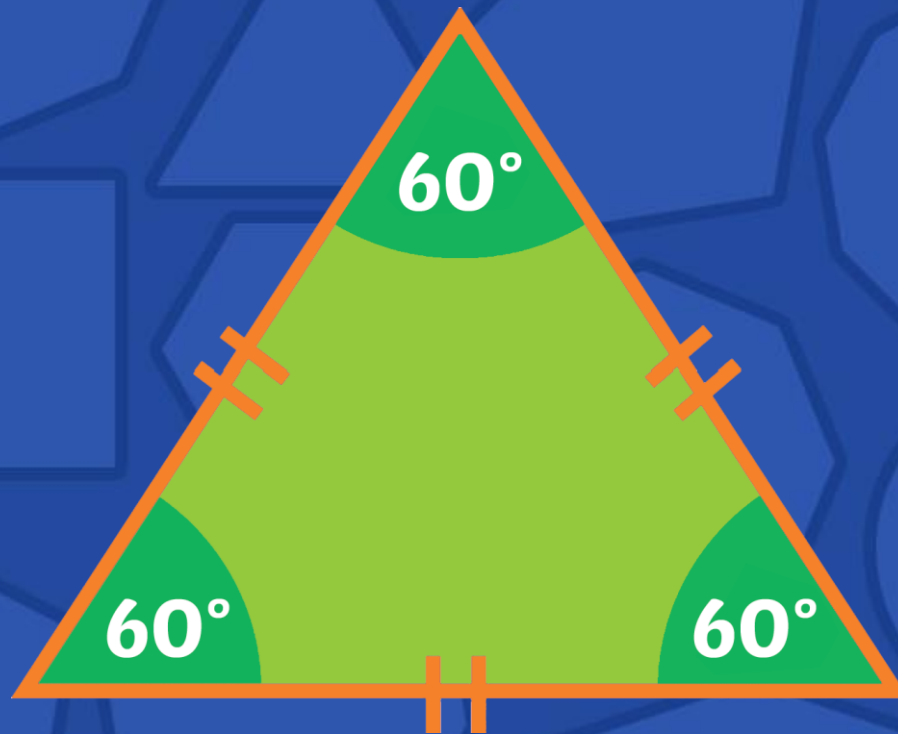


Triangles



Aim

- To compare, classify and find unknown angles in triangles.

Success Criteria

- I can describe the properties of different triangles.
- I can sort triangles based on their properties using Venn and Carroll diagrams.
- I can find unknown angles in triangles.

