

Decimal Detectives

Read, write, and compare tenths and hundredths.

GRADE 4 • 4.NF.C

CCSS.Math.Content.4.NF.C "Understand decimal notation for fractions, and compare decimal fractions."

NAME _____

DATE _____

DECIMAL CLUES

The first digit after the decimal point shows tenths. The second digit shows hundredths. To compare decimals, compare the tenths first. If the tenths are equal, compare the hundredths.

WORKED EXAMPLE

Write $9/10$ as a decimal.

1. $9/10$ means 9 tenths.

2. A decimal with 9 tenths is 0.9.

Answer: 0.9

PRACTICE 6 problems

1 Write $17/100$ as a decimal.

ANSWER _____

2 Write 0.43 as a fraction with a denominator of 100.

ANSWER _____

3 Write $85/100$ as a decimal.

ANSWER _____

4 Write $<$, $>$, or $=$. 0.62 ___ 0.6

ANSWER _____

5 Write $<$, $>$, or $=$. 0.27 ___ 0.29

ANSWER _____

6 Order these decimals from least to greatest:
 0.54 , 0.45 , 0.5

ANSWER _____

APPLY IT Show your work

- 1** In a video game, Jay's progress bar is 0.38 full. Mia's progress bar is 0.41 full. Whose progress bar is fuller?

WORK SPACE

ANSWER _____

- 2** Sam's remote-control car traveled 0.65 mile. Inez's remote-control car traveled 0.56 mile. Whose car traveled farther?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Ava says that $0.7 < 0.68$ because 68 is greater than 7. Is Ava correct? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write $17/100$ as a decimal.	0.17
2	Write 0.43 as a fraction with a denominator of 100.	43/100
3	Write $85/100$ as a decimal.	0.85
4	Write $<$, $>$, or $=$. 0.62 ___ 0.6	$>$
5	Write $<$, $>$, or $=$. 0.27 ___ 0.29	$<$
6	Order these decimals from least to greatest: 0.54, 0.45, 0.5	0.45, 0.5, 0.54

PART 2 • APPLY IT

1. **Mia's progress bar is fuller.** Compare the tenths first. 0.38 has 3 tenths, and 0.41 has 4 tenths, so 0.41 is greater.
2. **Sam's car traveled farther.** Compare the tenths first. 0.65 has 6 tenths, and 0.56 has 5 tenths, so 0.65 is greater.

CHALLENGE

Ava is not correct. $0.7 = 0.70$, and $0.70 > 0.68$ because 7 tenths is greater than 6 tenths.

Accept equivalent decimal forms that keep the same value, such as 0.50 for 0.5. For comparison explanations, students should compare tenths before comparing hundredths.