## U1:L4 Ordering Numbers

Remember place values?

| P |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Let's practice! Write the name or the number which matches the given word or number:

| 0.0025 | Three million, three hundred and <br> thirty-three thousand, three <br> hundred and thirty-three |
| :---: | :---: |
| 0.000007 | Twelve and three hundred <br> and forty-five tenths |
| 0.000 | Six million and eighty- <br> eight |
|  |  |

# To determine the order of decimals, simply compare their place values. 

For example:
0.0342
0.031
0.04
0.03
0.029999

## To determine the order of fractions, simply +urn them in+0 a decimal!

To turn a fraction into a decimal...

What about a mixed fraction?

## practice!

Order the following numbers from least to greatest:
$\begin{array}{llllllll}-1.2 & \frac{4}{7} & \frac{2}{5} & \frac{9}{16} & \frac{4}{5} & \frac{7}{8} & -0 . \overline{5} & -\frac{7}{8}\end{array}$

Place the following numbers on a number line:

| 0.99 | 1.5 | $\frac{9}{10}$ | $-\frac{2}{5}$ | $-\frac{1}{2}$ | -2.25 |
| :--- | :--- | :--- | :--- | :--- | :--- |

You can always find a number that fits in-between two other numbers.

## DECIMALS

Adding another decimal place allows you to find numbers between number sets!

| ـ. 1.05 | 1.1 |
| :---: | :---: | :---: |

Write a number in the blank spaces to find a number between each set of numbers:

| 12.34 | $12.34 \_$ | 12.35 |
| :--- | :--- | :--- |

## PRACTICE!

Fill in the missing digits so that the value in the middle decimal is between that of the top and bottom decimal
a) 0.3174
0.3

0.2968
0.3000

Given the following sets of decimals, fill in the spaces so that, in each group, the value of the middle decimal is between that of the top and the bottom decimals:
0.3174
$0.31 \_4$
0.29__
0. _———
0.2968
$0.2 \ldots 68$

In each of the following number pairs, put numbers in the blank spaces which will make the top number less than the bottom number:
3.2__0
3.__1_
$\ldots \cdot-36$
3.2__9
3.2
_-_ 35

Place appropriate numbers in the missing spaces:

| 0.1 |  | 0.2 |
| :---: | :---: | :---: |
| 3.3  3.4 <br> 7.776  7.777 <br> 12.0  12.1 |  |  |

## Fractions

Fractions are a bit more complex. There are a few guidelines to think about:

- IF the denominators are the same, the fraction with the larger numerator is the greater fraction.

| $\frac{4}{5}$ |  | $\frac{2}{5}$ |
| :---: | :---: | :---: |

■ If the numerator stays the same, but the denominator is different, the fraction with the smaller denominator is the greater fraction:


- IF you can find equivalent fractions with the same denominators, do it! Then, simply pick the fraction with the highest numerator as the greater fraction.



## practice!

Put a number in the blank space in each fraction, so that the top fraction is greater than the bottom fraction
a) $\overline{8}$
b) $\frac{9}{-}$
$\overline{8}$
8

Identify a fraction between the following:
$\frac{2}{3}$ and $\frac{5}{6}$

Fill the spaces with an appropriate number:

| $\frac{1}{8}$ |  |  | $\frac{1}{18}$ |
| :---: | :---: | :---: | :---: |


| $\frac{4}{8}$ |  |  | $\frac{8}{8}$ |
| :--- | :--- | :--- | :--- |

