

# The Angles in Triangles

How could you figure out the value of  $x$  in the figure below?

Cut out the three semicircles from the bottom triangle, keeping the grey (external) and white (internal) sectors together. How many semicircles did you cut out? How many degrees are there in one semicircle? How many degrees in three semicircles?

Next, cut the internal and external angles apart. Put the external angles together. It should look like they make a whole circle. How do we know for sure that the three grey external angles make a circle? How many semicircles do the three white internal angles make? How many degrees is that? How could you figure out the value of  $x$ ?

