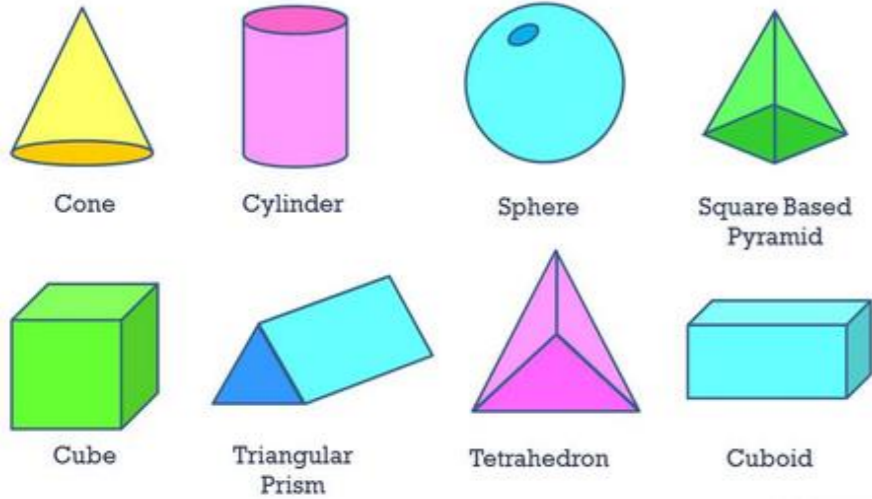
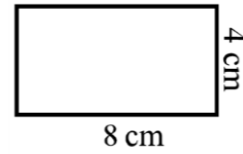


# 3D shapes



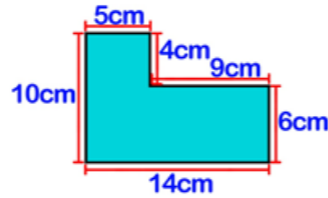
## Perimeters of Shapes

The perimeter is the distance around a shape.  
To calculate the perimeter, you add up lengths:



$$4\text{cm} + 4\text{cm} + 8\text{cm} + 8\text{cm} = 24\text{cm}$$

## Perimeter of a compound shape



## Area of Shapes (eg. cm<sup>2</sup>, mm<sup>2</sup>)

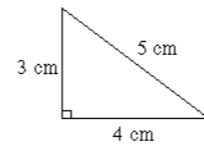
To calculate the area of a parallelogram, rectangle or square:

Length x Height



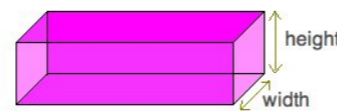
To calculate the area of triangle (eg. cm<sup>2</sup>, mm<sup>2</sup>):

$$(\text{Base} \times \text{Height}) \div 2$$

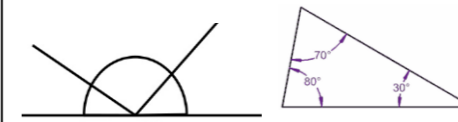


## Volume: (Remember cm<sup>3</sup>)

Length x Width x Height



## Angle Sums



Straight Line and a triangle = 180°

## Regular/ Irregular

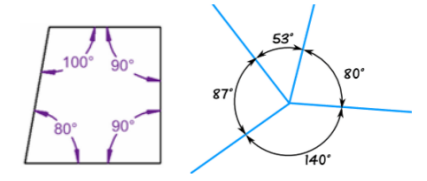
In regular shapes, all of the angles are the same and all the sides are the same length.

In irregular shapes, the angles or sides are different.



## Angle Sums

Quadrilaterals and about a point = 360°



## Circles

Radius, Diameter and Circumference



The diameter is double the radius.  
The circumference is the distance around the circle.

## QUADRILATERALS

<b>Parallelogram</b> 	The opposite sides of a parallelogram are equal and parallel. Also, opposite angles are equal.	<b>Square</b> 	All sides of a square are equal. Each angle is a right angle.
<b>Rhombus</b> 	The opposite sides of a rhombus are parallel. All sides are equal.	<b>Kite</b> 	A kite has two pairs of equal, adjacent sides.
<b>Rectangle</b> 	A rectangle's opposite sides are parallel and equal. A rectangle has four right angles.	<b>Trapezoid</b> 	Only one pair of opposite sides is parallel.

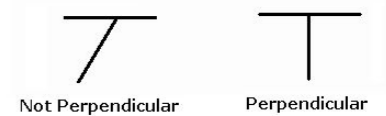
# Maths Revision made Easy

## Parallel and Perpendicular

-Parallel lines or sides stay the same distance apart.



-Perpendicular lines or sides meet at right angles.



## Units of Length

Kilometres and Metres

$$1 \text{ km} \xrightarrow{\times 1000} = 1000 \text{ m}$$

$$0.75 \text{ km} \xrightarrow{\times 1000} = 750 \text{ m}$$

Metres and Centimetres

$$1 \text{ m} \xrightarrow{\times 100} = 100 \text{ cm}$$

$$2.6 \text{ m} \xrightarrow{\times 100} = 260 \text{ cm}$$

Metres and Millimetres

$$1 \text{ m} \xrightarrow{\times 1000} = 1000 \text{ mm}$$

$$2.6 \text{ m} \xrightarrow{\times 1000} = 2600 \text{ mm}$$

Centimetres and Millimetres

$$1 \text{ cm} \xrightarrow{\times 10} = 10 \text{ mm}$$

$$31.5 \text{ cm} \xrightarrow{\times 10} = 315 \text{ mm}$$

## Units of Mass

Kilograms and Grams

$$1 \text{ kg} \xrightarrow{\times 1000} = 1000 \text{ g}$$

$$3.5 \text{ kg} \xrightarrow{\times 1000} = 3500 \text{ g}$$

Tonnes and Kilograms

$$1 \text{ tonne} \xrightarrow{\times 1000} = 1000 \text{ kg}$$

$$20 \text{ tonnes} \xrightarrow{\times 1000} = 20000 \text{ kg}$$

## Units of Capacity

Litres and Millilitres

$$1 \text{ litre} \xrightarrow{\times 1000} = 1000 \text{ ml}$$

$$1.68 \text{ litres} \xrightarrow{\times 1000} = 1680 \text{ ml}$$

## Roman Numerals

Symbol	Value
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

## Prime Numbers

A number that is only divisible by itself and 1.  
**2, 3, 5, 7 (not 9) 11**

## Factors:

Factors divide into a number exactly.

Eg. The factors of 6 are: 1, 6, 2 and 3

## Multiples

Think Times tables.

Multiples of 3 are: 6, 9, 12, 15 etc.

## Squared Numbers

$$5^2 = 5 \times 5 = 25$$

## Cubed Numbers:

$$5^3 = 5 \times 5 \times 5 = 125$$

## Averages

**Hey Diddle, Diddle,**

**The median's the Middle,**

**You Add and Divide for the Mean,**

**The Mode is the one that Appears the Most,**

**And the Range is the Difference**

## Days in a Month

30 days have September, April, June and November,  
All the rest have 31,  
Except February alone,  
It has 28 days clear,  
And 29 in each leap year.

**Remember, in a year, there are: 52 weeks, 12 months or 365 days.**

## Types of Angles

