YEAR 8 · GEOMETRY

Circumference and Area of Circles

Calculate around a circle and the space inside it.

Name _____ **Date** _____

REMEMBER $C = \pi d$ $A = \pi r^2$

Use π = 3.14. The radius, r, is half the diameter. Show your working, include units and give answers to 1 decimal place where needed.

A. Circles

Use the information given in each question.

1 A circle has a diameter of 9 cm. Calculate its circumference.

Working _____ Answer _____

2 A circle has a radius of 3.5 cm. Calculate its area.

Working _____ Answer _____

3 The circumference of a circle is 50.24 cm. Work out its diameter.

Working _____ Answer _____

4 A circular pond has a diameter of 5.6 m. How far is it around the pond?

Working _____ Answer _____

B. Semicircles

Read carefully: curved edge only, or the whole boundary?

5 A semicircle has a radius of 8 cm. Calculate its area.

Working _____ Answer _____

6 A semicircle has a diameter of 12 m. Calculate its area.

Working _____ Answer _____

7 A semicircular window has a diameter of 2.4 m. Calculate the length of its curved edge only.

Working _____ Answer _____

8 A semicircular garden has a diameter of 10 cm. How long is its whole boundary, including the straight edge?

Working _____ Answer _____