

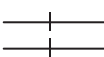


Maths Facts

SYMBOLS

+	plus or add	•	decimal point as in 7.9
-	minus or subtract	2	squared, 6^2 is 6×6
\times	multiplied by, times, lots of	$\sqrt{\quad}$	square root, $\sqrt{9}$ is 3
\div	divided by, into groups of	()	parentheses, or brackets - a grouping symbol
=	equals, is equal to	$\frac{4}{7}$	fraction, $4 \div 7$, four sevenths
\neq	is not equal to		right angle
\approx	is approximately equal to		parallel lines
<	is less than, $4 < 6$		lines of equal length
>	is greater than, $8 > 5$		
\leq	is less than or equal to		
\geq	is greater than or equal to		
%	percentage, $12\% = \frac{12}{100}$		

MEASURES

Length

10 millimetres (mm) = 1 centimetre (cm)
 $100 \text{ cm} = \left. \begin{array}{l} 1000 \text{ mm} = \end{array} \right\} 1 \text{ metre (m)}$
1000 m = 1 kilometre (km)

Area

100 square mm (mm^2) = 1 square cm (cm^2)
 $10000 \text{ cm}^2 = 1 \text{ square metre (m}^2\text{)}$
 $10000 \text{ m}^2 = 1 \text{ hectare (ha)}$

Mass

1000 milligrams (mg) = 1 gram (g)
1000 g = 1 kilogram (kg)
1000 kg = 1 tonne (t)

Liquid Capacity

1000 millilitres (mL) = 1 litre (L)
1000 L = 1 kilolitre (kL)
1000 kL = 1 megalitre (ML)

Time

60 seconds (s) = 1 minute (min)
60 minutes (min) = 1 hour (h)
24 hours (h) = 1 day
7 days = 1 week
2 weeks = 1 fortnight
4 weeks (approx.) = 1 month
 $365 = \left. \begin{array}{l} 52 \text{ weeks (approx.)} = \\ 12 \text{ months} = \end{array} \right\} 1 \text{ year}$
366 days = 1 leap year
10 years = 1 decade
100 years = 1 century

Temperature - degrees Celsius ($^{\circ}\text{C}$)

0°C = freezing point of water
 100°C = boiling point of water
 37°C = human body temperature

ZERO

Adding and subtracting 0

Adding and subtracting 0 to any number leaves the number unchanged.

$$3 + 0 = 3$$

$$3 - 0 = 3$$

$$2.5 + 0 = 2.5$$

$$2.5 - 0 = 2.5$$

$$\frac{4}{9} + 0 = \frac{4}{9}$$

$$\frac{4}{9} - 0 = \frac{4}{9}$$

Multiplying by 0

The product of any number and 0 is 0.

$$7 \times 0 = 0$$

$$81.6 \times 0 = 0$$

$$\frac{3}{5} \times 0 = 0$$

0 used in decimals

0's can be added when needed after the last digit and the decimal point.

$$4 = 4.000$$

0's can be added when needed before the first digit of the decimal number.

$$4 = 4.0 = 0004.0$$

By convention, decimal numbers less than 1 are written with a zero before the decimal point.

$$.4 = 0.4$$

0 as a probability

When the probability of an event is 0, the event is 'impossible'.

0 in words

Some of the words used to represent zero 0 are: nought, nil, none, nothing, zilch, zip.

Dividing by 0

Dividing by 0 is meaningless.

$4 \div 0$, $\frac{3}{0}$ are meaningless operations.

Power of 0

Any number raised to the power of 0 is 1.

$$1^0 = 1$$

$$(0.5)^0 = 1$$

$$(-24)^0 = 1$$

0 as the result of a sum

The sum of any number, except zero, and its opposite is 0.

$$4 + (-4) = 0$$

$$2.6 + (-2.6) = 0$$

$$\frac{5}{8} + \left(-\frac{5}{8}\right) = 0$$

0 facts

0 is a whole number and a digit but is neither a positive nor a negative number.

ONE

Multiplying by 1

Any number multiplied by 1 remains unchanged.

$$3 \times 1 = 3$$

$$2.5 \times 1 = 2.5$$

$$\frac{4}{9} \times 1 = \frac{4}{9}$$

Dividing by 1

Any number divided by 1 remains unchanged.

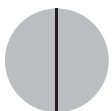
$$7 \div 1 = 7$$

$$81.6 \div 1 = 81.6$$

$$\frac{3}{5} \div 1 = \frac{3}{5}$$

1 as a fraction

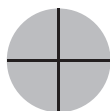
1 can be renamed as a fraction whenever the numerator is the same as the denominator.



$$1 = \frac{2}{2}$$



$$1 = \frac{3}{3}$$



$$1 = \frac{4}{4}$$



$$1 = \frac{5}{5}$$

Power of 1

Any number raised to the power of 1 remains unchanged.

$$7^1 = 7$$

$$(6.8)^1 = 6.8$$

$$(-4)^1 = -4$$

1 as a probability

When the probability of an event is 1, the event is 'certain' to happen.

1 as a percentage

1 is the same as 100%.

$$1 = \frac{100}{100} = 100\%$$

1 as a denominator

Any whole number can be written as a fraction with denominator 1.

$$20 = \frac{20}{1}$$

1 as the result of a product

The product of any number, except zero, and its reciprocal is 1.

$$4 \times \frac{1}{4} = 1$$

1 in words

Some of the words used to represent the digit 1 are: one, a, an, each, single, unit.

1 facts

1 is a whole number and a digit, but not a prime number.

1 is a factor of any whole number.

