

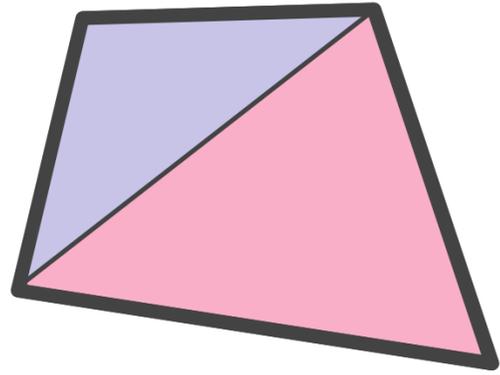
Angles in Polygons

Downloadable Resource –

Generalising angles in polygons
(Part I)



Try this



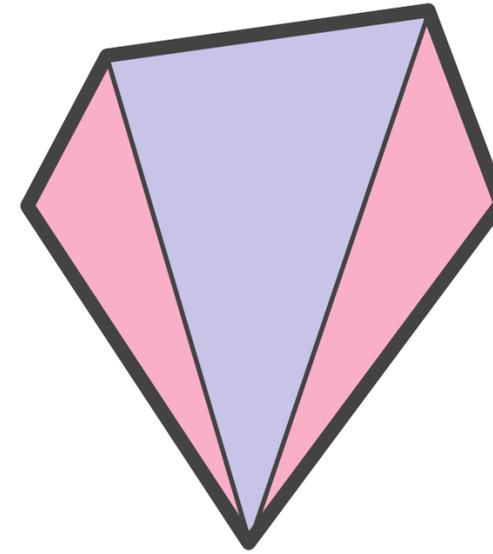
Name

Number of sides

Number of triangles

Sum of interior angles

4



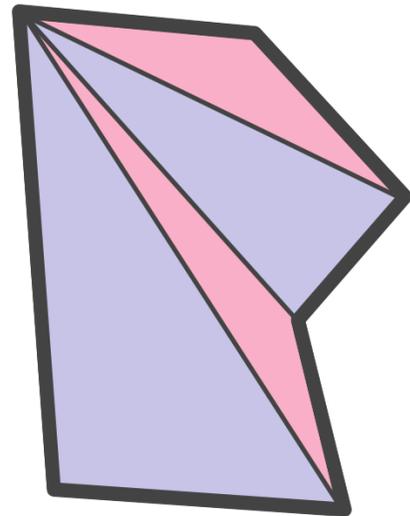
Name

Number of sides

Number of triangles

Sum of interior angles

Pentagon

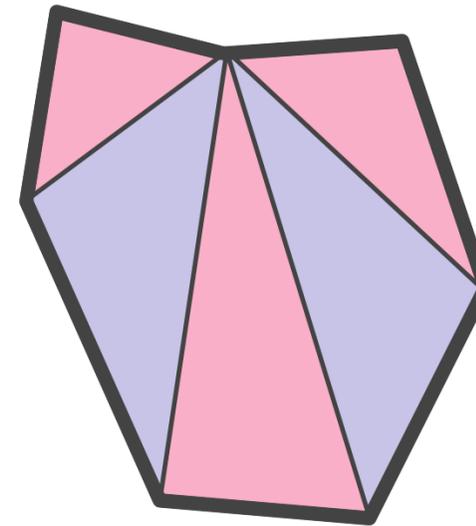


Name

Number of sides

Number of triangles

Sum of interior angles



Name

Number of sides

Number of triangles

Sum of interior angles



Connect

	Number of sides	Number of internal triangles	Sum of interior angles
Triangle	3	1	
Quadrilateral	4	2	
Pentagon	5	3	
Hexagon	6	4	
Decagon	10	8	
Dodecagon	12	10	
n-gon	n		



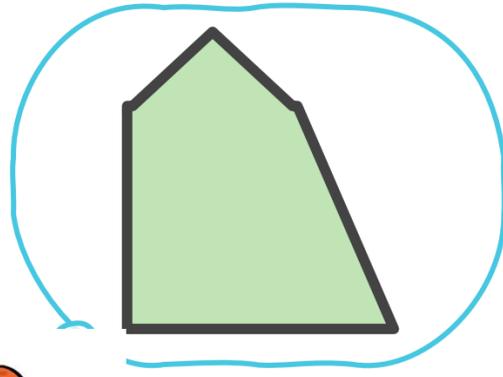
Independent Task

Fill in the table below with the information required (you may need to research some names!)

