Angle facts: flowchart

Planner week 2 · Which angle fact? Follow the arrows to find out

Find a missing angle

Are there parallel lines?
arrows on the lines

No → **Where is the angle?**

- **On a straight line**: add up to **180°**
  130° and a: a = 180° − 130° = 50°
- **Around a point**: add up to **360°**
  a = 360° − 150° − 120° = 90°
- **Where two lines cross**: opposite angles are **equal**
  opposite 70°: a = 70°
- **In a triangle**: add up to **180°**
  a = 180° − 60° − 45° = 75°
- **In a quadrilateral**: add up to **360°**
  a = 360° − 100° − 90° − 80° = 90°

Yes → **Which letter can you see?**

- **Z** — Alternate angles are **equal**
  a = 65°
- **F** — Corresponding angles are **equal**
  a = 110°
- **C** — Co-interior angles add up to **180°**
  a = 180° − 115° = 65°

Isosceles? Dashes on two sides mean the two base angles are **equal**.

Stuck? Find an angle you **can** work out, write it on the diagram, then look again.

The big question

Are there **parallel lines**? Look for the arrows.

No: where is the angle?
Yes: can you make a Z, F or C?

Give a reason

Copy the exact words in **red**, e.g. "Angles on a straight line add up to 180°".

Watch out

- One reason for every angle you find.
- Write each angle on the diagram as you go.
- Diagrams are not drawn accurately: work it out, don't measure.
- Equilateral triangle: every angle is 60°.