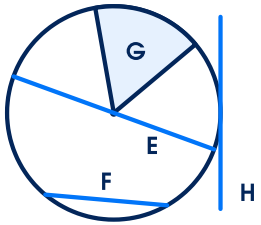
GCSE FOUNDATION · REVISION MAT 4

# Parts of a circle

**1** Name each part of the circle labelled with a letter.




**2** (a) A circle has radius 3.8 cm. Write down its diameter.

(b) A circle has diameter 31 cm. Write down its radius.

**3** Explain the difference between a chord and a diameter.

**4** Dee says the diameter is half the radius.

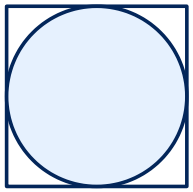
Explain why Dee is wrong.

**5** A circle has centre (3, 1).

The point (–5, 7) lies on the circle.

Work out the radius and the diameter of the circle.

**6** A circle fits exactly inside a square of side 8 cm.



(a) Write down the radius of the circle.

(b) Work out the area of the square that is not covered by the circle. Give your answer to 1 d.p.

ANSWERS · REVISION MAT 4

# Parts of a circle

**1** E: **diameter**
F: **chord**
G: **sector**
H: **tangent**

**2** (a) **7.6 cm**

(b) **15.5 cm**

**3** A chord is any straight line joining two points on the circle.

A diameter is a chord that passes through the centre, so it is the longest chord.

**4** The diameter is twice the radius.

**5** Across −8, up 6

Radius = $\sqrt{(-8^2 + 6^2)}$ = **10**

Diameter = **20**

**6** (a) **4 cm**

(b) $8^2 - \pi \times 4^2$ = **13.7 cm$^2$**