Constructing angles 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

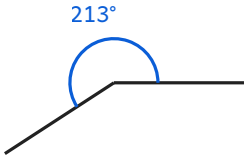
STRETCH PROBLEMS

1. Cian is designing a class crest for the Gaelic football jersey in art. He places a protractor on one angle of the crest and sees **82°** on one scale and **98°** on the other. Which reading is correct if the angle looks acute?

2. Cian is making a scale drawing of the school yard for his art lesson in 6th class. He places his protractor on one corner and sees **80°** on one scale and **100°** on the other. The angle looks acute. Which reading is correct?

3. Aoife is designing a mosaic for the school library wall. She places her protractor on one of the tile angles. One scale reads **93°** and the other scale reads **87°**. The angle looks obtuse. Which reading is correct?

4. Cara is making a scale drawing of the school yard for art class. One corner on her plan measures **213°**. Is this angle acute, right, obtuse, straight or reflex?



5. Aoife is designing a mosaic tile pattern for the school library wall. She places her protractor on one of the tile angles. One scale reads **92°** and the other scale reads **88°**. Which reading is correct if the angle looks obtuse?

SHAPE & SPACE