**Angles in Polygons Homework**

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| **Key Words**  **Learn the spellings and meanings!**  polygon, regular, interior, exterior  quadrilateral, pentagon, hexagon, heptagon, octagon, nonagon, decagon, dodecagon | **Research**  Find out the difference between a concave and convex polygon.  What’s a complex polygon? | **Memory**  Memorise these facts:   1. Interior and exterior angles sum to 180o 2. There are n-2 triangles in an n-sided polygon 3. 360 ÷ n gives you the size of an exterior angle in an n-sided polygon |
| **Skills**   |  | | --- | | Find the size of one interior angle in each of the following regular polygons. Show your methods. | | 1. Pentagon (5 sides) 2. Decagon (10 sides) 3. Pentadecagon (15 sides) | | | **Stretch**   1. Each of the interior angles of a regular polygon is 150°. How many sides does the polygon have? 2. The diagram shows a regular hexagon and a regular octagon. Calculate the size of the angle marked |