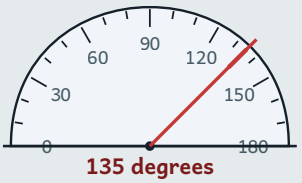
Angle-related problem-solving

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

Combine the angle facts — line, point, vertically opposite, triangle and quadrilateral sums — to find unknown angles step by step.

→ Label what you know, then work out one angle at a time.

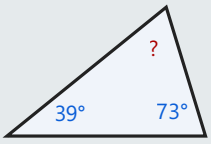


HOW TO ANSWER TODAY

- **Triangle angles.** Triangle angles add to 180°. Add the two you know, then subtract from 180°.
  45° + 60° = 105°. 180° − 105° = 75°
- **Pairs of angles.** Complementary → add to 90°. Supplementary → add to 180°. Around a point → add to 360°.
  Supplementary, one is 55° → other is 180° − 55° = 125°
- **Quadrilateral angles.** Quadrilateral angles add to 360°. Add the three you know, then subtract from 360°.
  70° + 80° + 90° = 240°. 360° − 240° = 120°

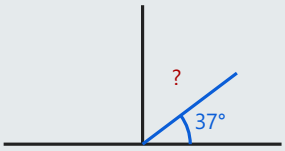
WARM-UP

1



Oisín is drawing a triangular danger zone on his homemade Snakes and Ladders board. He measures two of the corners and finds they are **39°** and **73°**. What size is the third corner of the triangle?

2



Cian is painting a corner square on the giant chess board in the school yard. The two angles inside the corner add up to **90°**, and he has measured one of them as **37°**. What is the size of the other angle?