

Converting Fractions and Decimals

Fractions to Decimals:

To Convert Fractions to decimals you have 2 ways/options:

Option 1:

* Divide the Numerator by the Denominator (Top in, Bottom Out)

$$\frac{1}{4} \overline{)41} \rightarrow 0.25 \quad \frac{3}{7} \overline{)713} \rightarrow 0.428$$

Option 2:

* See if the denominator has a multiple of 10, 100, or 1000.

$$\frac{1}{4} \xrightarrow{\times 25} \frac{25}{100} = 0.25 \quad \frac{3}{5} \xrightarrow{\times 2} \frac{6}{10} = 0.6$$

Decimals to Fractions:

To Convert decimals to Fractions, Keep decimal place values in mind or remember for every Zero in the denominator you need a place value...

Option 1:

* Decimal Place Values

$$23.4567$$

↑ ↑ ↑ ↑
10 100 1000 10000

$$\frac{4}{10}, \frac{5}{100}, \frac{6}{1000}, \frac{7}{10000}$$

Also, MUST SIMPLIFY!

* Count the Place Value numbers and put that many Zeros in your denominator with a 1 in front.

$$0.\underline{3} \rightarrow \frac{3}{10} \quad 2.\underline{30} \rightarrow 2\frac{30}{100} \rightarrow 2\frac{3}{10} \quad 14.\underline{02} \rightarrow 14\frac{2}{100} \rightarrow 14\frac{1}{50}$$

one decimal place So one Zero in the denominator.	2 decimal Places So 2 Zeros in the denominator; Simplify.	2 decimal Places Simplify. Zero's Count!
--	---	--

Converting Fractions and Decimals

Fractions to Decimals:

To Convert Fractions to decimals you have 2 ways/options:

Option 1:

* Divide the Numerator by the Denominator (Top in, Bottom Out)

$$\frac{1}{4} \overline{)41} \rightarrow 0.25 \quad \frac{3}{7} \overline{)713} \rightarrow 0.428$$

Option 2:

* See if the denominator has a multiple of 10, 100, or 1000.

$$\frac{1}{4} \xrightarrow{\times 25} \frac{25}{100} = 0.25 \quad \frac{3}{5} \xrightarrow{\times 2} \frac{6}{10} = 0.6$$

Decimals to Fractions:

To Convert decimals to Fractions, Keep decimal place values in mind or remember for every Zero in the denominator you need a place value...

Option 1:

* Decimal Place Values

$$23.4567$$

↑ ↑ ↑ ↑
10 100 1000 10000

$$\frac{4}{10}, \frac{5}{100}, \frac{6}{1000}, \frac{7}{10000}$$

Also, MUST SIMPLIFY!

* Count the Place Value numbers and put that many Zeros in your denominator with a 1 in front.

$$0.\underline{3} \rightarrow \frac{3}{10} \quad 2.\underline{30} \rightarrow 2\frac{30}{100} \rightarrow 2\frac{3}{10} \quad 14.\underline{02} \rightarrow 14\frac{2}{100} \rightarrow 14\frac{1}{50}$$

one decimal place So one Zero in the denominator.	2 decimal Places So 2 Zeros in the denominator; Simplify.	2 decimal Places Simplify. Zero's Count!
--	---	--