Comparing Decimals

When you look at a group of decimal fractions, it is sometimes difficult to tell which decimal is the largest. To compare decimals, give each decimal the same number of places by adding zeros. This is the same as giving each decimal fraction a common denominator. The zeros you add do not change the value of the decimals.

EXAMPLE 1 Which is larger, 0.07 or 0.2?

STEP 1	Add a zero to 0.2 so that both decimals have two places.	0.07 or 0.20
STEP 2	Since twenty hundredths is larger than seven hundredths, 0.2 is larger.	**0.2 is larger**

EXAMPLE 2 Arrange the following list of decimals in order from smallest to largest: 0.8, 0.08, 0.088, 0.808

STEP 1	Add zeros so that each decimal has the same number of places.	0.800, 0.080, 0.088, 0.808
STEP 2	Compare and arrange the decimals in order from smallest to largest.	**0.08, 0.088, 0.8, 0.808**

Notice that the extra zeros are not written in the final list.

In each pair, tell which decimal is larger.

1.	0.04 or 0.008	0.9 or 0.99	0.67 or 0.707
2.	0.328 or 0.33	0.0792 or 0.11	0.2 or 0.099
3.	0.0057 or 0.006	0.4 or 0.0444	0.065 or 0.07

Arrange each list in order from the smallest to the largest.

4.	0.03, 0.33, 0.033, 0.303	0.082, 0.28, 0.8, 0.08
5.	0.106, 0.16, 0.061, 0.6	0.017, 0.2, 0.02, 0.007
6.	0.4, 0.405, 0.45, 0.045	0.04, 0.304, 0.32, 0.4
7.	0.0072, 0.07, 0.027, 0.02	0.2, 0.06, 0.0602, 0.026