Notes - Converting Fractions and Decimals

Converting Fractions and Decimals

There is a relationship between fractions and decimals.

$\frac{4}{10}$ = four tenths (_____)

$\frac{35}{100}$ = thirty-five hundredths (_____)

$\frac{57}{1000}$ = fifty-seven thousandths (_____)

Converting Fractions to Decimals

The easiest way to convert fractions to decimals is when possible create an equivalent fraction with a denominator that is a power of ____.

$\frac{3}{5} = \_\_\_\_\_ = 0.6$

$\frac{5}{20} = \_\_\_\_\_ = 0.25$

Now You Try!

Convert each fraction into a decimal using a denominator of 10, 100, or 1000.

$\frac{1}{5}$ =

$\frac{2}{20}$ =

$\frac{17}{500}$ =

$\frac{11}{125}$ =

What are Terminating and Repeating Decimals???

_____ decimals end or terminate.

2.4 0.78 -0.000003 -9

_____ decimals end with a repeating digit or block of digits.

$0.\overline{7}$ $0.\overline{92}$ $-0.4\overline{5}$ $-8.\overline{613}$

Converting Fractions to Decimals Using Long Division

When you cannot easily change the denominator to a power of 10, you will need to use _____ to find the decimal.

Think of the fraction bar as a division symbol.

$\frac{3}{8}$ = three divided by 8 $8\overline{)3.000}$

Notes - Converting Fractions and Decimals

Now You Try!

Convert each fraction into a decimal using long division.

$\frac{1}{6}$ =

$-\frac{7}{8}$ =

$\frac{4}{9}$ =

$-3\frac{9}{11}$ =

Converting Decimals to Fractions

The convert decimals to fractions, write the _____ as you would say it out loud and then _____.

0.38 =

-2.14 =

1.07 =

Now You Try!

Convert each decimal into a fraction (remember to simplify!).

0.35 =

0.325 =

-3.08 =

2.111 =