SOL 5.2b compare and order fractions and decimals in a given set from least to greatest and greatest to least.

What you need to know: How to compare two decimal numbers, and how to compare and order fractions and decimals from *greatest to least* or *least to greatest*.

Key Vocabulary:
1) Divisor- The number you are dividing into another number
2) Dividend- The number being divided
3) Quotient –The answer to a division problem
4) Numerator-The top number in a fraction
5) Denominator- The bottom number in a fraction

How to do it: (Comparing two decimal numbers)

Step 1: Make a T-Chart

Step 2: Line up your two decimal numbers on the T-Chart.

Step 3: Beginning with the whole numbers (if there are any), work from left two right, crossing out the identical numbers until you find one of the numbers is bigger. The bigger number would be greater than the smaller number.

Step 4: This is written: bigger number > smaller number

Example of comparing two decimal numbers.

Example1) Which is greater, 4.537 or 4.562?

Step 1. Make a T-chart, and line up the two decimal numbers.

4	537
4	562

Step 2. Remember the vertical (up/down) line represents the decimal

Step 3. Work from left two right, crossing off numbers that are the same.

4	537
4	562

Step 4. Write your final answer 4.562 > 4.537

Example 2) Which is greater, 2.674 or 2.68?

Step 1. Make a T-chart, lining up the two decimal numbers.

2	674
2	68

Step 2. Add a zero behind the eight to make the decimals both end in the hundredths place. Then cross off from left to right.

2	674
2	680

2	674
2	680

Step 3. Now compare the two numbers.

Step 4. After adding the zero, it is easy to see that 2.680 > 2.674!

How to do it: (Comparing and ordering fractions and decimals from least to greatest and greatest to least).

Step 1: Make a T-chart.

Step 2: Line up your decimal numbers on the T-chart. Place fractions to the left of the T-chart, then convert the fractions into decimals and place them on the chart.

Step 3: Look to see if you are ordering from least to greatest or greatest to least, and highlight it.

Step 4: Now that you have all your fractions and decimals on the chart in decimal form, just compare them and order them.

Step 5: Write out your final answer in the original form in which the numbers were given (fractions and decimal numbers).

Example of comparing and ordering fractions from least to greatest and greatest to least.

1) Order $\frac{3}{8}$, 0.315, $\frac{1}{4}$, 0.28 and $\frac{1}{3}$ from greatest to least.

Steps 1and 2: Make a T-chart and line up fractions and decimals.

0.315	0.315
0.28 =	0.280
$\frac{3}{8}$ =	0.375
$\frac{1}{4}$ =	0.250
$\frac{1}{3}$ =	0.333

Step 3: Note that you are ordering greatest to least, highlight it.

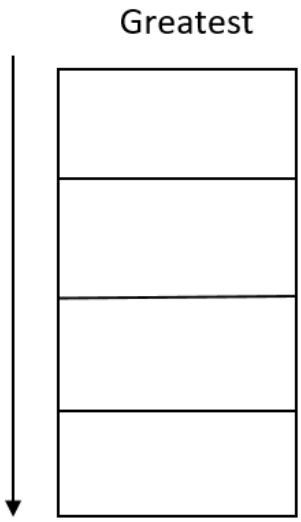
Step 4: Compare and order the numbers from greatest to least.

Step 5: Write out your final answer writing the original fractions and decimals. The correct order is shown below.

$\frac{3}{8}$, $\frac{1}{3}$, 0.315, 0.28 and $\frac{1}{4}$

SOL 5.2b TEI Practice

1. Arrange the four numbers shown from greatest to least.



$2\frac{1}{3}$	2.298	$2\frac{2}{5}$	2.42

2. Complete the number sentence by choosing the correct symbol.

$\frac{5}{8}$ ☐ $\frac{2}{3}$

$\frac{4}{5}$ ☐ $\frac{3}{4}$

$\frac{2}{6}$ ☐ $\frac{4}{12}$

$\frac{5}{7}$ ☐ $\frac{3}{5}$

☐ >

☐ <

☐ =

3.54 ☐ 3.487

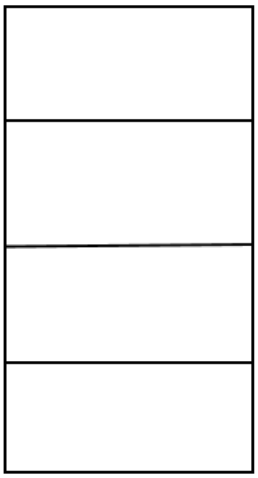
$4\frac{2}{3}$ ☐ $\frac{13}{3}$

$3\frac{2}{5}$ ☐ 3.376

$2\frac{4}{7}$ ☐ $2\frac{3}{5}$

3. Arrange the four numbers shown from least to greatest.

Least



Greatest

$2\frac{3}{4}$	2.7	$2\frac{3}{5}$	2.592