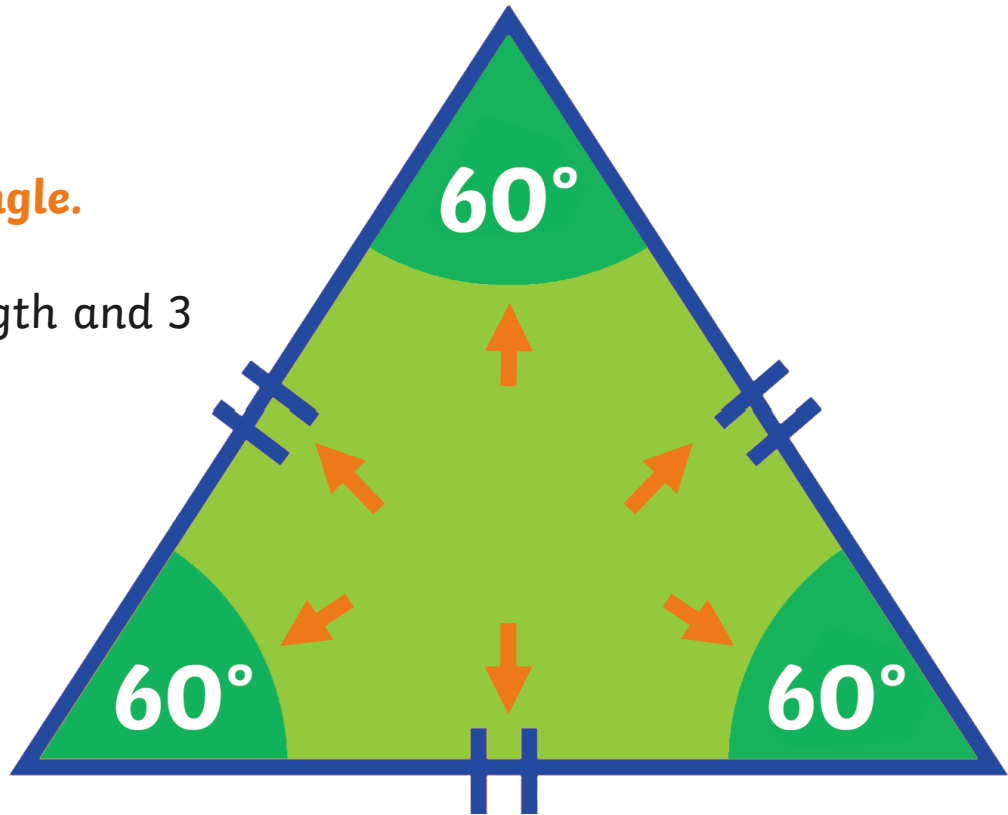
Triangles



This is an **equilateral triangle**.

It has 3 sides the same length and 3 equal angles.

- 3 equal sides
- 3 equal angles (60°)



