

Cue Card 2

Fundamental Law of Fractions

The value of a fraction does not change if its numerator and denominator are multiplied by the same number.

This is true because the value of a number does not change when it is multiplied by one.

Examples:

- $1/1$, $2/2$, $3/3$, $5/5$, and $10/10$ are all different names for the number one. There are infinite number of different names for one.
- $1/2$, $2/4$, $3/6$, $5/10$, and $10/20$ are all equivalent fractions. For any fraction, there are an infinite number of equivalent fractions.
- To write an equivalent fraction, choose a fraction for the number one. Multiply by that fraction.

$$\frac{2}{3} \times \frac{5}{5} = \frac{10}{15}$$

$$\frac{10}{15} \div \frac{5}{5} = \frac{2}{3}$$

$$\frac{2}{3} = \frac{10}{15}$$