

Measuring angles accurately with a protractor

MODULE 7 · 2D SHAPE, 3D SHAPE AND ANGLES SHAPE & SPACE

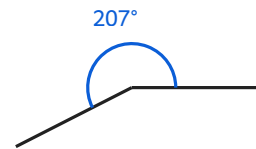
HOW TO ANSWER TODAY

- **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 $= 90^\circ$ · obtuse $90^\circ - 180^\circ$ · straight $= 180^\circ$ · reflex $> 180^\circ$.
 $75^\circ \rightarrow$ acute · $120^\circ \rightarrow$ obtuse · $220^\circ \rightarrow$ reflex

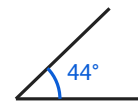
STRETCH PROBLEMS

- 1 Saoirse is measuring a corner on her scale plan of the classroom drawn on grid paper. On her protractor one scale reads 81° and the other scale reads 99° . Which reading is correct if the angle looks acute?

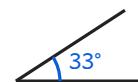
- 2 During STEM week, Fionn is building a model bridge from card and straws. He measures one joint with a protractor and finds it is 207° . Classify the angle as acute, right, obtuse, straight or reflex.



- 3 Aoife is helping to plan a flowerbed in the school garden. One corner of the bed forms an angle of 44° . Classify the angle as acute, right, obtuse, straight or reflex.



- 4 Saoirse is working on a woodwork project for Engineers Week in 6th class. She marks a corner of 33° on a piece of timber. Classify the angle 33° : acute, right, obtuse, straight or reflex?



- 5 Saoirse is building a den in the school orchard. Two sticks meet at a corner measuring 56° . Classify the angle 56° : acute, right, obtuse, straight or reflex?