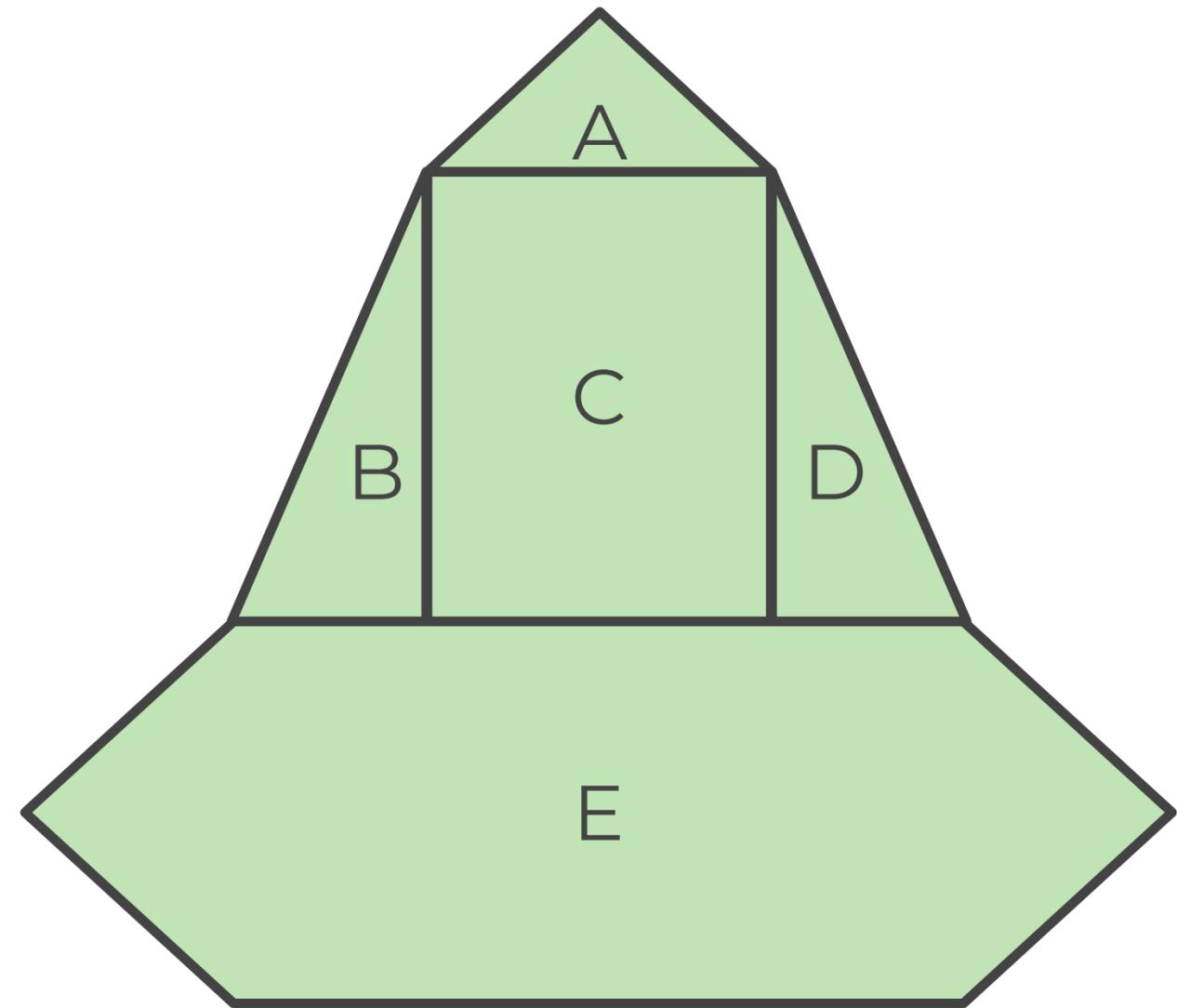
	Number of sides	Number of internal triangles	Sum of interior angles
Pentadecagon	15	_____	
Icosagon	20	_____	
Tetracontagon	_____	_____	
Hexacontagon	_____	_____	
_____	1000	_____	



Explore



ACD combined is a pentagon, the sum of the interior angles is 540°



What other shapes can you find by combining parts of this pattern?

What is the sum of the angles in that shape?

