Types of Triangle

Aim

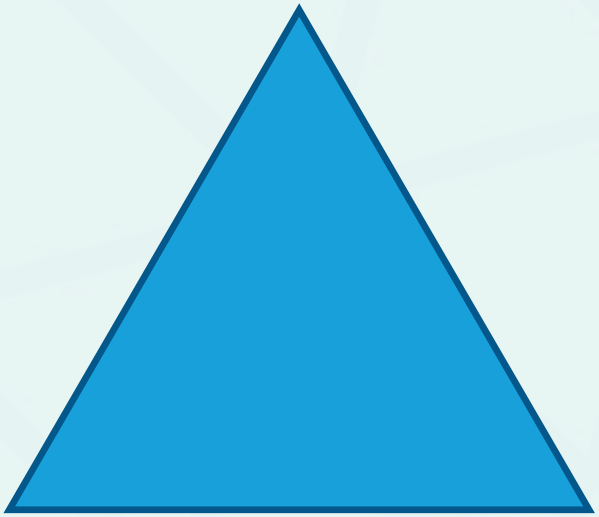
- To identify and discuss different types of triangle.

Success Criteria

- To name different equilateral, isosceles, scalene and right-angled triangles.
- To describe the properties of different types of triangle.
- To work out the value of a missing angle inside a triangle.

What Is a Triangle?

a 3-sided shape



all its sides are straight

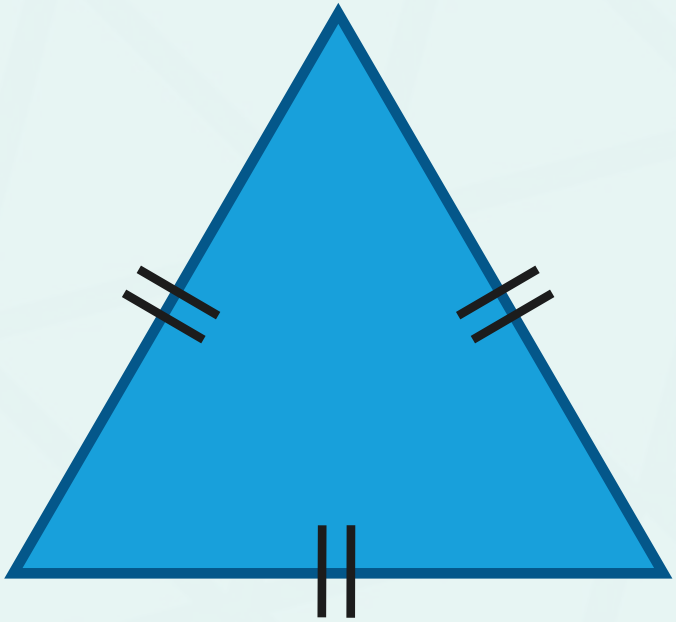
a 2D shape

has 3 **interior angles*** that add up to 180°

*the angles inside the shape

Equilateral Triangle

Do you think you know any properties of equilateral triangles?
What do you think **equilateral** means?



Has 3 equal sides.

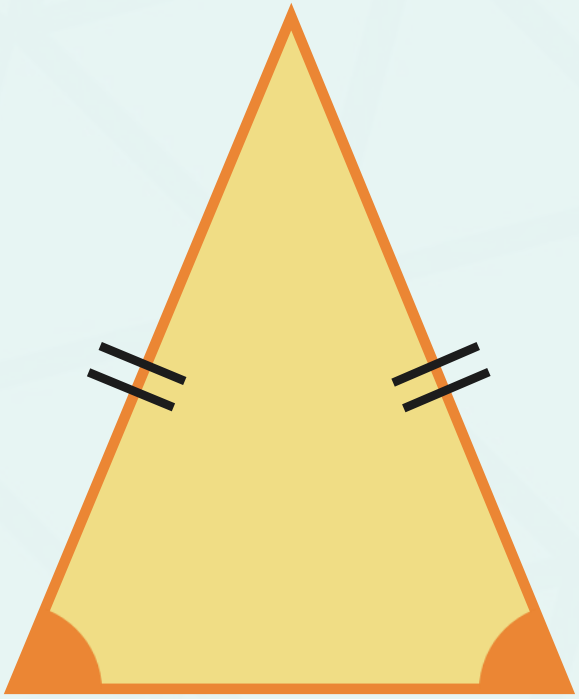
All its interior angles are the same.

