Simplest form

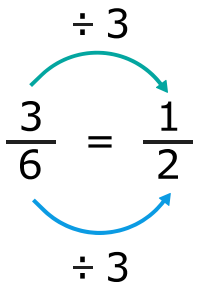
What is simplest form?

A fraction is in **simplest form** if the top and bottom have no common factors other than 1. In other words, you cannot divide the top and bottom any further and have them still be whole numbers.

You might also hear simplest form called "lowest terms".

For example, the fraction $\frac{4}{5}$ is in simplest form. There's no number that divides both 4 and 5, other than 1.

The fraction $\frac{3}{6}$ is not in simplest form. You can divide both the numerator and denominator by 3.



Since you cannot divide 1 and 2 any further, you know that $\frac{1}{2}$ is the simplest form of $\frac{3}{6}$.

How do you simplify a fraction?

To find the simplest form of a fraction, you can divide the numerator and denominator by their greatest common factor, or GCF.

Let's try it with $\frac{12}{18}$.

First, find the GCF of 12 and 18. List out all the factors of each number. Find the biggest factor they share.

Factors of 12: 1, 2, 3, 4, **6**, 12
Factors of 18: 1, 2, 3, **6**, 9, 18

The GCF of 12 and 18 is 6.

Next, simplify the fraction. Divide the numerator and the denominator by their GCF.

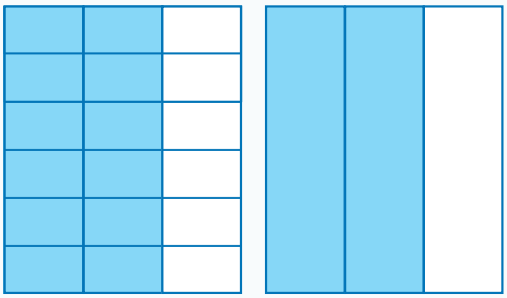
$$\frac{12}{18} \overset{\div 6}{=} \frac{2}{3}$$

So, the simplest form of $\frac{12}{18}$ is $\frac{2}{3}$!

Tip

A fraction and its simplest form are equivalent fractions. They represent the same amount.

$$\frac{12}{18} = \frac{2}{3}$$



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Write $\frac{24}{50}$ in lowest terms:

$\frac{\square}{\square}$

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Equivalent fractions

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