LESSON MAKER PRO

Decimal Detectives

Use place value and grids to compare decimals.

GRADE 4 · 4.N.3

4.N.3 "Represent and compare fractions and decimals in real-world and mathematical situations; use place value to understand decimal quantities. Represent and rename equivalent fractions using fraction models (e.g., parts of a set, area models..."

NAME _____ DATE _____

COMPARE BY PLACE

To compare decimals, start with the greatest place value and move right until the digits differ. You can add a zero at the end of a decimal without changing its value.

WORKED EXAMPLE

Compare 0.36 and 0.4 using <, >, or =.

1. Write 0.4 as 0.40.
2. Compare 36 hundredths and 40 hundredths.
3. 36 hundredths is less than 40 hundredths.

Answer: 0.36 < 0.4

PRACTICE 6 problems

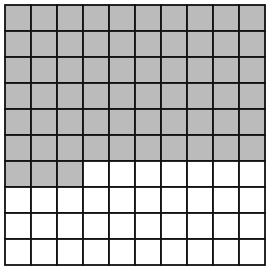
1 Compare 0.7 and 0.68 using <, >, or =.

ANSWER _____

2 Compare 0.52 and 0.5 using <, >, or =.

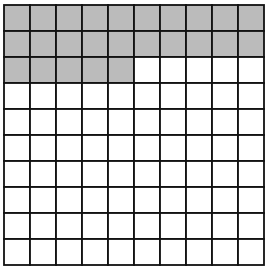
ANSWER _____

3 The grid has 100 equal squares. Compare its shaded part with 0.67 using <, >, or =.



ANSWER _____

4 The grid has 100 equal squares. Write the shaded part as a decimal.



ANSWER _____

5 Write 0.83, 0.38, and 0.8 in order from least to greatest.

ANSWER _____

6 Compare 1.02 and 0.99 using <, >, or =.

ANSWER _____

APPLY IT Show your work

1 Maya runs 1.2 kilometers. Leo runs 1.18 kilometers. Who runs farther? Write a comparison using their distances.

WORK SPACE

ANSWER _____

2 Two sticker packs cost $2.09 and $2.90. Which pack costs less? Write a comparison using the prices.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A classmate says 0.9 < 0.82 because 9 < 82. Is the classmate correct? Explain using hundredths.

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Detectives

GRADE 4 · 4.N.3

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Compare 0.7 and 0.68 using <, >, or =.	**0.7 > 0.68**
2	Compare 0.52 and 0.5 using <, >, or =.	**0.52 > 0.5**
3	The grid has 100 equal squares. Compare its shaded part with 0.67 using <, >, or =.	**0.63 < 0.67**
4	The grid has 100 equal squares. Write the shaded part as a decimal.	**0.25**
5	Write 0.83, 0.38, and 0.8 in order from least to greatest.	**0.38, 0.8, 0.83**
6	Compare 1.02 and 0.99 using <, >, or =.	**1.02 > 0.99**

PART 2 · APPLY IT

1. **Maya; 1.2 > 1.18** Write 1.2 as 1.20. Since 1.20 > 1.18, Maya runs farther.
2. **The $2.09 pack; $2.09 < $2.90** Both prices have 2 dollars. Compare the tenths digits: 0 tenths is less than 9 tenths.

CHALLENGE

No, 0.9 is 90 hundredths. Since 90 hundredths is greater than 82 hundredths, 0.9 > 0.82.

Accept equivalent comparisons that keep the values in the order given, such as 0.70 > 0.68. For the challenge, accept any explanation that correctly compares 90 hundredths with 82 hundredths.