

4th Grade Modified Math Remote Learning Packet

Name

Week 25



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)

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:	Week 25 Day 1 Date:			
BCCS-B	Howard Morehouse Hampton			
LEQ: How can I relate area models to multiplication to show equivalent fractions?				
Objective I can Use the area model a	nd multiplication to s	how the equivalence of		
two fractions.		HINT:		
<u>Do Now</u>		# shaded boxes on top		
What fraction of the whole is shaded	?	# total boxes on bottom		
Write 3 fifths as a repeated addition	sentence of unit fract	ions;		
Complete the number sentence:	x 1/5	Hint: Use your chart to look up "fifths"		
Input				
Problem 1: Determine that multiplyi	ng the numerator and	d denominator by the		
same number results in an equivalen	t fraction.			
	Show 1 third Draw 1 horizontal line What fraction is being	e through the middle. g shown now?		
What happened to the size of the un	its?			
What happened to the number of un	its?			
We can say that =				
Record this as multiplication:		3		

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Name: _____

BCCS-B

Input

Your Turn:

Show ½ in the area model.

Draw 3 horizontal lines across the area model.

What fraction is being shown now? _____

So we can say that ______ = _____

Record this as multiplication: _____

Problem 2: Given an area model, determine an equivalent fraction for the area

selected.

Draw an area model to show 1 fourth.

Hint: Use your chart to look up "fourth"

I can make an equivalent fraction by drawing one horizontal line through the middle. What fraction did we make?

This isn't the only equivalent fraction we can make. Using the 2nd area model show ¼ again and make a new, different equivalent fraction.

What fraction did you make? _____



Howard Morehouse Hampton

Week 25 Day 1 Date: _____

Week 25 Day 1 Date: _____

BCCS-B

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Input

Your turn

Using the 2 area models below, make 2 different equivalent fractions of 1 fifth.



CFU

Decompose the area models to make an equivalent fraction. Write each as a multiplication equation.





Write as a multiplication:

_____= _____

Write as multiplication:

_____= _____



Week 25 Day 1 Date: _____

BCCS-B

Howard Morehouse Hampton

Application Problem

Model an equivalent fraction for $\frac{4}{7}$ using an area model.



<u>Exit Ticket</u>

Draw two different area models to represent 1 fourth by shading.

A.

В.			

Decompose the shaded fraction into (a) eighths and (b) twelfths.

Use multiplication to show how each fraction is equivalent to 1 fourth.

a. ¼ x _____ = ____

b. ¼ x _____= ____

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BCCS-B

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<u>Homework</u>

The shaded unit fractions have been decomposed into smaller units. Express the equivalent fractions in a number sentence using multiplication. The first one has been done for you



2. Decompose the shaded fractions into smaller units using the area models. Express the equivalent fractions in a number sentence using multiplication

b.

a.



Γ		



Week 25 Day 2 Date: _____

BCCS-B

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LEQ: How can I use division to show equivalent fractions?

Objective I can use division to show that fractions are equivalent

Do Now



What fraction is being modeled in the area model **<u>before</u>** the horizontal line was drawn? _____

What is being model after?

Write this as multiplication.	
-------------------------------	--

Input

What is GCF? _____

What does it mean to simplify/reduce?





Name:	Week 25 Day 2 Date:		
BCCS-B	Howard Morehouse Hampton		
Input			
Problem 1: simplify 6/12 by finding the G with an area model.	SCF and using divis	ion. Model the result	
What are factors of 6?			
What are the factors of 12?			
What factors do they have in common?		_	
What is the GCF?			
Your Turn		HINT: Remember to use your factor chart if	
What are the factors of 4 and 8?		you need it!	
4:	8:		
What factors do they have in common?			
What is the GCF? Simplify 4/8:			

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BCCS-B

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Input

Problem 2: simplify 2/8 and 3/12 using the GCF

Shade 2/8

Shade 3/12

Factors of 2:	Factors of 3:
Factors of 8:	Factors of 12:
GCF:	GCF:
What do you notice about 2/8 a	nd 3/12?
Compose the larger fraction. Wh	nat is the larger fraction?
Your Turn	
Simplify 2/6 and 4/14 using the	GCF.

What do you notice? _____

Using 2 different area models, compose the larger fraction.





Week 25 Day 2 Date: _____

BCCS-B

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CFU

Find the GCF of the fraction in the area model below, simplify using the GCF.

Write a corresponding division sentence.



