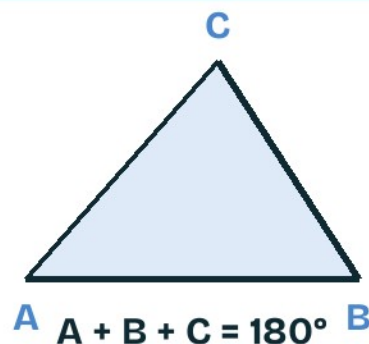


Geometry

The math of shapes, size and space

WHAT IS IT?

Geometry studies shapes and space: lengths, angles, areas and volumes. It also teaches you to prove, one step at a time, that something is always true.



THE BIG IDEAS

- 1 Shapes follow rules: the angles in any triangle add up to 180° .
- 2 Formulas measure size: the area of a rectangle is length times width.
- 3 Similar shapes have the same form but different sizes.
- 4 A proof is a chain of reasons, each one justified.

YOU SEE IT WHEN ...

Planning a room or garden

Building, drawing and design

Maps and navigation

WORDS YOU WILL MEET

Angle

the amount of turn between two lines

Parallel

lines in a flat plane that never meet

Perimeter

the distance around a shape

Area

the space inside a shape

Congruent

exactly the same shape and size

Theorem

a statement that has been proved

GOOD TO KNOW FIRST

Arithmetic, simple equations and using a ruler and protractor.

IN YOUR COURSE YOU WILL ...

- Angles, triangles and polygons
- Perimeter, area and volume
- Congruence, similarity and the Pythagorean theorem
- Writing simple proofs

Start tip: Draw a neat, labelled picture before every problem.