

Mathematical vocabulary

Let's look at some of the words you'll be using this term...

Key Words

Definition

Examples

Ratio A comparison of the relative sizes of two or more values

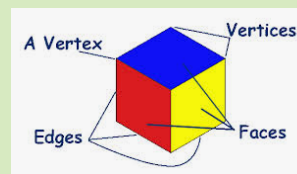
3 : 4	4 : 3	1 : 2309	0.3 : 7.4	$\frac{3}{4}$
✓	✓	✓	✓	✗

Fraction A comparison of part of something to the whole

$\frac{3}{4}$	$\frac{4}{3}$	$\frac{409}{3091}$	$\frac{4.9}{30}$	3 : 4
✓	✓	✓	✓	✗

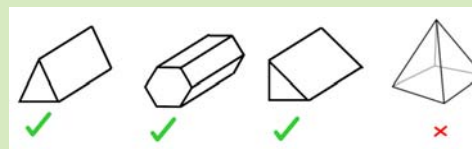
Face A 2D shape which makes one surface of a 3D shape

Vertex A point where two or more edges meet. The plural is vertices

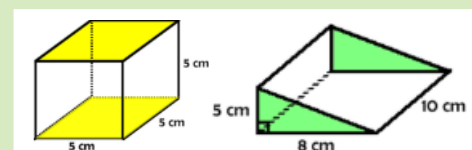


Edge A line segment joining two vertices

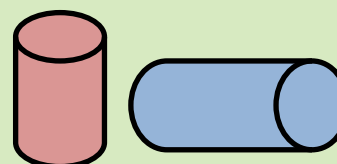
Prism A 3D shape with two equal faces on opposite sides



Cross-section The shape made when a solid is split parallel to a face



Cylinder A solid shape with two identical circular (or elliptical) faces and one curved surface



Mathematical facts

Time

- 1 minute = 60 seconds
- 1 hour = 60 minutes
- 1 hour = 3600 seconds

Length

- 1 centimetre = 10 millimetres
- 1 metre = 100 centimetres
- 1 metre = 1000 millimetres
- 1 kilometre = 1000 metres

Capacity

- 1 litre = 1000 ml
- 1 litre = 1000 cm³

Area

Area is measured with squared units

E.g. cm², m², km²

Volume

Volume is measured with cubed units

E.g. cm³, m³, km³

Facts, formulae and procedures

Number facts

Let's review some of the facts, formulae and procedures that you've learned in the past...

To convert a decimal to a percentage:

Multiply by 100

E.g. $0.13 \times 100 = 13$ so $0.13 = 13\%$
 $0.7 \times 100 = 70$ so $0.7 = 70\%$
 $0.125 \times 100 = 12.5$ so $0.125 = 12.5\%$
 $1.02 \times 100 = 102$ so $1.02 = 102\%$

To convert a percentage to a decimal:

Divide by 100

E.g. $13 \div 100 = 0.13$ so $13\% = 0.13$
 $5 \div 100 = 0.05$ so $5\% = 0.05$
 $102 \div 100 = 1.02$ so $102\% = 1.02$

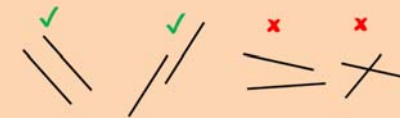
Key Words

Definition

Examples

Parallel

Lines that point in the same direction and always remain the **same distance apart**.



Perpendicular

Lines that are at **90°** to each other.



Some equivalent fractions, decimals and percentages:

$$\frac{1}{2} = 0.5 = 50\%$$

$$\frac{1}{4} = 0.25 = 25\%$$

$$\frac{3}{4} = 0.75 = 75\%$$

$$\frac{1}{100} = 0.01 = 1\%$$

Symbols

Examples

=

Equal to

$a = b$ means a is equal to b AND b is equal to a

<

Less than

$a < b$ means a is less than b AND b is greater than a

>

Greater than

$a > b$ means a is greater than b AND b is less than a

Symbols

Examples

≤

Less than or equal to

$a \leq b$ means " a is less than or equal to b " AND " b is greater than or equal to a "

≥

Greater than or equal to

$a \geq b$ means " a is greater than or equal to b " AND " b is less than or equal to a "