Application Problem

In the first area model, show 2 sixths. In the second area model, show 3 ninths.





Week 25 Day 2 Date: _____

BCCS-B

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Application Problem cont.

Show how both fractions can be renamed as the same unit fraction.

2/6=_____ 3/9=_____

Write the corresponding division sentences.

Exit Ticket

In the first area model, show 2 sixths. In the second area model, show 4 twelfths. Show how both fractions can be composed, or renamed, as the same unit fraction.

Express the equivalent fractions in a number sentence using division.

Name:	Week 25 Day 2 Date:
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<u>Homework</u>

Compose the shaded fractions into larger fractional units. Express the equivalent fractions in a number sentence using division. The first one has been done for you.



c.

d.

b

HINT: Remember to use your charts and to look back in your notes.



Name: V	Veek 25 Day 3 Date:
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BCCS-B Howard Morehouse Hampton

LEQ: How can I show equivalent fractions on a number line by using a tape diagram?

Objective I can Explain fraction equivalence using a tape diagram and the number line, and relate that to the use of multiplication and division.

Do Now

What fraction of a foot is 1 inch? What fraction of a foot is 3 inches?

Answer: _____

Answer: _____

(Hint: 12 inches = 1 foot.) Draw a tape diagram to model your work.

Input



What are some similarities between these 2 images?

Name:	
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Input

Problem 1: Use a tape diagram and number line to find equivalent fractions for halves, fourths, and eighths.

Draw a tape diagram to show 1 whole and split into 2 parts, shade 1 of those parts.

Draw a number line that is the same length as the tape diagram that we drew.

Label 0, ½ , 1 on the number line

Now, decompose the halves into fourths.

What is a pair of equivalent fractions on the number line?

Now, decompose the same number line into eighths.

Circle the equivalent fractions you see now.

Problem 2: Use a number line, multiplication, and division to decompose and compose fractions

Draw a number line, label 0 and 1 on the ends and break it into 3 parts. Label thirds on the number line.

Decompose each third into 4 more equal parts.

Circle the equivalent fractions you see.

Name:			

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Problem 3: Decompose a non-unit fraction using a number line and division.

On your own, draw a number line and partition it into 5ths.

-place a 0 at the beginning and 1 at the end

-label all 5ths on the number line

-Place a point on 2/5

Now, partition 2 fifths into 6 equal parts. How many parts will there be inbetween each part? _____

If we did this on the entire number line, how many equal parts would there be?

2/5 = _____ Write a multiplication sentence: _____

CFU

Label each number line with the fractions shown on the tape diagram. Circle the fraction that labels the point on the number line that also names the shaded part of the tape diagram.



Week 25 Day 3 Date: _____

BCCS-B

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Application Problem

Kelly was baking bread but could only find her $\frac{1}{8}$ -cup measuring cup. She needs $\frac{1}{4}$ cup sugar, $\frac{3}{4}$ cup whole wheat flour, and $\frac{1}{2}$ cup all-purpose flour. How many $\frac{1}{8}$ cups will she need for each ingredient?

Exit Ticket

Partition a number line from 0 to 1 into sixths. Decompose $\frac{2}{6}$ into 4 equal lengths.

Circle the equivalent fractions

Write a corresponding multiplication sentence:

Name:	Week 25 Day 3 Date:			
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<u>Homework</u>

Label each number line with the fractions shown on the tape diagram. Circle the fraction that labels the point on the number line that also names the shaded part of the tape diagram





Week 25 Day 4 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can I show my understanding of equivalent fractions?

Objective I can show my understanding of equivalent fractions by actively engaging in review successfully

Do Now

Draw a tape diagram and partition it into fourths.

Shade ¼

Draw a number line of the same length and partition it into 4ths as well, label all the fourths between 0 and 1.

Decompose the tape diagram above into twelfths.

Do the same on the number line, circle all the equivalent fractions.

Input/CFU

Directions: For today's lesson, you are going to need to use the 3 strips of paper that were included with your lesson.

Step 1: partition one of the strips of paper into thirds, shade 1/3.

Step 2: partition a 2^{nd} piece of paper into a fraction that is equivalent to 1/3. Use multiplication to help you determine an equivalent fraction. Shade the fraction that is equivalent to 1/3.

Step3: Draw a number line on the 3rd strip of paper that shows thirds and the equivalent fraction you made with the 2nd strip of paper.

