

Decimal Line Detectives

Plot, order and explain decimals to hundredths.

GRADE 4 • MA.4.NSO.1.5

MA.4.NSO.1.5 "Plot, order and compare decimals up to the hundredths."

NAME _____

DATE _____

COMPARE PLACE BY PLACE

Compare the whole-number parts first. If they match, compare the tenths, then the hundredths. A decimal with no hundredths digit can be written with a zero, so $4.6 = 4.60$.

WORKED EXAMPLE

Look at the number line. Compare point A and point B using $<$, $>$, or $=$.

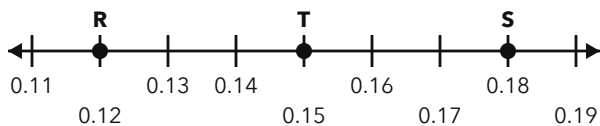
- Point A is at 0.34, and point B is at 0.47.
- Both decimals have 0 ones.
- Compare the tenths: 3 tenths is less than 4 tenths.
- So 0.34 is less than 0.47.

Answer: $0.34 < 0.47$



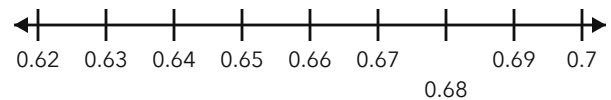
PRACTICE 6 problems

- 1** Look at the number line. List R, S, and T from least to greatest.



ANSWER _____

- 2** Plot M at 0.63 and N at 0.69 on this hundredths line. Compare M and N using $<$, $>$ or $=$. Explain using place value.



ANSWER _____

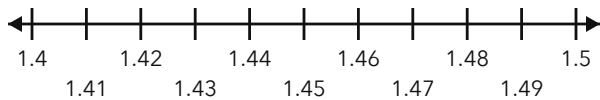
- 3** Write $<$, $>$, or $=$ to compare the decimals:
2.08 ___ 2.80 Explain using tenths.

ANSWER _____

- 4** List these decimals from least to greatest:
0.75, 0.57, 0.72

ANSWER _____

- 5** Plot P six hundredths after 1.40. Write its decimal value.



ANSWER _____

- 6** Write $<$, $>$, or $=$ to compare the decimals:
3.05 ___ 3.50

ANSWER _____

APPLY IT Show your work

- 1** Three players timed one lap in a racing game. Use the table. List the players from fastest to slowest. Name the fastest player and the slowest player.

RACING GAME LAP TIMES

Player	Time in minutes
Jaden	1.28
Lila	1.09
Omar	1.35

ANSWER _____

2

At the school store, pencil grips cost \$2.48, \$2.67, and \$2.53. Which prices are between \$2.50 and \$2.70? List those prices from least to greatest.

WORK SPACE

ANSWER _____

CHALLENGE One step up

List 2.04, 2.4, and 2.40 from least to greatest. Explain why two of the decimals name the same point on a number line.

WORK SPACE AND ANSWER

PRACTICE 1

Look at the number line. List R, S, and T from least to greatest.

R, T, S

PRACTICE 3

Write $<$, $>$, or $=$ to compare the decimals: 2.08 ___ 2.80 Explain using tenths.

2.08 < 2.80 Both have 2 ones; 0 tenths is less than 8 tenths.

PRACTICE 4

List these decimals from least to greatest: 0.75, 0.57, 0.72

0.57, 0.72, 0.75

PRACTICE 6

Write $<$, $>$, or $=$ to compare the decimals: 3.05 ___ 3.50

3.05 < 3.50

APPLY IT 1

Lila, Jaden, Omar. Lila is fastest, and Omar is slowest.

The fastest time is the smallest decimal, 1.09.
Order the times from least to greatest: 1.09, 1.28, 1.35.

APPLY IT 2

\$2.53, \$2.67

Compare each price to 2.50 and 2.70. Only 2.53 and 2.67 are greater than 2.50 and less than 2.70.

CHALLENGE

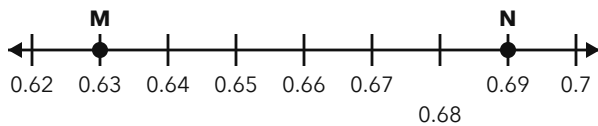
2.04 < 2.4 = 2.40. The decimal 2.4 is the same as 2.40 because 2.4 has 4 tenths and 0 hundredths.

Accept comparison statements with the correct symbols and ordered lists with commas or spaces. For the challenge, accept an explanation that states 2.4 and 2.40 are equal because a zero can be written in the hundredths place. For plotted points, use the supplied exact scales: M at 0.63, N at 0.69 and P at 1.46. Check place-value explanations as well as symbols.

PRACTICE 2

Plot M at 0.63 and N at 0.69 on this hundredths line. Compare M and N using $<$, $>$ or $=$. Explain using place value.

0.63 < 0.69. Both have 6 tenths; 3 hundredths is less than 9 hundredths.



PRACTICE 5

Plot P six hundredths after 1.40. Write its decimal value.

1.46; P is on the sixth hundredth tick after 1.40.

