



Angles & Shape

Gold

These Gold questions require calculating missing angles in more complex situations and explaining shape reasoning.

Name: _____ Date: _____

Section A: Angle Reasoning

1. A quadrilateral has angles of 90° , 85° , and 100° . What is the fourth angle? (Angles in a quadrilateral add up to 360° .)

2. Four angles around a point are all equal. What is the size of each angle?

3. A triangle has one right angle and one angle of 35° . What is the third angle, and what type of triangle is this?

4. Two angles on a straight line are in the ratio 2:3. What are the two angles?

5. Explain why the angles in any triangle always add up to 180° , using an example.

Section B: Shape Reasoning

1. Explain the difference between a regular and an irregular hexagon.

2. A 3D shape has 6 faces, 12 edges, and 8 vertices, with all faces being squares. What is it?

3. How many diagonals does a regular pentagon have?

4. If you combine two identical right-angled triangles, what quadrilateral could you make?

5. Explain how you know a shape is a parallelogram rather than a trapezium.