Week 25 Day 4 Date: _____

BCCS-B

Howard Morehouse Hampton

Homework

Part 1: Shade the models to find equivalent fractions.



Part 2: Write the fraction that names the shaded part of each circle.



Which two fractions above are equivalent? _____ and _____

Part 3: Draw a line to divide the 1st square into 2 equal parts. Shade $\frac{1}{2}$ of the square. Then draw lines to divide the 2nd square into 4 equal parts. Shade $\frac{1}{2}$ of the square.





Write an equivalent fraction statement shown by the squares above.



Name:	
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Week 25 Day 5 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can I prove my understanding of Topic A and B?

Objective; I can prove my understanding of topic A and B 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 A/B 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.**



4th Grade Modified Math Remote Learning Packet

Name

Week 26



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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Week 26 Day 1 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can I use benchmark fractions to help compare fractions on a number line?

Objective: I can use knowledge of benchmark fractions to help compare 2 fractions.

Do Now

Draw a tape diagram to show 2/3. Below the tape diagram draw a number line, partition it into 3rds and label all the fractions between 0 and 1.

Input

(video)

Compare 5/6 and 2/3

←------→

Write 2 comparison statements:

_____and _____

Name:	
-------	--

Week 26 Day 1 Date: _____

BCCS-B

Howard Morehouse Hampton

Input

Problem 1: reason about the size of a fraction as compared to $\frac{1}{2}$.

Draw a number line and partition it into sixths. Label all the sixths between 0 and 1.

How many	sixths	are	in a	whole	?
,					

How many sixths are in a one half?

Plot ½ on the number line.

Plot 2/6 on the number line.

Is 2/6 greater than or I	ess than ½?	

Let's write 2 comparison statements using the greater than and less than symbol.

Remember:

< LESS THAN >GREATER THAN = EQUAL TO

Write 2 comparison statements:

and _____

Name:				

Week 26 Day 1 Date: _____

BCCS-B

Howard Morehouse Hampton

Your Turn

Partition a number line into eighths, labeling all the 8ths between 0 and 1.

How many 8ths are in ½? _____

Label it on the number line.

Plot 5/8

Is 5/8 greater than or less than ½? _____

Right 2 number sentences that prove that._____ and _____

What if we wanted to compare 2/3 to ½? Are there any amount of halves that are equal to thirds?

Draw a number line to show all the thirds between 0 and 1.

Based on what we know about the size of fractional pieces, do we think that $\frac{1}{2}$ will come before or after 2/3? Plot it.

Write 2 comparison sentences

_____ and _____

Name:

Week 26 Day 1 Date: _____

BCCS-B

Howard Morehouse Hampton

Input

Problem 2: Plot points on a number line by thinking about fractions in relation to 0, $\frac{1}{2}$, or 1.

Let's begin by drawing a number line that shows 0, $\frac{1}{2}$ and 1.

←------

Without plotting all the 12ths between 0 and 1 where do we think 5/12 will be.

Now, lets reason about where we think 7/8 would go on the same number line.

One comparison I could write is 5/12 < 7/8	. What is another comparison we could
write?	

CFU

Using a number line compare 5/8 and 4/5 based on what we know about 0,1/2 and 1.

←------→

Application problem

Plot $\frac{1}{4}, \frac{4}{5}$, and $\frac{5}{8}$ on a number line, and compare the three points.

←------→

¹/₄ <u>5/8</u> 4/5 <u>5/8</u> ¹/₄ <u>4/5</u>

Name:	Week 26 Day 1 Date:	
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Exit ticket		
On a number line plot 8/10, 3/5 and ¼ without measuring.		
\leftarrow		

Now compare:

1/4 _____ 1/2

8/10 _____ 3/5

1/2 _____ 3/5

Name:	Week 26 Day 1 Date:
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Homework

1. a. Plot the following points on the number line without measuring.



- b. Use the number line in Part (a) to compare the fractions by writing >, <, or = on the lines.
 - i. $\frac{2}{3}$ _____ $\frac{1}{2}$ ii. $\frac{4}{10}$ _____ $\frac{1}{6}$

2. Compare the fractions given below by writing > or < on the lines. Give a brief explanation for each answer referring to the benchmark of 0, $\frac{1}{2}$, and 1.





Name: ______ Week 26 Day 2 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can I use benchmark fractions greater than 1 to compare 2 fractions?

Objective: I can use benchmark fractions greater than 1 to compare 2 fractions on a number line.

