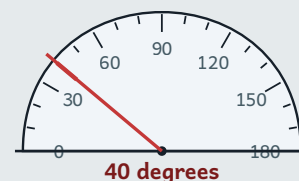


Constructing angles with a protractor

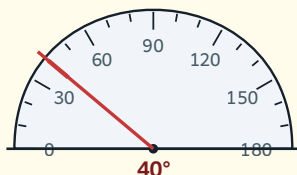
MODULE 7 · 2D SHAPE, 3D SHAPE AND ANGLES REVIEW

To **draw** an angle, mark the vertex and one arm, line up the protractor, dot the degree you want, then join it to the vertex.

→ Draw 65° : baseline first, mark at 65° , rule the second arm.



DRAW AN ANGLE OF 40°



- 1 Rule a base line and mark a vertex.
- 2 Line the protractor's centre on the vertex, 0° along the base line.
- 3 Mark 40° , then join it to the vertex with a ruler.

HOW TO ANSWER TODAY

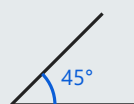
- **Read a protractor.** Protractors have two scales. Pick the one that reads 0° on the side the angle's first arm sits on.
First arm on outer 0° → use the outer scale to read the second arm
- **Classify an angle.** Acute $< 90^\circ$ · right = 90° · obtuse 90° – 180° · straight = 180° · reflex $> 180^\circ$.
 75° → acute · 120° → obtuse · 220° → reflex

WARM-UP

- 1 Saoirse is measuring an angle on a Seachtain na Gaeilge banner she is pinning to the class door. The protractor's two scales show 121° and 59° where the banner's corner sits. The angle clearly looks obtuse, so which reading is correct?

On a protractor, one scale reads 121° and the other scale reads 59° . Which reading is correct if the angle looks obtuse?

2



5th class are stitching a quilt for the school fair, with each fabric square decorated by a different pupil. Saoirse measures the angle at the corner of her zigzag pattern and finds it is 45° . Is the angle acute, right, obtuse, straight or reflex?