

Fractions

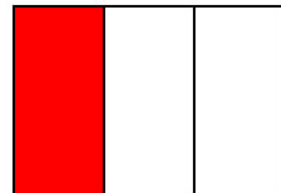
A fraction is a part of a whole.

A common fraction is made up of a **denominator** and a **numerator**.

The **numerator** is shown above the line, and it represents *the number of parts of the whole*.

The **denominator** is shown underneath the line, and it represents *the number of parts into which the whole has been divided*.

This shape shows $1/3$



The numerator is '1', meaning 1 part of the whole.

The denominator is '3', meaning the whole has been divided into 3 parts.

Proper Fractions:

A proper fraction is a standard fraction, where the numerator is smaller than the denominator.

E.g $1/8$, $3/4$, $7/8$, etc

Improper Fractions:

An improper fraction is a fraction where the numerator is greater than the denominator. Therefore it has a total value which is greater than one whole.

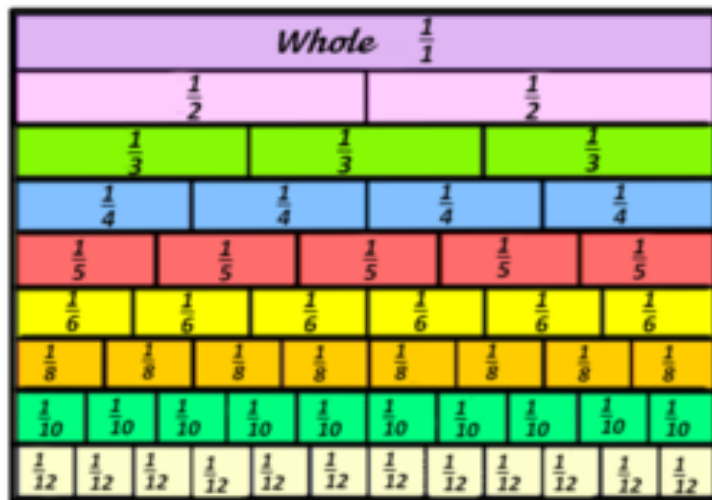
E.g $5/4$, $11/8$, $8/6$ etc

Equivalent fractions

These are fractions that may look different from each other, but have the same value.

E.g $\frac{1}{4}$ is worth the same as $\frac{2}{8}$

$\frac{1}{2}$ is the same as $\frac{2}{4}$, $\frac{5}{10}$ etc



Mixed number fractions.

A mixed number fraction is a fraction that is made up of a whole number plus a fraction.

Simplified fractions.

A simplified fraction is a fraction that has been fully reduced to its lowest term. This can be done when the denominator and numerator can both be divided by the same number.

E.g $\frac{4}{16}$ can be simplified to $\frac{1}{4}$ by dividing both the numerator and denominator by 4.

$\frac{10}{20}$ can be simplified to $\frac{1}{2}$ by dividing both the numerator and denominator by 10.