edlight.







4th Grade Modified Math Remote Learning Packet

Name

Week 31



Dear Educator,

My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

(Parent Signature)

(Date)

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BCCS-B

Howard Morehouse Hampton

LEQ: How do I create a line plot?

Objective: I can use a line plot to solve word problems.

Do Now

←-----→

Using the number line plot the following fractions:

 $2\frac{1}{4}$, $2\frac{5}{8}$, and $2\frac{5}{6}$.

Input

Student	Distance (in miles)
Joe	$2\frac{1}{2}$
Arianna	$1\frac{3}{4}$
Bobbi	$2\frac{1}{8}$
Morgan	$1\frac{5}{8}$
Jack	2 ⁵ /8
Saisha	$2\frac{1}{4}$
Tyler	$2\frac{2}{4}$
Jenny	5 8
Anson	$2\frac{2}{8}$
Chandra	$2\frac{4}{8}$

Week 31 Day 1 Date: _____

BCCS-B

Howard Morehouse Hampton

CFU

- Solve each problem.
 - a. Who ran a mile farther than Jenny?
 - b. Who ran a mile less than Jack?
 - c. Two students ran exactly $2\frac{1}{4}$ miles. Identify the students. How many quarter miles did each student run?
 - d. What is the difference, in miles, between the longest and shortest distance run?
 - e. Compare the distances run by Arianna and Morgan using >, <, or =.
 - f. Ms. Smith ran twice as far as Jenny. How far did Ms. Smith run? Write her distance as a mixed number.
 - g. Mr. Reynolds ran $1\frac{3}{10}$ miles. Use >, <, or = to compare the distance Mr. Reynolds ran to the distance that Ms. Smith ran. Who ran farther?

BCCS-B

Exit Ticket

Student	Length of time (in hours)
Robin	$\frac{1}{2}$
Bill	1
Katrina	$\frac{3}{4}$
Kelly	$1\frac{3}{4}$
Mary	$1\frac{1}{2}$
Gail	$2\frac{1}{4}$
Scott	$1\frac{3}{4}$
Ben	$2\frac{2}{4}$

Mr. O'Neil asked his students to record the length of time they read over the weekend. The times are listed in the table.

At the bottom of the page, make a line plot of the data.

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Howard Morehouse Hampton

BCCS-B

Homework

Students	Length of shoe (in inches)
Collin	$8\frac{1}{2}$
Dickon	$7\frac{3}{4}$
Ben	$7\frac{1}{2}$
Martha	$7\frac{3}{4}$
Lilias	8
Susan	$8\frac{1}{2}$
Frances	$7\frac{3}{4}$
Mary	$8\frac{3}{4}$

Week 31 Day 1 Date: _____

Howard Morehouse Hampton

1. A group of students measured the lengths of their shoes.

The measurements are shown in the table. Make a line plot to display the data.

←-----→

Solve each problem.

- a. Who has a shoe length 1 inch longer than Dickon's?
- b. Who has a shoe length 1 inch shorter than Susan's?



Name:	
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Week 31 Day 2 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can I use benchmark fractions to estimate mixed numbers?

Objective: I can use benchmark fractions to estimate mixed numbers to the nearest whole or ½ number.

What does it mean to estimate? _____

Do Now

Both Allison and Jennifer jogged on Sunday. When asked about their distances, Allison said, "I ran 2 7/8 miles this morning and 3 3/8 miles this afternoon. So, I ran a total of about 6 miles," and Jennifer said, "I ran 3 1/10 miles this morning and 3 3/10 miles this evening. I ran a total of 6 4/10 miles."

How do their answers differ? _____

Input

Problem 1: Estimate the sum or difference of two mixed numbers by rounding each fraction.

3 1/5 + 4 8/9. Let's estimate the sum.

What if we wanted to estimate the difference?

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Input	
Try this one:	
$8\frac{9}{10}+2\frac{4}{8}$	
First, round 8 and 9/10=	
Next, round 2 and 4/8=	
Add:	
Problem 2: Round two mixed numbers to and then find the sum.	the nearest half or whole number,
If we used the 2 mixed numbers from the n	roblem above $8\frac{9}{2}+2\frac{4}{2}$ and we though

If we used the 2 mixed numbers from the problem above $8\frac{9}{10} + 2\frac{4}{8}$ and we thought abought rounding to the nearest whole number or half one of these fractions could stay the same.

Which one could stay the same and why?

If we estimated the sums using 9 and 2 and ½, how would our answers differ from the first time?

Problem 3: Estimate the difference of two fractions greater than 1

 $\frac{15}{4}$ and $\frac{22}{7}$

Before we estimate the sum of the 2 fractions above, let's convert them into mixed numbers.

