

Converting Fractions, Decimals and Percents

Jan 8, 2024

1) Fractions to Decimals

↳ Divide

Example: $\frac{2}{3}$ \rightarrow Divide

$= 0.\overline{6}$

$$\begin{array}{r} 0.\overline{6} \\ 3 \overline{) 2.00} \\ \underline{-18} \\ 20 \\ \underline{-18} \\ 20 \\ \vdots \end{array}$$

Try: $\frac{1}{8}$

$= 0.125$

$$\begin{array}{r} 0.125 \\ 8 \overline{) 1.000} \\ \underline{-8} \\ 20 \\ \underline{-16} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

2) Decimal to %

↳ Multiply the decimal by 100%

↳ Move the decimal place two spaces to the right

Example: $0.\overline{8}$
Show work: $0.\overline{8} \times 100\%$
 $= 80\%$

Try: $0.\overline{37}$
 $0.\overline{37} \times 100\%$
 $= 37\%$

Try: $2.\overline{00}$
 $2 \times 100\%$
 $= 200\%$

3) Decimal to Fraction

- ↳ Numerator (top) \rightarrow The decimal # without the decimal place
- ↳ Denominator (Bottom) \rightarrow # of decimal places : # of zeroes after a 1

Example: $0.71 = \frac{71}{100}$
2 dec places \rightarrow 2 zeroes

Try $0.005 = \frac{5}{1000}$
3

$3.7 = \frac{37}{10}$

4.) % to Decimal

\rightarrow Divide the % by 100%

\rightarrow Move the decimal 2 places to the left.

Example: 14%

Try: 27.4%

Work: $\frac{14\%}{100\%} = 0.14$

$\frac{27.4\%}{100\%} = 0.274$

5.) % to Fraction

\rightarrow Change % to decimal, then decimal to fraction

Example: 5%

$\frac{5\%}{100\%} = 0.05$

Change to decimal

$0.05 = \frac{5}{100}$

Change to fraction