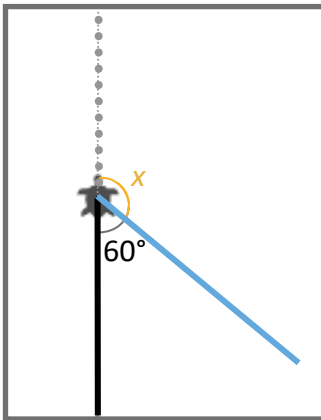


Turtlestitch Maths

Finding angles using properties of shapes

A key element of stitching shapes is working out how many degrees the turtle needs to turn.



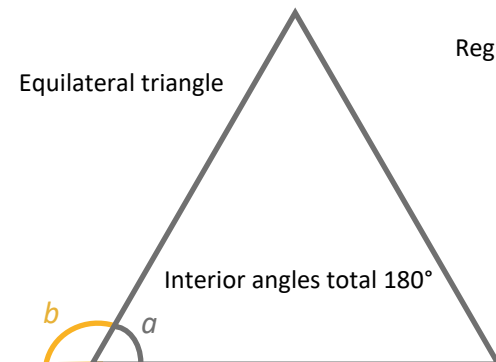
The turtle has already walked along the black line. The dots show where the turtle will go if you don't tell it to turn.

We want the turtle to walk along the blue line. To do this, how far does it need to turn?

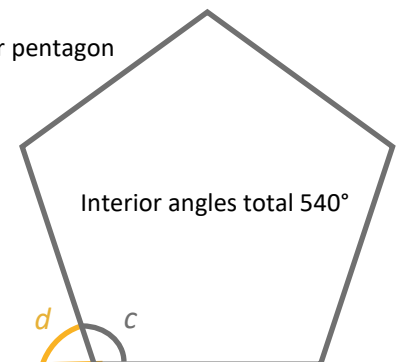
What fact can you use to work out the missing angle?

1. Using the information about each shape, calculate the values of the angles.

Equilateral triangle



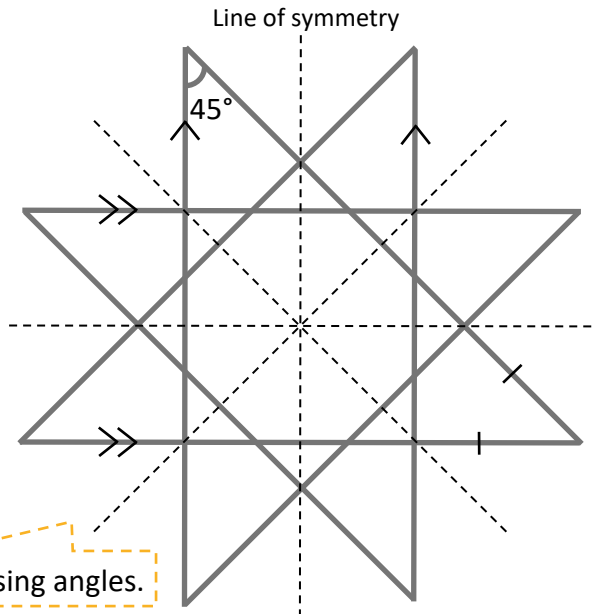
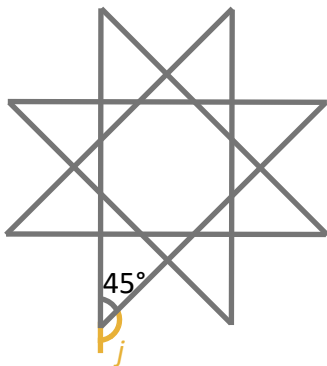
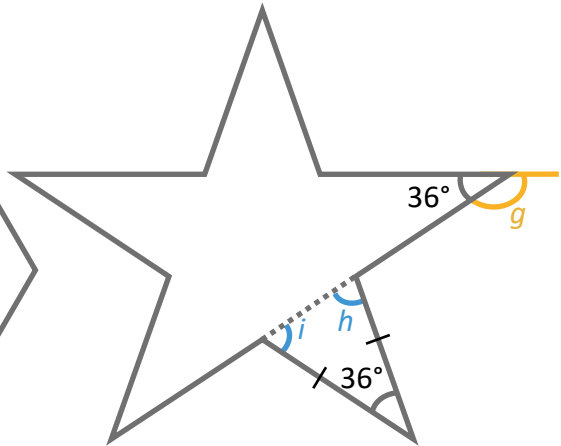
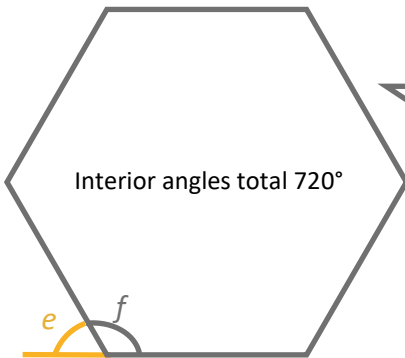
Regular pentagon



2. Check your answers as you go along by stitching the shapes on Turtlestitch with these blocks.



Regular hexagon



3. Work out all of the missing angles.