

## FRACTIONS/DECIMALS


**Any fraction can be changed into a decimal and any decimal can be changed into a fraction.** This is because a decimal is based on the place values of tenths, hundredths, and thousandths etc. and most fractions can be changed to have a denominator of ten, hundred or thousand etc.

hundreds, tens, ones, . , tenths, hundredths, thousandths

For the fractions that cannot easily be changed into 10, 100, or 1000, **simple division will change the fraction into a decimal.** By being able to change fractions into decimals and vice versa, fractions and decimals can be compared easily.

### How to use fractions/decimals:

- A type of fraction that has a denominator of ten or one hundred can be written as a decimal. For example,  $\frac{3}{10}$  can be changed to 0.3.
- To change a fraction into a decimal, multiply the numerator by the denominator. For example,  $\frac{3}{5}$  multiply the numerator by 2, making the denominator 10. Once the factor is found, multiply the numerator by this factor to get the new numerator, and then change this new fraction into a decimal.



**PREVIEW**

Please login or register to download the printable version of this study guide.

[www.newpathlearning.com](http://www.newpathlearning.com)

*Example:* Fraction:  $\frac{3}{5}$  multiply by 2:  $\frac{6}{10}$   
 changes into decimal: 0.6

- If there is a fraction that does not easily change into 10, 100, 1000 etc., simple division will be used to change it into a decimal. Fractions are read, "twelve divided by sixteen", so the fraction can be divided. In this case, 12 is the dividend and 16 is the divisor. In order to divide, zeros must be added after a decimal point.

Example:

$$\begin{array}{r}
 \underline{12} \\
 16 \overline{) 12.00} \leftarrow \text{add zeros} \\
 \underline{- 112} \\
 80 \\
 \underline{- 80} \\
 0
 \end{array}$$

To change a decimal into a fraction, simply change the number into the numerator and the place value into the denominator. So .78 would change into the fraction 78/100. The new fraction should also then be put into lowest terms, 78/100 would equal 39/50.

### Try this!

1. C

5/10

7/8

26/35

5/11

2. Change into a fraction:

0.8

0.35

0.891



**PREVIEW**

Please login or register to download the printable version of this study guide.

[www.newpathlearning.com](http://www.newpathlearning.com)