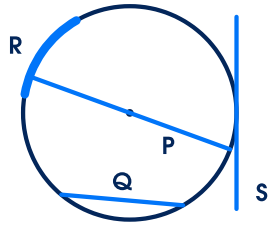
GCSE FOUNDATION · REVISION MAT 2

Parts of a circle

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



2 (a) A circle has radius 4.5 cm. Write down its diameter.

(b) A circle has diameter 22 cm. Write down its radius.

3 Explain the difference between a chord and a diameter.

4 Bea says a tangent is a line that crosses the circle twice.

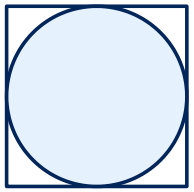
Explain why Bea is wrong.

5 A circle has centre $(-1, 2)$.

The point $(5, 10)$ lies on the circle.

Work out the radius and the diameter of the circle.

6 A circle fits exactly inside a square of side 10 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 2

Parts of a circle

1 P: **diameter**
Q: **chord**
R: **arc**
S: **tangent**

2 (a) **9 cm**

(b) **11 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 A tangent touches the circle at exactly one point. A line crossing twice is a chord (extended).

5 Across 6, up 8

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

Diameter = **20**

6 (a) **5 cm**

(b) $10^2 - \pi \times 5^2$ = **21.5 cm^2**