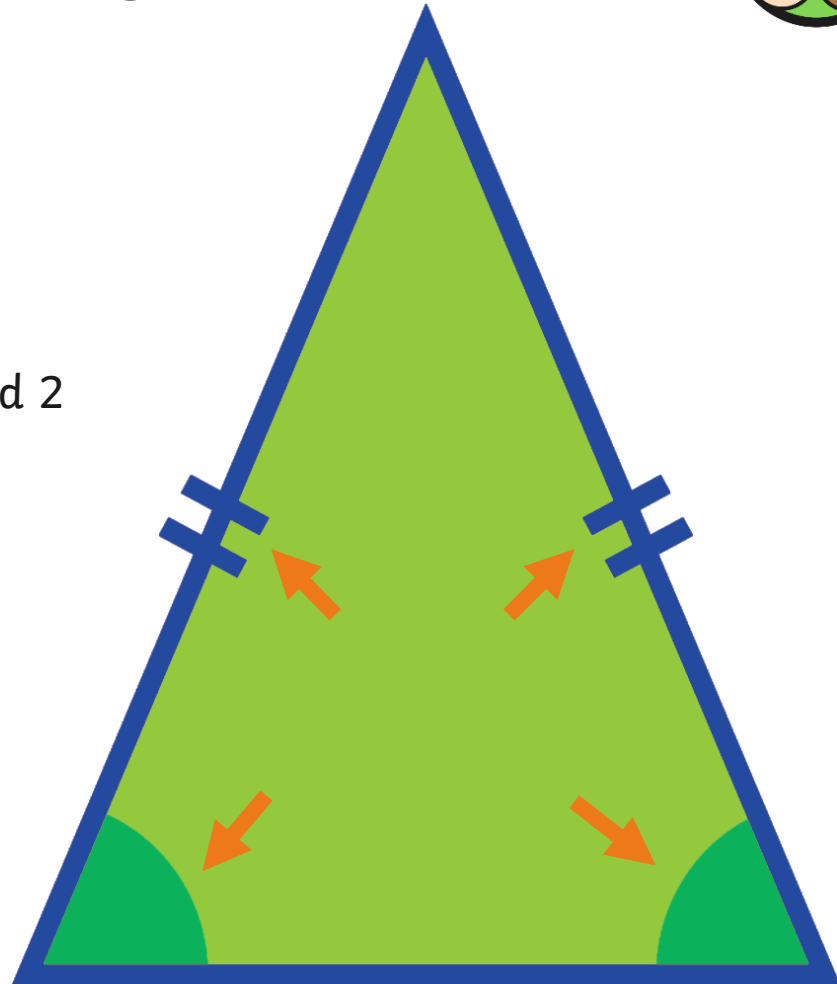
Triangles



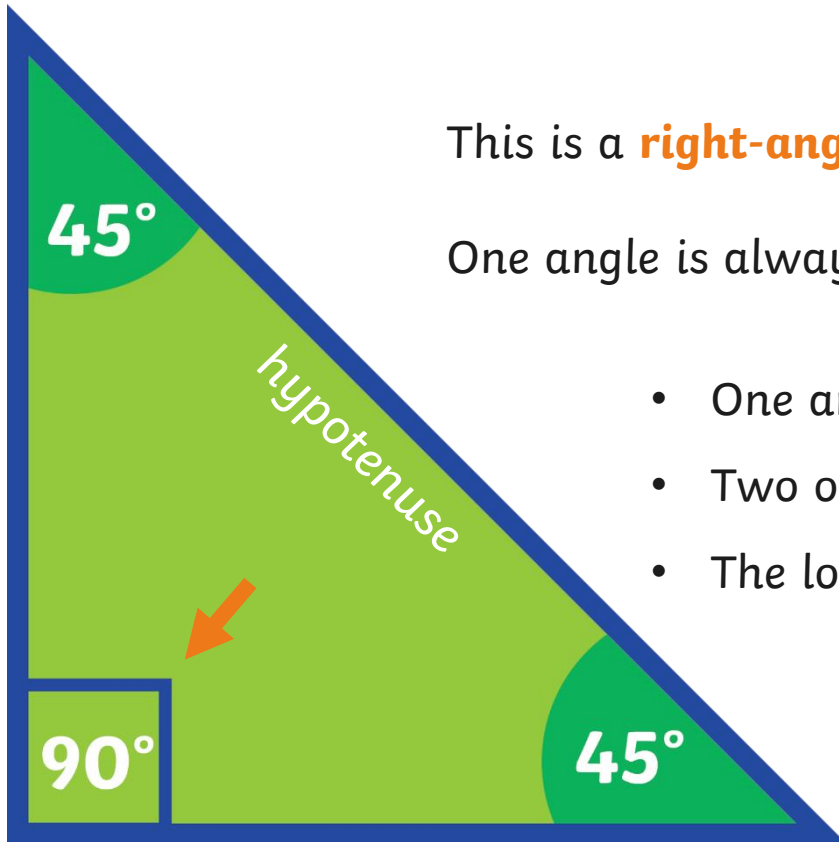
This is an **isosceles triangle**.

It has 2 sides the same length and 2 equal angles.

- 2 equal sides
- 2 equal angles



Triangles



This is a **right-angled triangle**.

One angle is always a right angle.

- One angle is a right angle (90°)
- Two other angles add up to 90°
- The longest side is called the hypotenuse

$$45 + 45 = 90$$

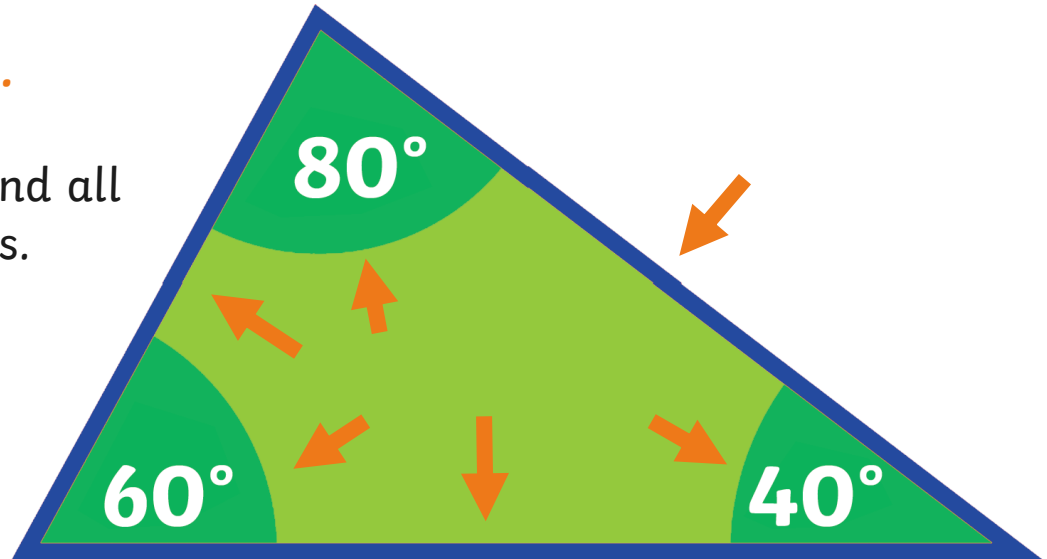
Triangles



This is an **scalene triangle**.

