Study the following.

To compare decimals to see which is larger, make both decimals the same place value by adding zeros to the right side of the decimal if needed. What you are doing is making an equivalent decimal.

Example: compare .23 and .3

Add a zero to .3 to make it .30

Compare .23 and .30

30 hundredths is larger than 23 hundredths. Because they are both hundredths, you can compare the 23 and the 30. 30 is larger, so .3 is larger than .23.

Example 2: compare .0352 and .08

Add two zeros to .08 to get .0800.

Compare .0352 to .0800

800 is larger than 352 so .0800 is larger than .0352.

Add zeros if needed and circle which number is larger.

1. .82 .092

2. .832 .15

3. .93 .744

4. .4 .099

5. .492 .843211

6. .005 .0006

7. .00029 .0001

Study the following.

When comparing several decimals it helps to write them in a column.

Example: Put in order from least to greatest. .8, .27, .14 and .053

Write in a column, lining up the decimals.

- .2
- .87
- .14
- .053

Add zeros to make them all the same length.

- .200
- .870
- .140
- .053

compare the numbers to get,

53 is smallest, 140 next, 200 next, 870 next.

Therefore the order is .053, .14, .2 and .87.

Write in a column.

Add zeros.

Put in order from least to greatest.

1. .14 .082 .105 .1381

2. .07 .029 .0883 .1

3. .04502 .38 .093 .1942

Study the following.

Follow this same procedure when the decimals have whole numbers in front of them.

Example: Put in order from least to greatest. 82.3 81.04 81.19 82.085

Write in a column, lining up the decimals.

82.3 81.04 81.19 82.085

Add zeros to make them all the same length.

82.300 81.040 81.190 82.085

First compare the whole number parts.

81.040 81.190	the 81's are smaller
82.300 82.085	the 82's are larger

Then compare the decimal parts within the same equal whole numbers.

Within the 81's, the 40 is smaller than the 190 Within the 82's, the 85 is smaller than the 300.

Therefore the order is 81.040 81.190 82.085 82.300

Write in a column.

Add zeros.

Put in order from least to greatest.

1. 72.148 70.8 72.7 70.09

2. 9.005 9.04 8.003 9.1023

3. 45.4 44.06 45.13 45.0583 44.019