



Instructions: Work out the shape maths and use the answer bank to check. Read the Did you know? box. Number the 4 steps in order, tick True or False, match each word to its meaning, then write short answers.

1. Shape maths

Answer bank: (2) (24 cm) (8) (80°)

Question	Answer
$360^\circ - 90^\circ - 90^\circ - 100^\circ =$	
Sides on an octagon	
Diagonals in a rectangle	
Perimeter of a regular hexagon with 4 cm sides	

About this topic

A polygon is a flat, closed shape made of straight sides. Polygons are named by their number of sides: triangle (3), quadrilateral (4), pentagon (5), hexagon (6), heptagon (7), octagon (8), nonagon (9), decagon (10). A regular polygon has all sides equal and all angles equal.

Did you know?

- 'Poly' means many and 'gon' means angle in Greek.
- Stop signs in many countries are octagons.
- A square is a rectangle and a rhombus at the same time.



Quadrilaterals

2. Put the steps in order

Write 1 to 4 in the boxes (1 = first).

- ☐ Split: Draw diagonals from one corner to make triangles
- ☐ Share: For a regular polygon divide by the number of angles
- ☐ Count sides: Count the straight sides to name the polygon
- ☐ Multiply: Multiply the number of triangles by 180°

3. True or false?

A square has four right angles.	☐ True	☐ False
A circle is a polygon.	☐ True	☐ False
A trapezium has one pair of parallel sides.	☐ True	☐ False
A pentagon has 6 sides.	☐ True	☐ False

4. Match up

Write the letter of the right meaning in the box.

Polygon	A. A line joining two corners that are not next to each other.
Quadrilateral	B. A flat closed shape with straight sides.
Diagonal	C. A polygon with all sides and all angles equal.
Regular polygon	D. A polygon with four sides.

5. Short answers

- Name a quadrilateral with four equal sides.

- What is a diagonal?

- What do the angles in a quadrilateral add up to?

- Explain in your own words: What makes a polygon regular?

- Stretch: Explain why a square is also a rectangle.