All 3 angles are different and all 3 sides are different lengths.

- All sides are different
- All angles are different



The interior angles in all triangles total 180° .

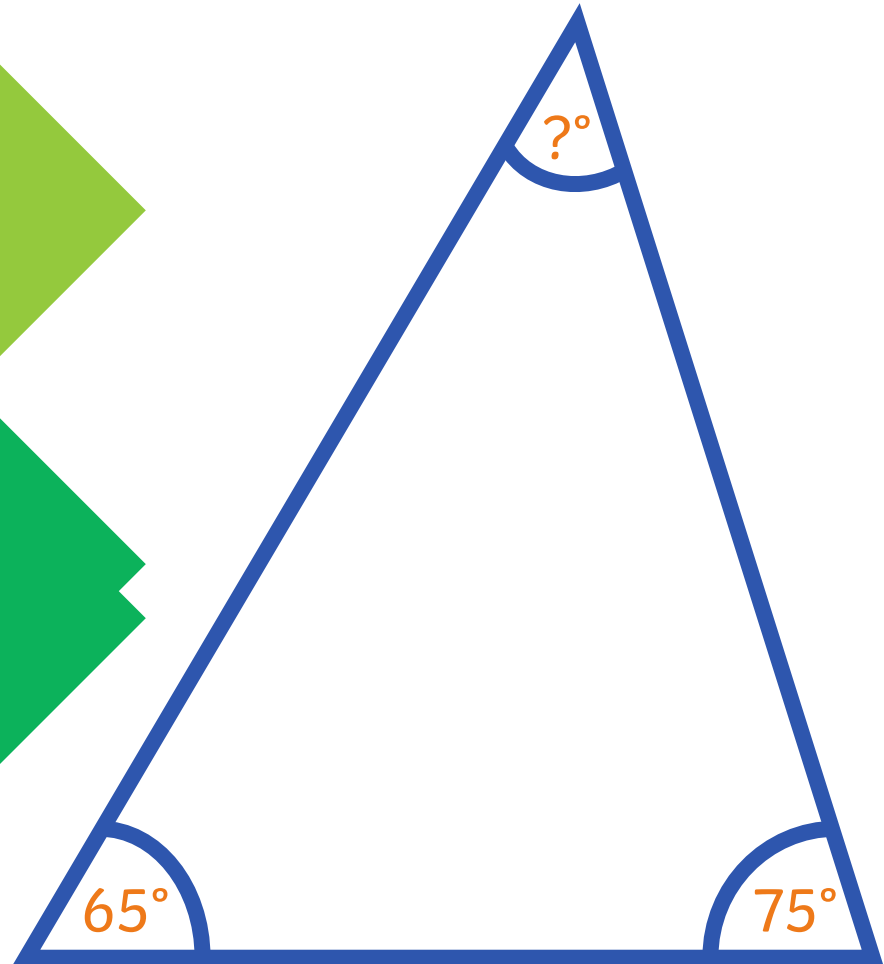
Triangle Missing Angles



If the sum of the interior angles of a triangle is 180° , when two of the angles are given, we can calculate the missing angle.

A: We can calculate that 65° and 75° total 140° , and the difference between 180° and 140° is 40° .