Do Now

Mr. and Mrs. Reynolds went for a run. Mr. Reynolds ran for $\frac{6}{10}$ mile. Mrs. Reynolds ran for $\frac{2}{5}$ mile. Who ran farther? Explain how you know. Use the

benchmarks 0, $\frac{1}{2}$, and 1 to explain your answer.

Input

What appears to be wrong with the following fraction 6/4 6 fourths?

An improper fraction is ______

Name:	Week 26 Day 2 Date:	
BCCS-B	Howard Morehouse Hampton	
Input		
Problem 1: Reason to compare fractions be Compare 7/8 and 6/4.	etween 1 and 2.	
What do we know about 7/8?		
What do we know about 6/4?		
Based on what we already know about the Write 2 comparison statements.	se 2 fractions we can compare them.	
and		
Compare 5/3 and 9/5		

These 2 fractions are improper. So this time let's use number bonds to help us.

We are going to draw 2 number bonds, both showing how much of each unit is in a whole and how much is left. For example:



Now, draw a number bond similar to this one for 9/5.

Now we can just compare the fractions that we have left, 2/3 and 4/5. This comparison is still a bit challenging so we need to think of the size of the pieces.

Let's compare these 2 fractions by using the 2 tape diagrams given.

Week 26 Day 2 Date: _____

BCCS-B

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Input

Your Turn

Compare the 2 fractions below by drawing the number bonds to compare.

 $\frac{7}{4}$ and $\frac{9}{5}$.

Problem 2: Reason about the size of fractions as compared to $1\frac{1}{2}$.

Model 11/8 as a number bond.

Now compare the amount of 8ths left over after the whole.

3/8 _____ ½

So, 11/8 _____ 1 $\frac{1}{2}$.

Name:	Week 26 Day 2 Date:
BCCS-B	Howard Morehouse Hampton

CFU

Place the following fractions on the given number line and then complete the comparisons

4/3, 11/6,17/12



b. $1\frac{1}{3}$ _____ $1\frac{5}{12}$

Application Problem

Compare the fractions given below by writing > or < on the lines. Give a brief explanation referring to benchmarks

$\frac{14}{12} \frac{11}{6}$	Explain.

Name:	Week 26 Day 2 Date:
BCCS-B	Howard Morehouse Hampton
Exit Ticket	
Place the following fractions on the number line given.	
<i>←</i>	→



Compare the fractions using >, <, or =.





Name:	Week 26 Day 2 Date:
BCCS-B	Howard Morehouse Hampton

Homework

1. Place the following fractions on the number line given.



- 2. Use the number line in Problem 1 to compare the fractions by writing >, <, or = on the lines.
 - a. $1\frac{1}{6}$ b. $1\frac{1}{2}$ b. $1\frac{1}{2}$
- 3. Place the following fractions on the number line given.





Week 26 Day 3 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can I use common denominators or common numerators to compare fractions?

Objective: I can make common denominators to compare fractions.

Do now

Compare $\frac{4}{5}$, $\frac{3}{4}$, and $\frac{9}{10}$ using <, >, or =. Put them in order from smallest to biggest. Explain your reasoning using a benchmark.

If needed, draw a number line to assist.

Input

Think about the following statement:

Which is greater 1 apple or 3 apples?

Write your thoughts

Share.

Name:	Week 26 Day 3 Date:	
BCCS-B	Howard Morehouse Hampton	
Input		
Problem 1: Reason about fraction siz	e using unit language.	
Which is larger and how do you know	v, ¼ or 1/5?	
We know that when a	is cut into pieces, the	
pieces continue to get	This proves that is	
than		
Model it		
[]	[]	
Write 2 comparison statements:		
white 2 companison statements.		
and		
We can use the same thinking when	the numerator is NOT one.	
For example:		
2/4 and 2/6		
When the are t	he same, we have to compare the	
of the pieces.		
Model it		
Write 2 statements:		

Name:	Week 26 Day 3 Date:
BCCS-B	Howard Morehouse Hampton
Input	
Your Turn	
Compare: 5/7 and 5/12	
Model it	
Write 2 statements:	
Problem 2: Compare fractions with re	lated numerators.
Compare 2/8 and 4/10.	
These 2 fractions have from one to the other.	numerators, meaning that we can go
How can we go from 2 to 4?	
Remember the rule: Whatever you do	to the you MUST to do the
After we multiply 2/8 by 2, what are w	e comparing now?
and	
Now, the numerators are the SAME, w pieces.	e can again compare just the size of the
Write 2 comparison statements:	

