

08.06.20

WALT understand the angles in a triangle equal  
180 degrees

## Mathematical Talk

What's the same and what's different about the four types of triangle?

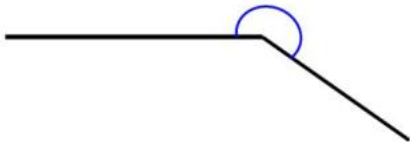
What do the three interior angles add up to? Would this work for all triangles?

Does the type of triangle change anything?

Does the size of the triangle matter?

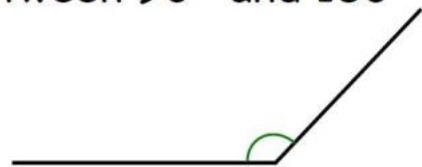
## Reflex angle

A **reflex** angle is an angle that is bigger than  $180^\circ$



## Obtuse angle

An **obtuse** angle is an angle between  $90^\circ$  and  $180^\circ$



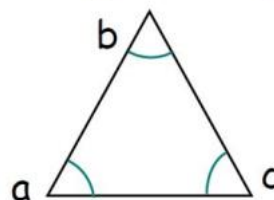
## Right angle

A **right** angle is an angle that measures  $90^\circ$



## Triangles

The angles of any triangle will always add up to  $180^\circ$



$$a + b + c = 180^\circ$$

Have a look through the types of triangle poster

What are the key features of each triangle?

What do the interior angles add up to in all triangles?

## Varied Fluency

Use different coloured pieces of card to make an equilateral, isosceles, scalene and right-angled triangle.

Use a protractor to measure each interior angle, then add them up. What do you notice?

Now take any of the triangles and tear the corners off. Arrange the corners to make a straight line.

The interior angles of a triangle add up to



Calculate the missing angles and state the type of triangle that these corners have been torn from.



Calculate the missing angles.



Amir says,



My triangle has two  
 $90^\circ$  angles.

Can Amir be correct? Can you  
demonstrate this?

Eva says,



My triangle is a scalene triangle. One angle is obtuse. One of the angles measures  $56^\circ$ . The obtuse angle is three times the smallest angle.

Work out the size of each of the angles in the triangle.

## True or False?

A triangle can never have  
3 acute angles.