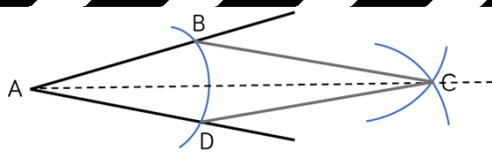


# Year 9 Mathematics Learning Journey: Unit 10 - Deduction

## Step 6 (H): Constructions and Reasoning

Construct the angle bisector of any angle. Join up the arc lines with two straight lines. What shape is ABCD? Will this always work?



## Step 5: Conjectures with shapes

Is the following conjecture true?  
“The number of sides that a regular shapes has is the same as the number of lines of symmetry it has”.

## Step 3: Angle problems with algebra

Form and solve an equation to find the value of  $x$ .

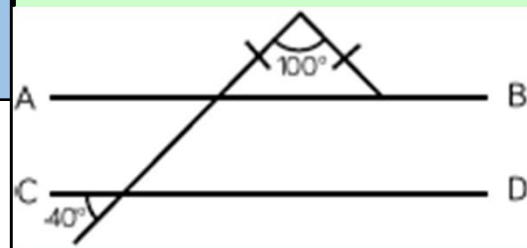


## Step 4: Conjectures with angles

Is the following statement always, sometimes or never true?  
“The sum of two obtuse angles is a reflex angle”

## Step 2: Solving angles problems

Show that lines AB and CD are parallel giving a reason for each step.



## Step 1 (R): Angles in parallel lines

What do co-interior angles sum to?

 Achievement  resilience 

 Community

 PERSEVERANCE

Pride 

**SHUTTLEWORTH**   
COLLEGE