You might want to consider doing this via the document camera so you can model each problem.

Eureka Math

4th Grade
Module 5
Lesson 13

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.

Icons

Read, Draw, Write

Learning Target

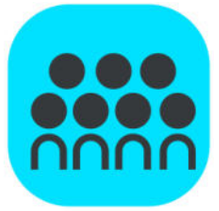
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

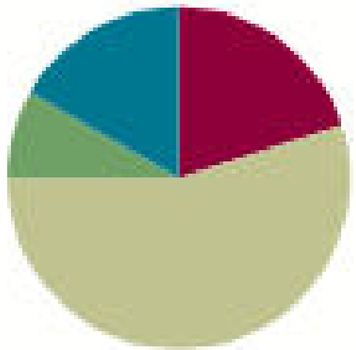
Small Group Time

Lesson 13

Objective: Reason using benchmarks to compare two fractions on the number line.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(5 minutes)
Concept Development	(33 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



Reason using benchmarks to compare two fractions on the number line.

Divide 3 ways

435/3

184/4

Count by...

Count by fours to 40.

Count by fourths starting at 0 to 40 fifths.

Plot Fractions on Number line

Use a whiteboard to do this fluency.

RDW

Application Problem

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.

Reason to compare fractions

Compare ⅞ and 6/4 with your partner.
Draw a number bond for 6/4 partitioning the whole and parts.
Draw a number line and label the endpoints 0 and 2.
Imagine that we are partitioning the line into fourths between 1 and 2. That is where we will place 6/4.
Plot ⅞.
Why did you place ⅞ where you did.

Reason to compare fractions

Compare 5/3 and 9/5. Discuss their relationship to one.
Write a number bond to show 5/3 and 9/5 as a whole and parts.
Use the number bond to write each fraction as 1 and some parts.
Draw and label a number line from 0-2.
Discuss with your partner where you would place 5/3 and 9/5.
Plot the points and compare.

Reason to compare fractions

Is 11/8 less than 1 or greater? Use a number bond to guide your thinking.
Is 11/8 less than 1 ½ or greater?
Discuss with your partner if 5/4 is greater than or less than 1.
Let's draw a new number line. What are our endpoints going to be?
How do you know?
Plot 11/8 and 5/4 on the number line.
Compare them.

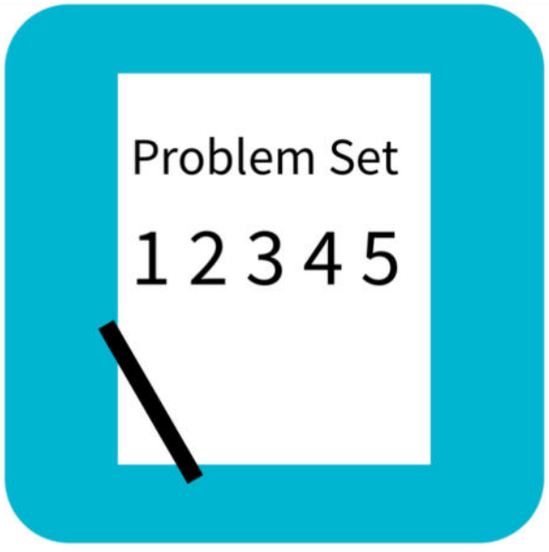
Reason to compare fractions

Compare 11/8 and 10/6.
Use the a number bond and the number line to help you.

Reason to compare fractions

Which is great: 14/10 or 7/5. Discuss with your partner. Use benchmark to help.

Compare 6/4 and 11/10
Which one is greater? How do you know?

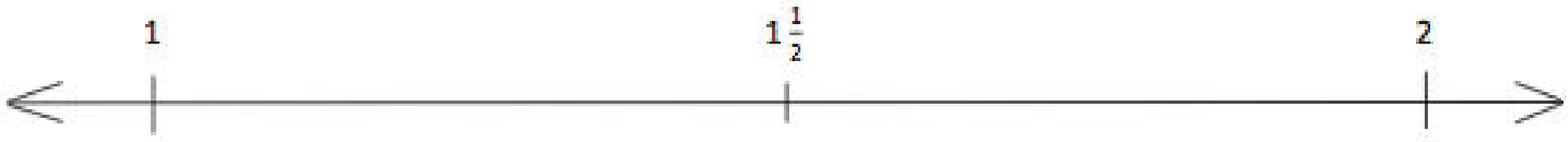


Problem Set

Name _____ Date _____

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

a. $\frac{4}{3}$ b. $\frac{11}{6}$ c. $\frac{17}{12}$



Debrief

- When were number bonds helpful in solving some of the problems on the Problem Set? Explain.
- Explain your thinking in comparing the fractions when you solved Problem 5(a–j). Were benchmarks always helpful?
- How did you solve Problem 5(h)?
- What other benchmarks could you use when comparing fractions? Why are benchmarks helpful?
- How did the Application Problem connect to today's lesson?

Exit Ticket

Name _____ Date _____

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

a. $\frac{5}{4}$ b. $\frac{10}{7}$ c. $\frac{16}{9}$