Measuring angles accurately with a protractor

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

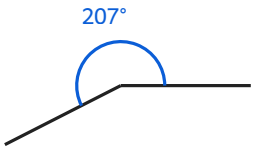
HOW TO ANSWER TODAY

- **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° → use the outer scale to read the second arm
- **Classify an angle.** Acute < 90° · right = 90° · obtuse 90°–180° · straight = 180° · reflex > 180°.
  75° → acute 120° → obtuse 220° → reflex

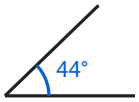
STRETCH PROBLEMS

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?

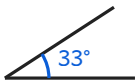
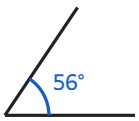
2. During STEM week, Fionn is building a model bridge from card and straws. He measures one joint with a protractor and finds it is **207°**. Classify the angle as acute, right, obtuse, straight or reflex.



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?