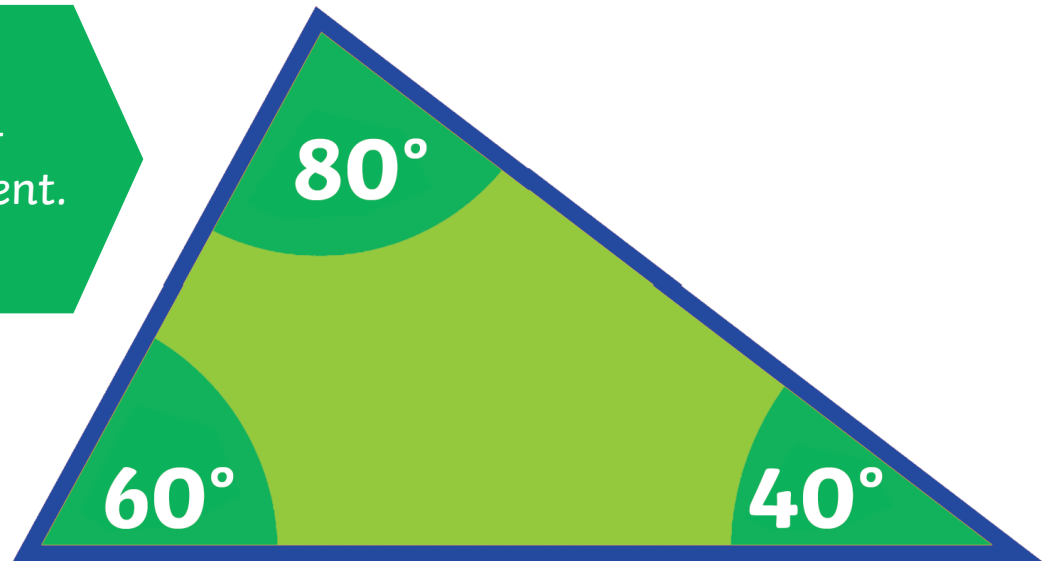
$$180^\circ - (65^\circ + 75^\circ) = 40^\circ$$



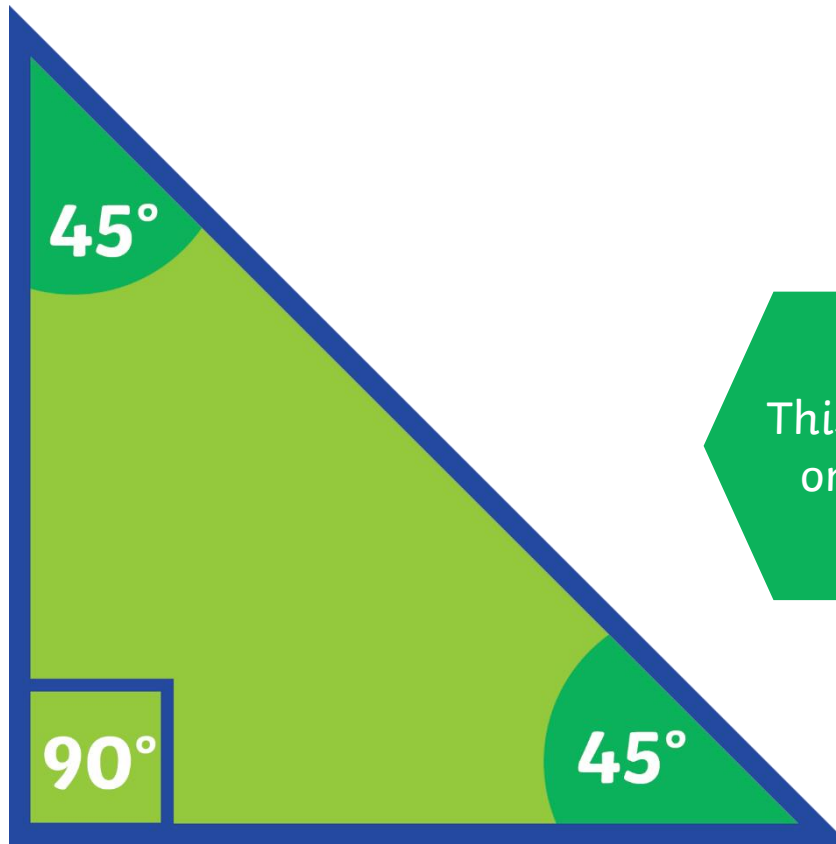
Triangle Missing Angles



This is a scalene triangle –
all of the angles are different.



Triangle Missing Angles



This is a right-angled triangle – one of its angles measures 90°

Triangles



This is an isosceles triangle – two of its angles are equal.

