Fractions, percentages and decimals - Maths Vocabulary

Unsure of what that word means in your homework? Well you may find it here!

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Arithmetic

The basic calculations we make in everyday life: addition, subtraction, multiplication and division.

The subject also includes fractions and percentages (related to division), and exponents (related to multiplication).

$5.5 - 3.4 = 2.1$

$15 / 3 = 5$

$2 + 15 = 17$

$3 \times (4+2) = 18$

25% of 12 is 3

$\sqrt{9} = 3$

$\frac{3}{4} \times 16 = 12$

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Ascending order

The arrangement of numbers from smallest to largest

Example: 3, 9, 12, 55 are in ascending order.

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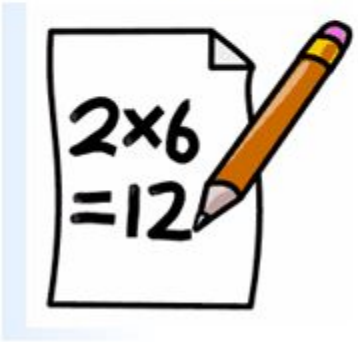
Calculate

To work out an answer, usually by adding, multiplying etc.



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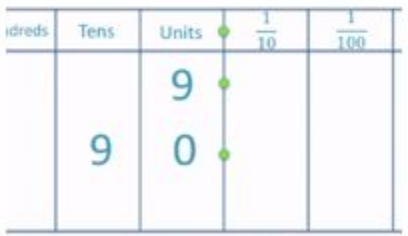
Column

An arrangement of figures, one above the other.

This is a column of numbers:

12
25
17
92
14

$9 \times 10 = 90$



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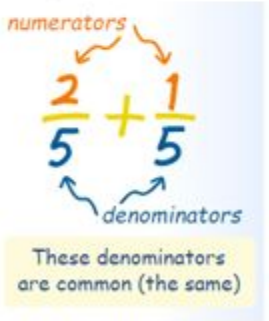
Common Denominator

When two or more fractions have the same denominator (the bottom number).

We can add and subtract fractions only when they have a common denominator.

To get common denominators we can multiply both top and bottom of a fraction by the same amount.



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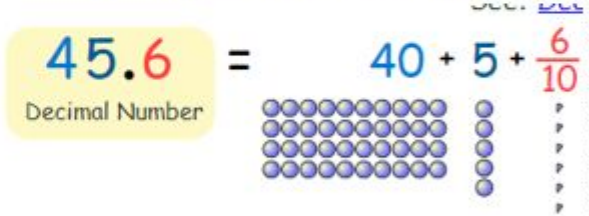
Decimal Number

A number that has a decimal point followed by digits that show a value smaller than one.

Example decimal numbers;
0.01 (point zero one) which is also equal to 1/100
45.6 (forty-five point six) which is also equal to 45 and 6/10



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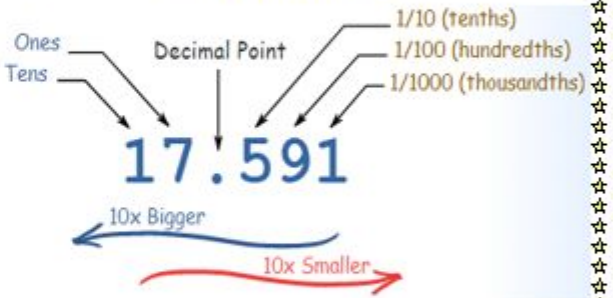
Decimal point

A point (small dot) used to separate the whole number part from the fractional part of a number.



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Decrease Decreasing	Make something smaller (in size or quantity).

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Denominator

The number below the line in a fraction.

Shows how many equal parts the item is divided into.

$$\frac{3}{4}$$

← Numerator

← Denominator

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Descending order

The arrangement of numbers from the largest to smallest

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Equal

Exactly the same amount or value

The symbol is =

1+1=2

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Equal Sign

The symbol =

Shows that what is on the left of the sign is exactly the same amount or value as what is on the right of the sign.

1+1=2

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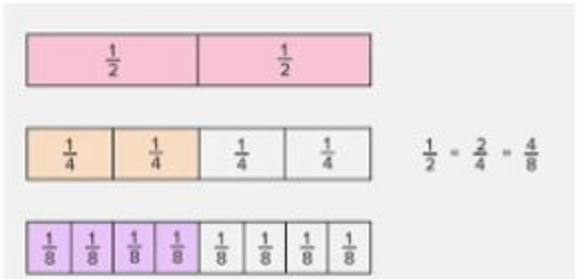
Equivalent

Having the same value

$1+1=2$



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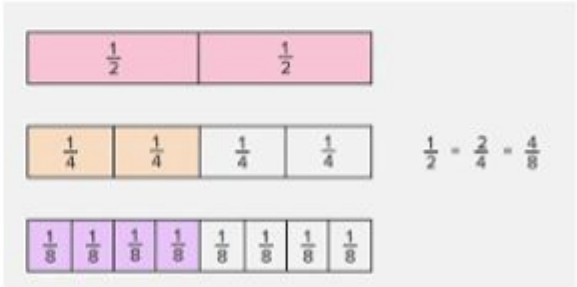
Equivalent fractions

Fractions, which have the same value, even though they may look different.