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Input	
Now round $3\frac{1}{7}$ to the nearest one. F	Round $3\frac{3}{4}$ to the nearest one.
What is the estimated sum?	
How could our answer be more pred	cise?
Try this one	
$18\frac{7}{12}$ and $17\frac{3}{8}$	
Estimated sum:	
CFU	

Estimate each sum or difference to the nearest half or whole number by rounding. Explain your estimate using words or a number line.

a.	$2\frac{1}{12} + 1\frac{7}{8} \approx $	Explain (a)
b.	$1\frac{11}{12} + 5\frac{3}{4} \approx _$	
		Explain (b)



Application Problem

Montoya's estimate for 85/8 - 21/3 was 7. Julio's estimate was 61/2. Whose estimate do you think is closer to the actual difference? Explain.

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Howard Morehouse Hampton

Exit Ticket

Estimate each sum or difference to the nearest half or whole number by rounding. Explain your estimate using words or a number line.



Explain number 1:

2. $11\frac{8}{9} - 3\frac{3}{8} \approx _$

Explain number 2:

Week 31 Day 2 Date: _____

BCCS-B

Howard Morehouse Hampton

Homework

Use benchmark numbers or mental math to estimate the sum or difference.

a. $10\frac{3}{4} + 12\frac{11}{12}$	b. $2\frac{7}{10} + 23\frac{3}{8}$
c. $15\frac{9}{12} - 8\frac{11}{12}$	d. $\frac{56}{7} - \frac{31}{8}$

Gina's estimate for $7\frac{5}{8} - 2\frac{1}{2}$ was 5. Dominick's estimate was $5\frac{1}{2}$. Whose estimate do you think is closer to the actual difference? Explain.



Week 31 Day 3 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can I show my understanding of adding fractions with unlike denominators?

Objective: I can add fractions with unlike denominators by making common denominators before I add.



Find the sum of the fractions in the octagons.	Find the sum of the fractions in the hexagons.	Find the sum of the fractions in the triangles.

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Howard Morehouse Hampton

Find the sum of the fractions in the squares.	Find the sum of the fractions in the circles.	Find the sum of the fractions in the trapezoids.

"SCOOT" game board



Week 31 Day 4 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can I show my understanding of improper fractions and mixed numbers?

Objective: I can match the improper fraction with the correct mixed number and vice versa.



Name:					
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Week 31 Day 4 Date: _____

BCCS-B

Howard Morehouse Hampton

Write each mixed number as an improper fraction

a. $2\frac{1}{4} =$ **b.** $8\frac{3}{8} =$ **c.** $2\frac{5}{6} =$ **d.** $4\frac{1}{2} =$ **e.** $5\frac{1}{3} =$ **f.** $10\frac{7}{12} =$ **g.** $9\frac{1}{4} =$ **h.** $6\frac{5}{6} =$

Write each improper fraction as a mixed number.

- **m.** $\frac{7}{5} =$ **n.** $\frac{9}{4} =$ **o.** $\frac{5}{3} =$
- **q.** $\frac{13}{7} =$ **r.** $\frac{9}{2} =$ **s.** $\frac{17}{9} =$



Week 31 Day 5 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How do I add mixed numbers and fractions?

Objective: I can use my knowledge of adding fractions to add mixed numbers and fractions.

Do Now

One board measures 2 meters 70 centimeters. Another measures 87 centimeters. What is the total length of the two boards expressed in meters and centimeters?

Hint: 1 meter= 100 cm

Input

Problem 1: Use unit form and the number line to add a mixed number and a fraction having sums of fractional units less than or equal to 1.

 $2\frac{3}{8} + \frac{3}{8} =$ _____

What is the unit that we are adding? _____

Since the fractions both have the same denominator we do not need to change either.

We can think about this problem as adding: _____

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Howard Morehouse Hampton

Look at this next one:

 $2\frac{3}{8} + \frac{5}{8} =$ _____

Problem 2: Decompose a sum of a mixed number and a fraction with sums of fractional units greater than 1.

 $5\frac{2}{4} + \frac{3}{4} =$ _____

Break apart the problem above like we did the others:

What do we get when we add the fractions? _____

What is that fraction as a mixed number?_____

Now, add the mixed number to 5: _____

Our final answer is _____

Try the next 2 on your own:

 $7\frac{2}{5} + \frac{4}{5} =$ _____

 $3\frac{5}{12} + 1\frac{11}{12} =$ _____

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CFU	
$5\frac{2}{4} + \frac{3}{4} = $	

$$3\frac{7}{8} + \frac{3}{8} =$$

$$9\frac{11}{12} + \frac{5}{12} =$$

Application Problem

To solve $7\frac{9}{10} + \frac{5}{10}$, Maria thought, " $7\frac{9}{10} + \frac{1}{10} = 8$ and $8 + \frac{4}{10} = 8\frac{4}{10}$." Paul thought, " $7\frac{9}{10} + \frac{5}{10} = 7\frac{14}{10} = 7 + \frac{10}{10} + \frac{4}{10} = 8\frac{4}{10}$." Explain why Maria and Paul are both right.

	Exit Ticket
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2. $2\frac{3}{8} + \frac{7}{8}$

Homework

Solve.

a. $2\frac{3}{5} + \frac{3}{5}$	b. $3\frac{6}{8} + \frac{4}{8}$
c. $5\frac{4}{6} + \frac{3}{6}$	d. $\frac{7}{10} + 6\frac{6}{10}$