

Shape and angle construction review

MODULE 7 · 2D SHAPE, 3D SHAPE AND ANGLES REVIEW

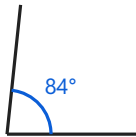
HOW TO ANSWER TODAY

- **Read a protractor.** Protractors have two scales. Pick the one that reads 0° on the side the angle's first arm sits on.
First arm on outer $0^\circ \rightarrow$ use the outer scale to read the second arm
- **Classify an angle.** Acute $< 90^\circ$ · right = 90° · obtuse 90° – 180° · straight = 180° · reflex $> 180^\circ$.
 $75^\circ \rightarrow$ acute · $120^\circ \rightarrow$ obtuse · $220^\circ \rightarrow$ reflex
- **Triangle angles.** Triangle angles add to 180° . Add the two you know, then subtract from 180° .
 $45^\circ + 60^\circ = 105^\circ$. $180^\circ - 105^\circ = 75^\circ$

 STRETCH PROBLEMS

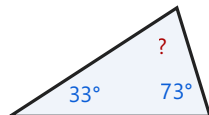
- 1 Cian is making a kite at the after-school crafts club and uses a protractor to check one of the corner angles. One scale reads 84° and the other reads 96° , but the angle clearly looks acute. Which reading is the correct one?

2



Cian is marking out a mini athletics track in the yard for sports day. The two boundary lines at the start meet at an angle of 84° . Is this angle acute, right, obtuse, straight or reflex?

3



Saoirse is cutting triangle shapes from a cereal box for a junk-modelling project. She measures two corners of one triangle as 33° and 73° . What size is the third corner?

- 4 Tadhg is making a homemade Snakes and Ladders board for 5th class. He draws a special tile in the middle that has 6 equal sides and 6 equal angles. What 2D shape is the tile?

Which 2D shape has these properties: 6 equal sides and 6 equal angles?

- 5 Niamh draws a triangular bunting flag for the school yard sports day. The three sides of the flag measure **8 cm**, **17 cm** and **17 cm**. What kind of triangle is the flag (equilateral, isosceles, right-angled or scalene)?

A triangle is constructed with sides 8 cm, 17 cm and 17 cm. What kind of triangle is it (equilateral, isosceles, right-angled or scalene)?