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Fraction

How many parts of a whole:

- the top number (the numerator) says how many parts we have.

- the bottom number (the denominator) says how many equal parts the whole is divided into

$$\frac{3}{4}$$ ← *Numerator* ← *Denominator*

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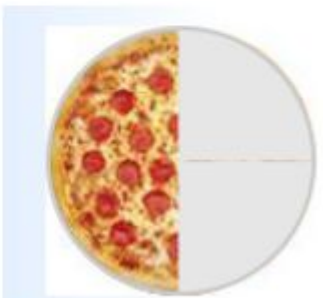
Half	One of two equal parts of a whole. 

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Halve

To divide into two equal parts.

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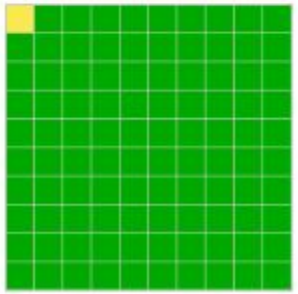
Hundredths

One part in a hundred equal parts.

1/100th



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Improper fraction

A fraction whose numerator is equal to or greater than its denominator.

Larger (or equal) → 9

Smaller (or equal) → 5

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Increase

Make something bigger (in size or quantity)

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Least Common Denominator

The smallest number that can be used for all denominators of 2 or more fractions;

- a "Denominator" is the bottom number of a fraction.
- a "Common Denominator" is when the bottom number is the same for the fractions.
- the "Least Common Denominator" is the smallest number that can be used for all denominators of the fractions.

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Lowest Common Denominator

The smallest number that can be used for all denominators of 2 or more fractions:

- a "Denominator" is the bottom number of a fraction.
- a "Common Denominator" is when the bottom number is the same for the fractions.
- the "Lowest Common Denominator" is the smallest number that can be used for all denominators of the fractions.

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Mixed Fraction

A whole number and a fraction combined into one "mixed" number.

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Mixed Number

A whole number and a fraction combined into one "mixed" number.

mixed fraction

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Numerator

The number above the line in a fraction.

Shows how many parts we have.

$\frac{3}{4}$ ← *Numerator*

$\frac{3}{4}$ ← *Denominator*

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Ordering

Putting things into their correct place following some rule.

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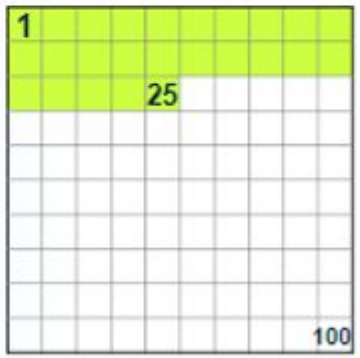
Percent

Parts per 100

The symbol is %



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Place Holder

Zero is also used as a "place-holder" so that you can write a numeral properly.

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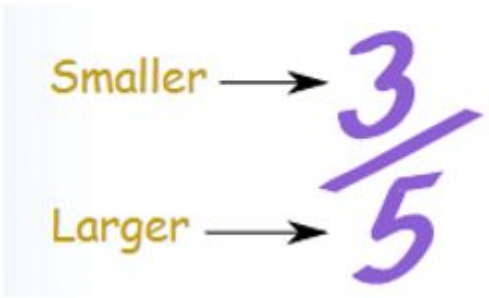
Proper Fraction

A fraction where the numerator (the top number) is less than the denominator (the bottom number).



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Quarter

One of four equal parts

Written as 1/4

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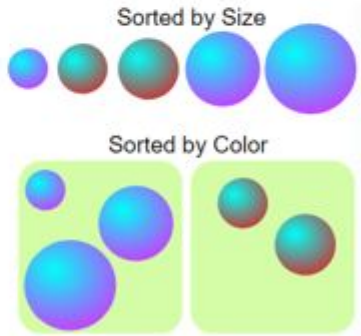
Sort

To arrange or group in a special way (such as by size, type or alphabetically).



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Ratio

A ratio shows the relative sizes of two or more values.

