

Polygons *key words*

ANSWERS

A Fill in the missing words from the word bank.

Word bank

Two words are not needed.

diagonal

exterior

heptagon

hexagon

interior

octagon

pentagon

polygon

quadrilateral

regular

triangles

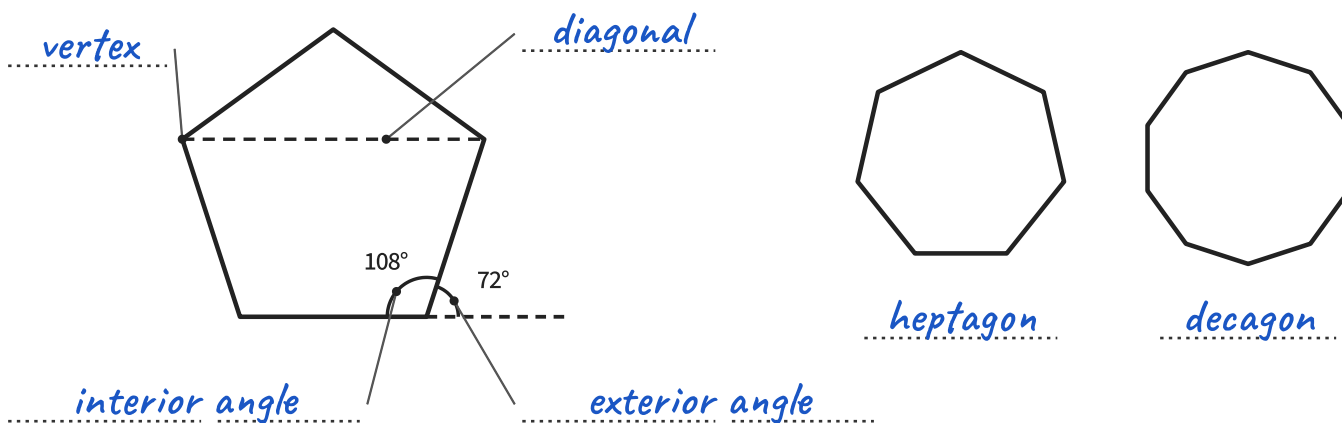
vertex

A polygon is a flat shape with straight sides. A polygon with five sides is a pentagon, one with six sides is a hexagon and one with eight sides is an octagon. In a regular polygon all the sides are equal and all the angles are equal.

An interior angle is inside the polygon, between two sides. An exterior angle is between one side and the next side made longer. At each vertex the interior and exterior angles add up to 180° , because they lie on a straight line.

A diagonal joins two corners that are not next to each other. From one corner of a hexagon you can draw 3 diagonals, which split it into 4 triangles, so its interior angles add up to $4 \times 180^\circ = 720^\circ$.

B Label the diagram. No word bank this time. Each label gives the first letter.



C Each sentence uses the wrong key word. Cross it out and write the right word.

1 A hexagon has eight sides.

octagon

2 A polygon with all its sides equal and all its angles equal is irregular.

regular

3 The interior angles of any polygon add up to 360° .

exterior

4 A line joining two corners that are not next to each other is a side.

diagonal