COMPARING FRACTIONS AND DECIMALS

Comparing Fractions and Decimals

Let's say we want to compare 3/5 to 0.7 to see which is GREATER.

1. One way to compare a fraction to a decimal is to **convert the fraction to a decimal** first, so that we can compare a decimal to a decimal.

To compare 0.7 to 3/5 we can convert the fraction into a decimal by dividing the numerator by the denominator.

We would divide 3 by 5 → 3 ÷ 5

```
   0 . 6
5 | 3 . 0
  - 0
    3 . 0
  - 3   0
        0
```

3/5 = 0.6

Now we can compare a decimal to a decimal: 0.6 **<** 0.7 so…

3/5 < 0.7

2. Another way to compare a fraction to a decimal is to **convert the decimal to a fraction** and then compare the fraction to a fraction.

Let's compare 3/5 and 0.7 again, converting the decimal to a fraction this time.

We read 0.7 as three tenths: 0.3 = 7/10

Now we have two fractions to compare: 3/5 and 7/10.

We need to do an additional step before deciding which fraction is greater: we need to find a **COMMON DENOMINATOR.**

10 is a common denominator between 3/5 and 7/10.

We do not 0 as its denominat

$$\frac{3 \times 2}{5 \times 2} =$$

Now they both have the SAME denominators so we can now see which one is GREATER: 6/10 < 7/10 so…

$$3/5 < 0.7$$