Comparing Decimals (4.NF.C.7)

Use reasoning and models to compare **decimals**.

Which is greater, 0.4 or 0.5?

Draw area models. Shade 0.4 of one model and 0.5 of the other model.

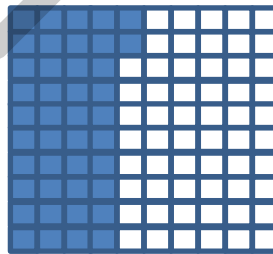0.5 is greater than 0.4.

Record this as 0.5 > 0.4, or as 0.4 < 0.5.

Use reasoning. 5 tenths is greater than 4 tenths, so 0.5 > 0.4.

Compare 0.4 and 0.42.

THINK: $0.4 = \dfrac{4}{10} = \dfrac{40}{100}$ and $0.42 = \dfrac{42}{100}$

40 < 42, so $\dfrac{40}{100} < \dfrac{42}{100}$ and 0.4 < 0.42.

CHECK: Draw area models.

If your students…

Do not understand decimals:

WATCH: Writing Tenths and Hundredths with Decimals

https://www.opened.com/video/writing-tenths-and-hundredths-with-decimals/63911

Make errors expressing tenths as hundredths and/or hundredths as tenths:

WATCH: Use a Grid Model to Show how Fractions with Denominators 10 and 100 are Equivalent

https://www.opened.com/video/use-a-grid-model-to-show-how-fractions-with-denominators/412422

Compare decimals incorrectly:

WATCH: Compare Two Decimals to the Hundredths Place Using a Number Line

https://www.opened.com/video/compare-two-decimals-to-the-hundredths-place-using-a-number/412432

WATCH: Compare Two Decimals to the Hundredths Place Using Fraction Models [overview?]

https://www.opened.com/video/compare-two-decimals-to-the-hundredths-place-using-fraction/412430

For extra practice with comparing decimals:

PLAY: Compare Two Decimals to Hundredths

https://www.opened.com/homework/4-nf-7-compare-two-decimals-to-hundredths-by-reasoning-about/3689486?run=true

PLAY: Ordering Decimals to the Tenths and Hundredths

https://www.opened.com/game/ordering-decimals-to-the-tenths-and-hundredths/213086

PLAY: Comparing Fractions and Decimals

http://mrnussbaum.com/comparedec/