Eureka Math

4th Grade
Module 6
Lesson 10

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!

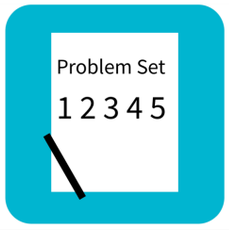
Directions for customizing presentations are available on the next slide.

Icons

Read, Draw, Write

Learning Target

Personal White Board



Problem Set

Manipulatives Needed

Fluency

Think Pair Share

Whole Class

Individual

Partner

Small Group

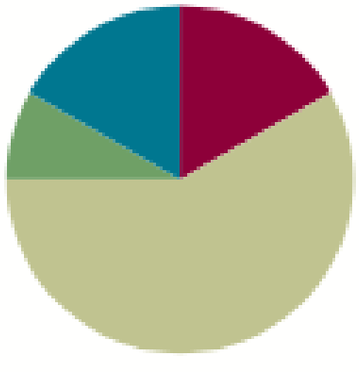
Small Group Time

Lesson 10

Objective: Use area models and the number line to compare decimal numbers, and record comparisons using <, >, and =.

Suggested Lesson Structure

Fluency Practice	(10 minutes)
Application Problem	(5 minutes)
Concept Development	(35 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can use models and the number line to compare decimals numbers, and record comparisons using <,>, and =.

Decompose larger units

On your place value charts draw 2 ones.

2 ones=_____tenths. Show how many tenths are in 2 ones on your place value chart.

Rename the following:
2 ones 5 tenths for tenths
2 tenths for hundredths
2 tenths 4 hundredths for hundredths

Decimal fraction equivalence

Write the equivalence as a fraction and greater than one.

5.2=_____=_____

9.6=_____=_____

10.6=_____=_____

78.9=_____=_____

Rename the decimal

Write the decimal as a mixed number.

3.1

9.8

10.4

64.3

Application Problem

In science class, Emily's 1-liter beaker contains 0.3 liter of water. Ali's beaker contains 0.8 liter of water, and Katie's beaker contains 0.63 liter of water. Who can pour all of her water into Emily's beaker without going over 1 liter, Ali or Katie?

Compare decimals

Shade 0.15 on your area model template.

Shade 0.51 on another area model template.

Which one is greater? How do you know.

Here is one way to record the comparison

$0.15 < 0.51$: is there another way to record it?

Compare Decimals

On the first number line label the endpoints 4.3 and 4.6

Label the other TENTHS that we can label on the number line.

Plot 4.50 and 4.38 on your number line.

Which decimal number is greater? How do you know?

Compare Decimals

6.24_____5.24

13.24_____13.42

0.48_____2.1

2.17_____2.7

3.3_____3.30

7.9_____7.09

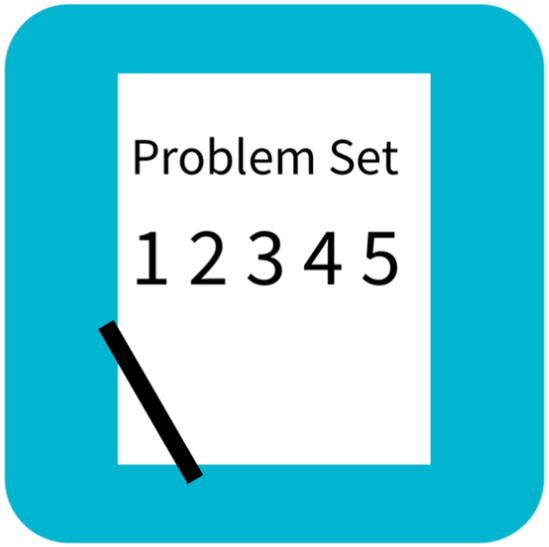
8.02_____8 2/10

5.3_____ 5 ones and 3 hundredths

5.2_____52 tenths

4 ones and 6 tenths____4 ones and 60 hundredths

2.31_____23 tenths

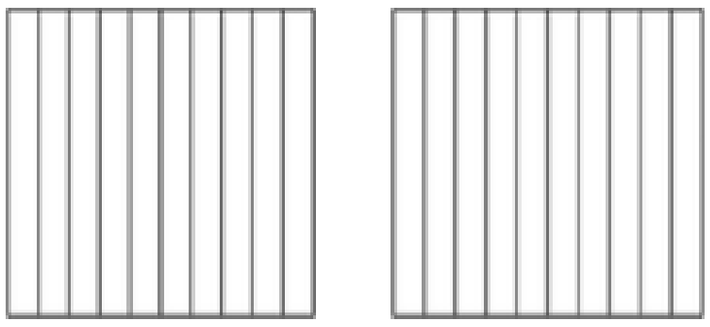


Problem Set

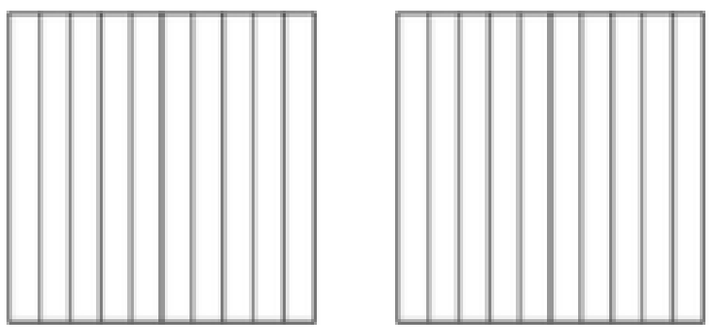
Name _____ Date _____

1. Shade the area models below, decomposing tenths as needed, to represent the pairs of decimal numbers. Fill in the blank with <, >, or = to compare the decimal numbers.

a. 0.23 _____ 0.4



b. 0.6 _____ 0.38



Debrief

- Compare your area model for Problem 1(d) with your partner's area model. Explain why it was possible to shade both models without decomposing one to hundredths.
- Find an example on your Problem Set where a decimal number with only three digits has a greater value than a decimal number with four digits. Explain why this is so.
- During our lesson, we saw that 0.27 is less than 0.7. Explain why this is so. How can looking at the numbers quickly instead of considering the size of the unit lead to mistakes when comparing? How can we rename 0.7 to compare it easily to 0.27? Which model helped you compare numbers most easily? Was it easier to represent particular problems with certain types of models?
- How did the Application Problem connect to today's lesson?

Exit Ticket

Name _____ Date _____

1. Ryan says that 0.6 is less than 0.60 because it has fewer digits. Jessie says that 0.6 is greater than 0.60. Who is right? Why? Use the area models below to help explain your answer.

0.6 _____ 0.60