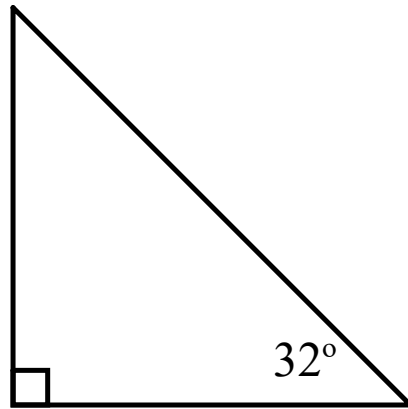


Find the missing angle

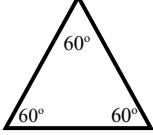
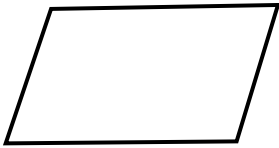
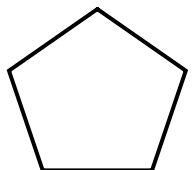
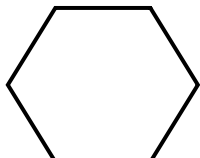
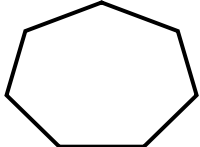
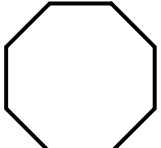


Interior and Exterior Angles in Polygons

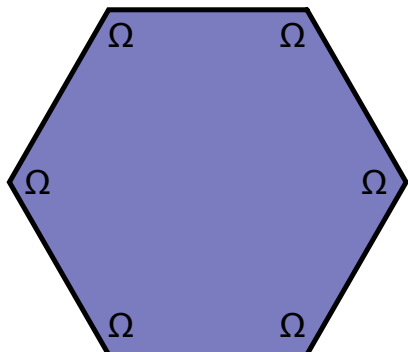
Learning Goal:

By the end of today, I will be able to determine the sum of the interior (inside) angles of a polygon and I will be able to sum the exterior (outside) angles of a polygon.

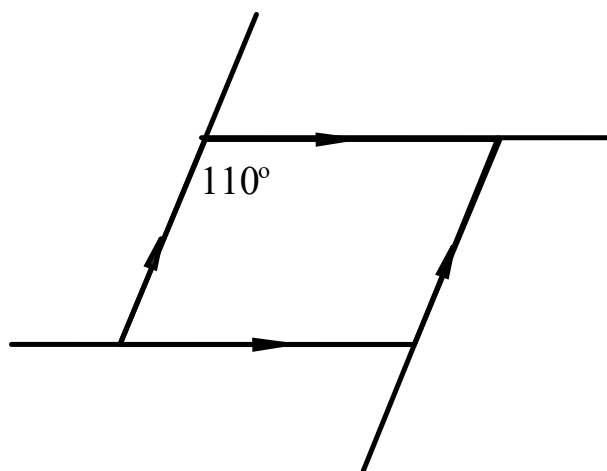
Look for a pattern in the following:

Shape	# of sides	Sum of Interior Angles	Sketch	# of triangles
triangle				
quadrilateral				
pentagon				
hexagon				
heptagon				
octagon				
n-agon				

What is the value of the unknown angle, Ω , for the following:



Exterior Angles are created by extending the sides beyond the shape.



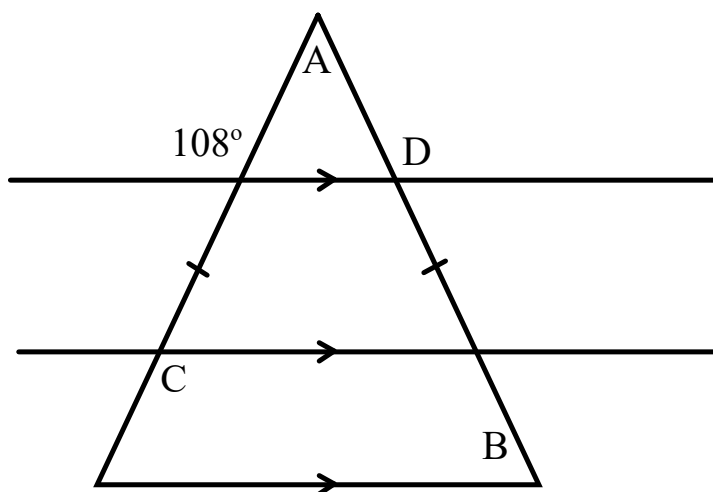
Geometers Sketchpad Animation #2 slide



What is the sum of ALL exterior angles for different polygons?

See Geometers Sketchpad File - Polyangles.gsp

Find the unknown angle values:



Consolidation Questions:

Grade 9 Academic - page 394-5 #2, 3, 4, 5, 7, 8

Attachments

PolyAngles.gsp

QuadAngles.gsp