

Comparing and Ordering Decimals

To determine which of two decimals is greater, you can compare the digits in each place-value position, or you can use a number line.

EXAMPLES Order Decimals

1 Which is greater, 7.4 or 7.63?

METHOD 1 Use place value.

7.4 Line up the decimal points.

7.63 Starting at the left, compare the digits in each place-value position.

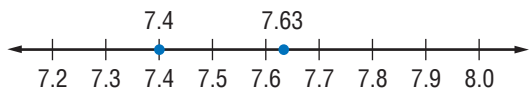


The digits in the tenths place are not the same.

Since 6 tenths $>$ 4 tenths, $7.63 > 7.4$.

METHOD 2 Use a number line.

Graph each decimal on a number line and compare.



On a number line, numbers to the right are greater than numbers to the left.

7.63 is to the right of 7.4, so $7.63 > 7.4$.

2 Order 12.15, 12.08, and 12.103 from least to greatest.

12.15 Line up the decimal points.

12.08 12.08 is less than 12.15 and 12.103 since $0 < 1$ in the tenths place.

12.103 12.103 is less than 12.15 since $0 < 5$ in the hundredths place.

So, the numbers from least to greatest are 12.08, 12.103, and 12.15.