Problem 1 – Interior Angles

On page 1.3 use the **Calculate** tool to find the sum of the interior angles of each polygon as you click on the slider.

Polygon	Sum of Interior Angles	Number of Triangles
Triangle		
Quadrilateral		
Pentagon		
Hexagon		
n-gon		

Problem 2 – Angle Measures in Regular Polygons

- Explain how to find the measure of one interior angle in a regular polygon.

Problem 3 – Exterior Angles

On page 3.2, calculate the sum of the exterior angles of each polygon as you click on the slider.

Polygon	Sum of Exterior Angles
Triangle	
Quadrilateral	
Pentagon	
n-gon	

Extension – Relationship Between Interior and Exterior Angles

- The measure of one interior angle of a regular *n*-gon is 168°.
  What is the value of *n*?

- Complete the proof on page 4.3.