

10/14/16

Name: CLASS NOTES

NOTES

Per ☺ _____

Reciprocals

*Remember, **RECIPROCAL**s are two numbers whose **PRODUCT** is 1!

1. To find the reciprocal of a **PROPER** fraction, just flip the fraction!

a. $\frac{3}{4} \rightarrow \frac{4}{3}$

b. $\frac{1}{3} \rightarrow \frac{3}{1}$

c. $\frac{10}{21} \rightarrow \frac{21}{10}$

$\frac{3}{4} \times \frac{4}{3} = \frac{12}{12} = 1$

$\frac{1}{3} \times \frac{3}{1} = \frac{3}{3} = 1$

$\frac{10}{21} \times \frac{21}{10} = \frac{210}{210} = 1$

2. To find the reciprocal of a **WHOLE** number, turn it into a fraction by putting it over 1 and then flip the fraction!

a. $\frac{2}{1} \rightarrow \frac{1}{2}$

b. $\frac{20}{1} \rightarrow \frac{1}{20}$

c. $\frac{5}{1} \rightarrow \frac{1}{5}$

$\frac{2}{1} \times \frac{1}{2} = \frac{2}{2} = 1$

$\frac{20}{1} \times \frac{1}{20} = \frac{20}{20} = 1$

$\frac{5}{1} \times \frac{1}{5} = \frac{5}{5} = 1$

3. To find the reciprocal of a mixed number, turn it into an improper fraction, then flip the fraction!

a. $3\frac{1}{2} = \frac{7}{2} \rightarrow \frac{2}{7}$

b. $2\frac{4}{5} = \frac{14}{5} \rightarrow \frac{5}{14}$

c. $1\frac{2}{3} = \frac{5}{3} \rightarrow \frac{3}{5}$

*Why do we care about **RECIPROCAL**s? Because they help us to divide by fractions!

We can divide fractions by multiplying the dividend by the reciprocal of the divisor!

KEEP (the dividend), **CHANGE** (the operation), **FLIP** (the divisor)
first number to multiplication second number

Ex: $5 \div \frac{2}{3} =$

Ex: $4 \div \frac{3}{5} =$

$\frac{5}{1} \times \frac{3}{2} = \frac{15}{2}$

$\frac{4}{1} \times \frac{5}{3} = \frac{20}{3}$