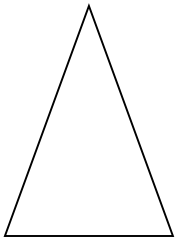
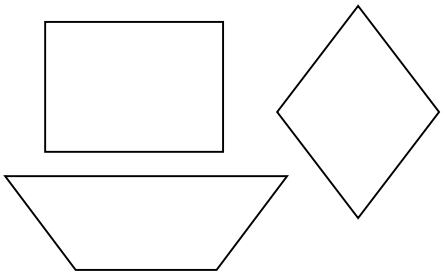
Angles Properties of Polygon Introduction IGCSE Math 0580

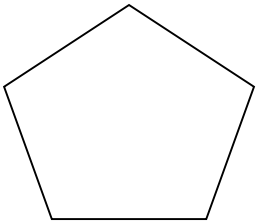
Polygon :- Closed figures with three or more sides



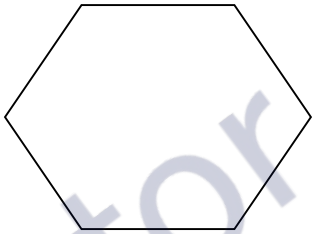
Triangle



Quadrilateral



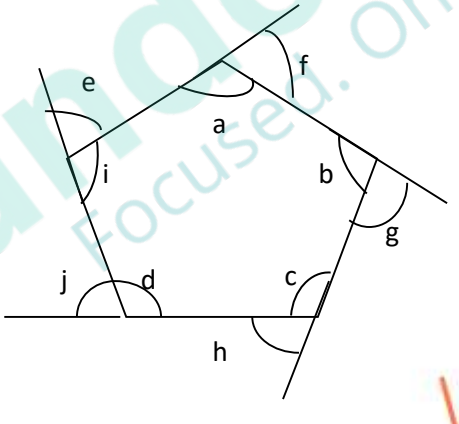
Pentagon



Hexagon

etc .....

Interior Angle and Exterior angle of Convex Polygon :-

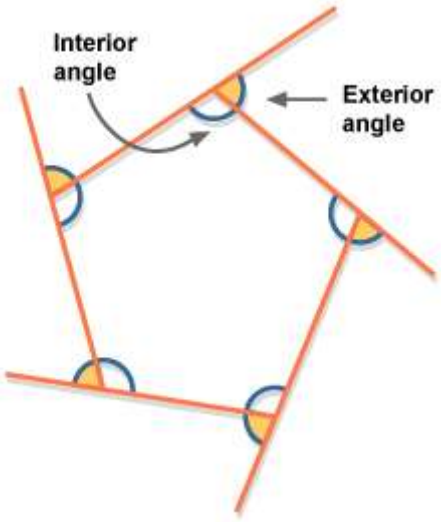


<a, <b, <c, <d, <i -> Interior Angles

<f, <g, <h, <j, <e -> Exterior Angles

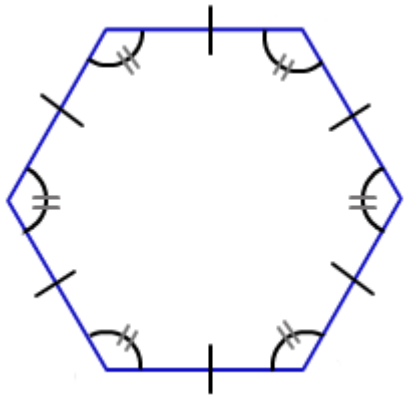
<int + <ext = 180°

Sum of exterior angles = 360°



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Regular Polygon :- A polygon with all sides equal and all interior angles equal



Formulas

n -> number of sides of polygon

sum of interior angles = 180(n - 2)

Each interior angle = $\frac{180(n-2)}{n}$

(Sum of exterior angles = 360°)

n = $\frac{360}{< ext}$ and < ext + < int = 180

Name of Polygon	**Number of Sides** (n)	**Sum of interior angle** 180(n-2)	**Each interior angle** (Regular Poly) 180(n-2)/n
Triangle			
Quadrilateral			
Pentagon			
Hexagon			
Heptagon			
Octagon			
Nonagon			
Decagon			
11-gon			
……	…….	…….	……
n- gon	n	180(n - 2)	180(n-2)/n

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Each interior angle (Regular Polygon)	**No of sides of regular polygon** n = 360/<ext
150°	
156°	
162°	
160°	
135°	

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