

Name: _____

Date: _____

Polygon Angle Investigations with GSP

Directions for this activity are at tech.ctkschool.org/assignments/8/polygons

Sides	Polygon	Sum of Interior Angles	Triangles
3	Triangle		
4	Quadrilateral		
5	Pentagon		
6	Hexagon		
7	Septagon		
8	Octagon		
10	Decagon		

Question 1: Write a rule you can use to get from the number of triangles in a polygon to the sum of its interior angles. Test your rule using the table below:

<u>Triangles</u> t	1	2	3	4	5	6	10
<u>Rule</u>							

If your results match the observations above, your rule is right!

Question 2: What is the relationship between number of triangles (t) and number of sides (n)? _____

Question 3: Now write a rule to get from sides to sum of interior angles and test it:

<u>Sides</u> n	3	4	5	6	8	10	15
<u>Rule</u>							