

Interior and Exterior angles.

Name.....

A polygon is **any 2D shape** with straight sides.

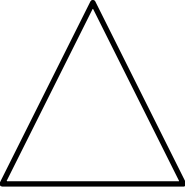
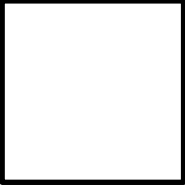
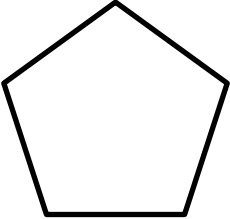
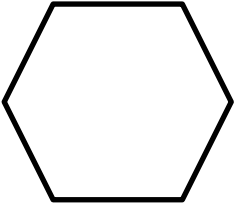
Aim – To be able to calculate the size of the interior and exterior angles of regular polygons.

Interior angles of polygons

Equations	
To calculate the sum of the interior angles in a polygon.	$(n-2) \times 180 =$
To calculate the size of ONE interior angle in a polygon.	Sum of interior angle \div n

n = number of sides in a polygon

1. Calculate the size of the interior angle of each polygon.

Polygon	n= number of sides	Number of sides - 2	Sum of interior angle	Size of ONE interior angle
	n	(n-2)	x180	Sum of interior angle \div n
Triangle 				
Square 				
Pentagon 				
Hexagon 				

Exterior angles of polygons

The exterior angle of a polygon add up to 360° .

Equations	
To calculate the size of ONE exterior angle in a polygon.	$360 \div n =$

2. Calculate the size of one exterior angle of each polygon.

Polygon	Size of ONE exterior angle	Working out
	$360 \div n$	
Triangle		
Square		
Pentagon		
Hexagon		
Heptagon		

3. Check your work.

Interior angle + Exterior angle = 180

Polygon	Interior angle + Exterior angle =	<input checked="" type="checkbox"/> Tick if your answer equals 180
Triangle		
Square		
Pentagon		
Hexagon		