Ratios can be shown in different ways;

- using the ":" to separate example values
- using the "/" to separate one value from the total
- as a decimal, after dividing one value by the total
- as a percentage, after dividing one value by the total

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Recurring Decimal

A decimal number with a digit (or group of digits) that repeats forever.

$\frac{1}{3} = 0.333\ldots = 0.\dot{3} = 0.\overline{3}$

Fraction — Ways to show recurring decimals

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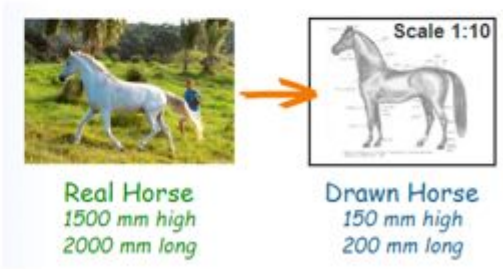
Scale

The ratio of the length in a drawing (or model) to the length on the real thing



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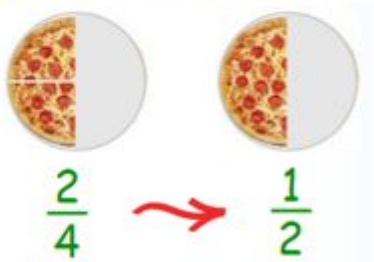
Simplest Form

A fraction is in simplest form when the top and bottom cannot be any smaller, while still being whole numbers.



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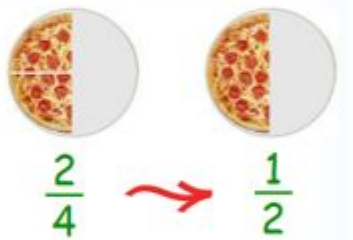
Simplify a fraction

To simplify a fraction: divide the top and bottom by the greatest number that will divide both numbers exactly (they must stay whole numbers).



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Symbol

A pattern, character or image used instead of words.

Example: "+" is the symbol for "plus"

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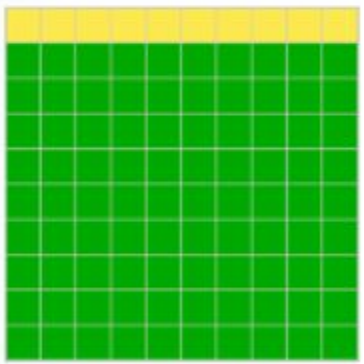
Tenth

One part in ten equal parts.



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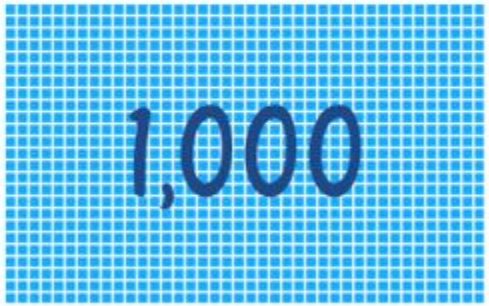
Thousandth

One part in a thousand equal parts: **1/1000th**



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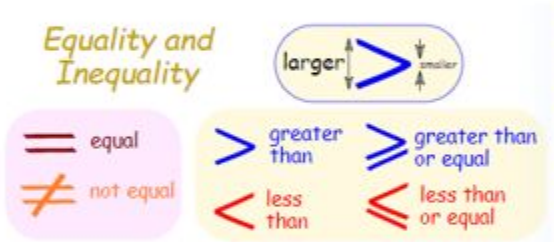
Unequal

Not equal



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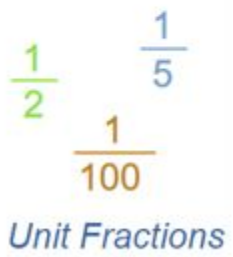
Unit Fraction

A fraction where the top number (the "numerator") is 1



Unit Fractions

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Value

A result of a calculation / how much something is worth in money / the value of the digit in the place that it holds in the number.

1+1 = 2

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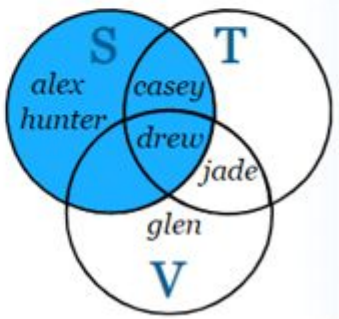
Venn diagram

A diagram that shows **sets** and which elements belong to which set by drawing regions around them.



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Whole

All of something - Complete

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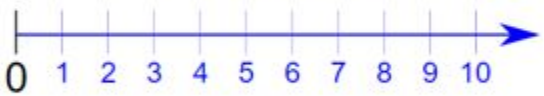
Whole Number

Any of the numbers {0, 1, 2, 3, ...} etc.

There is no fractional or decimal part. And no negatives.



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