If the angles in a triangle add up to 180°, what must each interior angle in an equilateral triangle be?

60°

Isosceles Triangle

Do you think you know any properties of isosceles triangles?

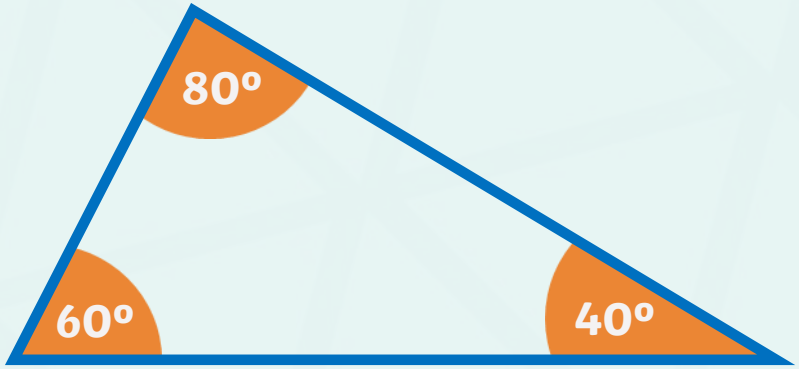


They have 2 equal sides.

They have 2 interior angles that are the same. These are called the base angles.

Scalene Triangle

Do you think you know any properties of scalene triangles?



All of its sides are different lengths.

All of its interior angles are different – but they still add up to 180°.

Right-Angled Triangle

Do you think you know any properties of right-angled triangles?

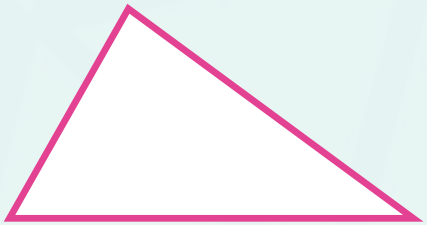
One of the angles is a right angle = 90°.

The other two angles will add up to 90°

The longest side of a right-angled triangle is called the hypotenuse.

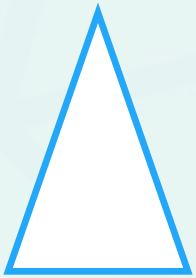
Can You Identify These Triangles?

Do you think you know any properties of right-angled triangles?

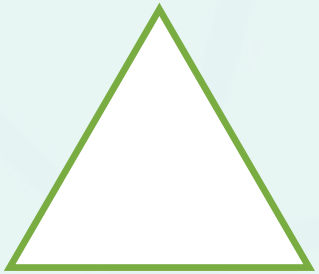


scalene

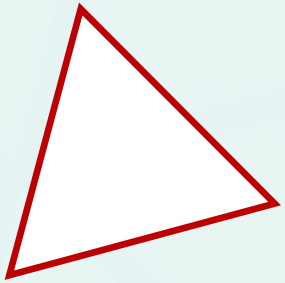
right-angled



isosceles



equilatera l



equilateral

right-angled

What Am I?

Each of my interior angles measure 60°. What am I?

I am an equilateral triangle.

I am the longest side of a right-angled triangle. What am I?

I am the hypotenuse.

The lengths of all my three sides are different. What am I?

I am a scalene triangle.

My interior angles measure 43°, 65° and 72°. What am I?

I am a scalene triangle.

I have 2 equal sides and 2 equal angles. What am I?

I am an isosceles triangle.