Pie charts — first encounter

MODULE 7 · DATA, CHANCE AND THE CO-ORDINATE PLANE DATA & CHANCE

A **pie chart** is a circle split into slices. Each slice's size matches that category's share of the whole. The whole pie is **360°**.

→ Half the class → slice of **180°**.

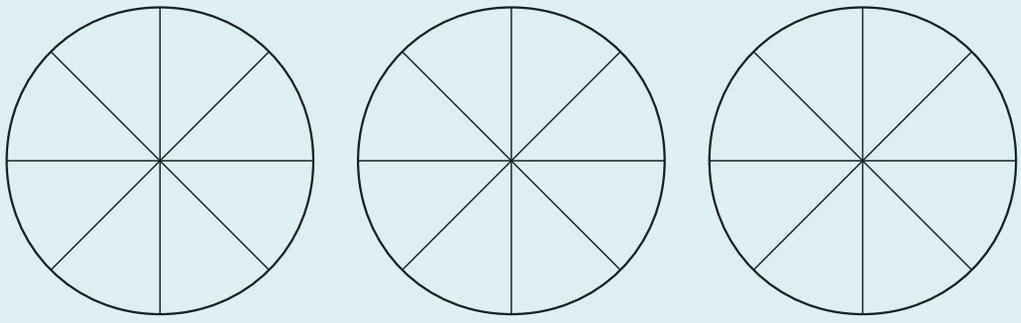
→ A quarter → **90°**. An eighth → **45°**.

HOW TO ANSWER TODAY

- **Pie chart.** A full circle = 360°. A segment's angle ÷ 360° gives its fraction; multiply by 360° to go the other way.
  90° ÷ 360° = 1/4 · 3/5 of 360° = 216°

TRY IT ON THE LINE

Each circle is split into 8 equal sectors. Each sector is 1/8 of the whole. Shade the fraction asked on its own circle.



Circle A Circle B Circle C

1. Circle A: shade **1/2** of the circle. How many sectors? _____
2. Circle B: shade **1/4** of the circle. How many sectors? _____
3. Circle C: shade **1/8** of the circle. How many sectors? _____
4. Each sector turns through how many degrees? _____ (the whole circle = 360°)

PRACTICE

1. Cian and his friends tally the colours of cars leaving the school gate at home time and draw the results as a pie chart. **1/4** of the cars are silver, shown as one segment of the pie chart out of **360°** in total. What angle does the silver segment cover?

   > In a pie chart of class survey results, 1/4 of pupils chose option A. What angle does that segment cover, out of 360° in total?

2. Ms Ní Bhriain's 5th class made a pie chart of their favourite lunchtime games. **1/6** of the pupils chose rounders. What angle, out of **360°**, does the rounders segment cover on the pie chart?

   > In a pie chart of class survey results, 1/6 of pupils chose option A. What angle does that segment cover, out of 360° in total?