

Notes-Converting Fractions and Decimals.notebook

Converting Fractions
to Decimals
&
Decimals to Fractions

Converting Fractions to Decimals

There is a relationship between fractions and decimals.

$$\frac{4}{10} = 0.4 \text{ four tenths}$$
$$\frac{35}{100} = 0.35 \text{ thirty five hundredths}$$

Touch here to try one

Pull

Converting Fractions to Decimals

The easiest way to convert fractions to decimals is when possible create an equivalent fraction with tenths or hundredths.

$$\frac{3}{5} = \frac{6}{10} = 0.6$$
$$\frac{5}{20} = \frac{25}{100} = 0.25$$

Determine the equivalent decimal.

Fraction	Factor	Equivalent Fraction (Power of 10)	Decimal
1/5	x 2		
3/20	x 5		
2/500	x 2		

0.15 0.2 0.004

Converting Fractions to Decimals Example Problems

- $\frac{3}{25} =$
- $\frac{1}{4} =$
-

?

Converting Fractions to Decimals Using Division

When you cannot easily change the denominator to either 10 or 100, you need to use division to find the decimal.

Think of the fraction bar as a division symbol.

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

←

Notes-Converting Fractions and Decimals.notebook

Converting Fractions to Decimals Using Division

- $-\frac{7}{8}$
- $\frac{2}{3}$
- $\frac{-5}{-3}$

Converting Decimals to Fractions

Write the fraction as you would _____ it out loud. Then reduce.

- 0.38
- 2.14
- 1.07

Converting a Decimal to a Fraction.

$$.35 = \frac{\quad}{100} = \frac{\quad}{100} \div \frac{\quad}{5} = \frac{\quad}{20}$$

$$.325 = \frac{\quad}{\quad} = \frac{\quad}{\quad} \div \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

TERMINATING AND REPEATING DECIMALS

Pull

TERMINATING DECIMAL

Pull

REPEATING DECIMAL

Terminating

Repeating

Let students play this activity on their devices.

Add game elements to make the activity.

Get it

9/20, 1.238, 5/16, 0.1, 2/3, 7/11, 3/5, 0.325, 0.11111, 0.16666, 1/6, 0.321321