

10.06.20

WALT calculate the exterior angles of a triangle

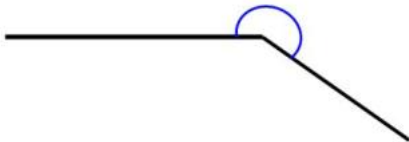
## Notes and Guidance

Children build on prior learning to make links and recognise key features of specific types of triangle. They think about using this information to solve missing angle problems.

They should also use their knowledge of angles on a straight line, angles around a point and vertically opposite angles.

## 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  $180^\circ$



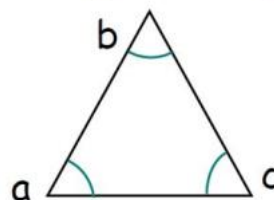
## Right angle

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



## Triangles

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



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

## Mathematical Talk

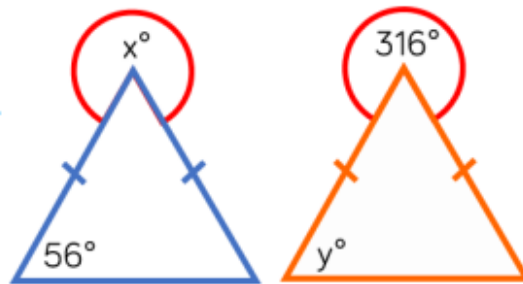
Is it sensible to estimate the angles before calculating them?  
Are the triangles drawn accurately?

Can you identify the type of triangle? How will this help you calculate the missing angle?

Which angle can you work out first? Why? What else can you work out?

## Varied Fluency

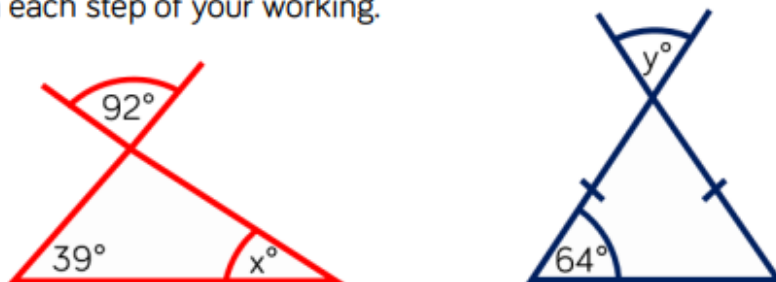
- Work out the value of  $x$  and  $y$ .  
Explain each step of your working.



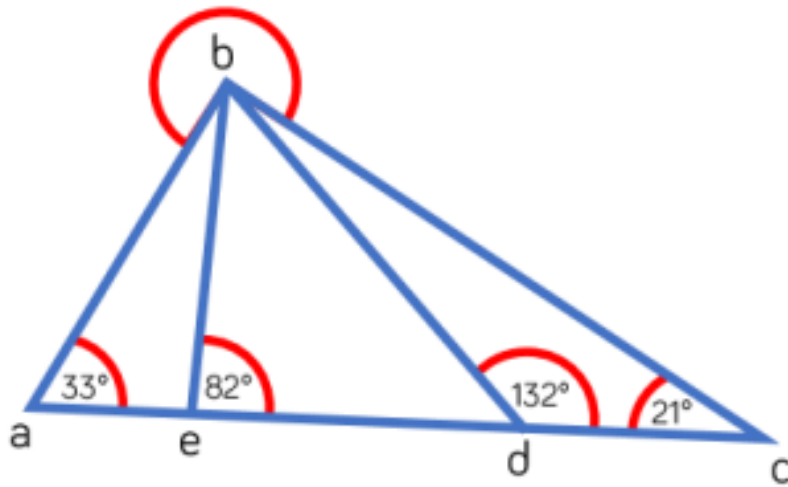
- Work out the value of  $f$  and  $g$ .  
Explain each step of your working.



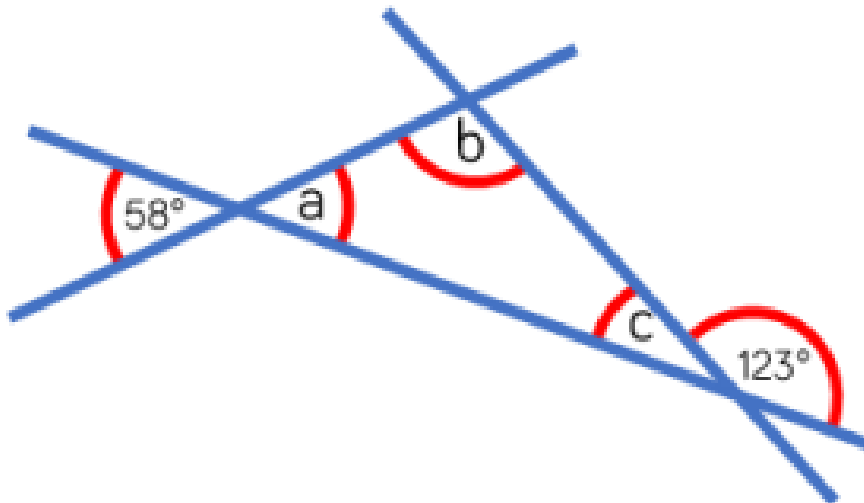
- Work out the value of  $x$  and  $y$ .  
Explain each step of your working.



Calculate the size of the reflex angle b.



Calculate the size of angles  $a$ ,  $b$  and  $c$ .



Give reasons for all of your answers.