Name:	Week 26 Day 3 Date:
BCCS-B	Howard Morehouse Hampton
Your turn	
Compare 9/10 and ¾	
What fraction are you going to change?	
How are you going to change it?	
Compare and	
Write 2 statements:	
Problem 3: Compare fractions having r denominator is a factor of the other.	elated denominators where one
Sometimes the process by making common denominat	_ are related and we can use the same ors.
For example: 7/10 and 3/5	
I can change 5 to 10 by multiplying by 2	. Now we can compare:
and	
When the denominators are the are the so, we are now on have.	that means the size of the pieces comparing the of pieces we
Write 2 statements:	
Model it	
] []

Name:	Week 26 Day 3 Date:
BCCS-B	Howard Morehouse Hampton
Your turn:	
2/3 and 4/6	
Which fraction are you going to change?	
How are you going to change it?	
Model it	
Write 2 comparison statements:	
CFU	
a. $\frac{3}{5} - \frac{3}{4}$	a. $\frac{2}{3} - \frac{5}{6}$
c. $\frac{7}{11} - \frac{7}{13}$	b. $\frac{3}{4} - \frac{7}{8}$

Week 26 Day 3 Date: _____

BCCS-B

Howard Morehouse Hampton

Application Problem

Timmy drew the picture to the beloq and claimed that $\frac{2}{3}$ is less than $\frac{7}{12}$. Evan says he thinks $\frac{2}{3}$ is greater than $\frac{7}{12}$. Who is correct? Support your answer with a picture.



Exit Ticket

Draw tape diagrams to compare the following fractions:

2/5 and 3/10

Nam	ame: Week 26 Day 3 Da	. Week 26 Day 3 Date:	
BCCS	CCS-B Howard Morehou	se Hampton	
	Homework		
1.	. Compare the pairs of fractions by reasoning about the si	ze of the units. l	

Compare the pairs of fractions by reasoning about the size of the units. Use
, <, or =.

a. 1 third _____1 sixth b. 2 halves _____2 thirds

c. 2 fourths _____2 sixths

d. 5 eighths _____ 5 tenths

2. Draw two tape diagrams to model each pair of the following fractions with related denominators.

Use >, <, or = to compare.

a. $\frac{3}{4} - \frac{7}{12}$



Week 26 Day 4 Date: _____

BCCS-B

Howard Morehouse Hampton

LEQ: How can cross-multiplication help me compare fractions?

Objective: I can use the butterfly method to compare fractions.

Do Now

Jamal ran $\frac{2}{3}$ mile. Ming ran $\frac{2}{4}$ mile. Laina ran $\frac{7}{12}$ mile. Who ran the farthest? What do you think is the easiest way to determine the answer to this question?

Input

How do we use the butterfly method? ______

Problem 1 Compare ³/₄ and 4/5 using the butterfly method.

Write 2 comparison statements: ______

You try: compare 2/3 and 3/5 using the butterfly method

Name:	Week 26 Day 4 Date:

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Input

Problem 2: we can use this same method when our fractions are improper

Compare 5/3 and 7/4

Write 2 comparison statements: _____

Your turn

Compare 6/4 and 7/5

Write 2 comparison statements: _____

CFU

Using the butterfly method complete the following:



Week 26 Day 4 Date: _____

BCCS-B

Howard Morehouse Hampton

Application Problem

Explain two ways you have learned to compare fractions. Provide evidence using words, pictures, or numbers.

Compare 2/3 and 4/6 using two different methods

Exit Ticket

Solve using the butterfly method and then draw an area model for each pair of fractions, and use it to compare the two fractions by writing >, <, or = on the line.

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



Name:		
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Week 26 Day 4 Date: _____

BCCS-B

Howard Morehouse Hampton

Homework

Use any method to compare the fractions. Record your answer using >, <, or =







Week 26 Day 5 Date: _____

BCCS-B

Howard Morehouse Hampton

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

Objective; I can prove my understanding of topic C by scoring an 80% or better on my quiz.

Do Now

Compare the following fractions using any method you have learned

2/6 an 3/7

7/4 and 8/3

Today you are going to be taking a quiz on comparing fractions. Tonight, there is NO HOMEWORK and NO EXIT TICKET ⓒ

Log into your google classroom and find the quiz called <u>Module 5 Topic C quiz.</u>

Make sure to submit your google form when you are done! GOOD LUCK!