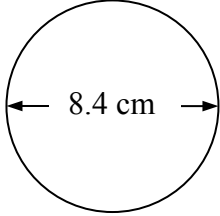
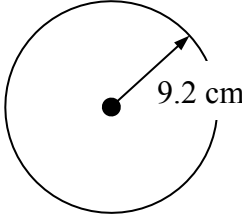
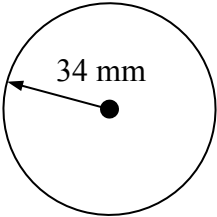
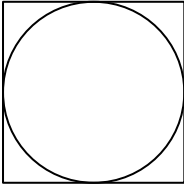




## CIRCLES

### THE CIRCUMFERENCE

Ref: G425. **2S1**

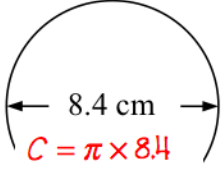
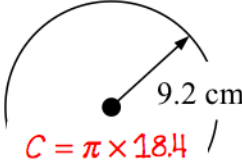
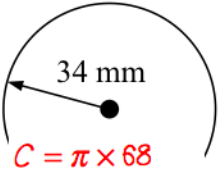
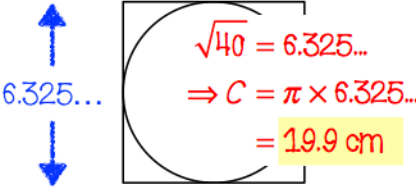
<p><b>A1</b> Find the length of the circumference.</p> 	<p><b>A2</b> A dinner plate has a diameter of 27 cm. Calculate the circumference of the plate.</p>	<p><b>A3</b> The circumference of a circle is 74 cm. Calculate the length of the diameter of the circle.</p>	<p><b>A4</b> Calculate the circumference of a 14-inch pizza.</p>
<p><b>B1</b> The diameter of a 10-pence coin is 24.5 mm. Calculate the circumference of the coin.</p>	<p><b>B2</b> Find the length of the circumference.</p> 	<p><b>B3</b> The distance between the pencil-tip and the point of a pair of compasses is set to 4.5 cm. Calculate the circumference of the circle that will be drawn.</p>	<p><b>B4</b> The distance around a circular pond is 22 metres. Work out the diameter of the pond.</p>
<p><b>C1</b> Find the length of the circumference.</p> 	<p><b>C2</b> The circumference of the earth is approximately 40 000 km. Calculate the distance from the surface to the centre of the earth.</p>	<p><b>C3</b> A square has an area of 40 cm<sup>2</sup>. Work out the circumference of the circle.</p> 	<p><b>C4</b> Work out: <math display="block">\frac{22}{7} - \pi</math> Give you answer correct to 3 significant figures.</p>



## CIRCLES THE CIRCUMFERENCE

$$C = \pi \times D$$

Ref: G425. **2S1**

<p><b>A1</b> Find the length of the circumference.</p>  $C = \pi \times 8.4$ $= 26.4 \text{ cm}$	<p><b>A2</b> A dinner plate has a diameter of 27 cm. Calculate the circumference of the plate.</p> $C = \pi \times 27$ $= 84.8 \text{ cm}$	<p><b>A3</b> The circumference of a circle is 74 cm. Calculate the length of the diameter of the circle.</p> $D = \frac{74}{\pi}$ $= 23.6 \text{ cm}$	<p><b>A4</b> Calculate the circumference of a 14-inch pizza.</p> $C = \pi \times 14$ $= 44 \text{ inches}$
<p><b>B1</b> The diameter of a 10-pence coin is 24.5 mm. Calculate the circumference of the coin.</p> $C = \pi \times 24.5$ $= 77.0 \text{ mm}$	<p><b>B2</b> Find the length of the circumference.</p>  $C = \pi \times 18.4$ $= 57.8 \text{ cm}$	<p><b>B3</b> The distance between the pencil-tip and the point of a pair of compasses is set to 4.5 cm. Calculate the circumference of the circle that will be drawn.</p> $C = \pi \times 9$ $= 28.3 \text{ cm}$	<p><b>B4</b> The distance around a circular pond is 22 metres. Work out the diameter of the pond.</p> $D = \frac{22}{\pi}$ $= 7 \text{ m}$
<p><b>C1</b> Find the length of the circumference.</p>  $C = \pi \times 68$ $= 214 \text{ mm}$	<p><b>C2</b> The circumference of the earth is approximately 40 000 km. Calculate the distance from the surface to the centre of the earth.</p> $D = \frac{40000}{\pi}$ $= 12732$ $\therefore r = 6366 \text{ km}$	<p><b>C3</b> A square has an area of 40 cm<sup>2</sup>. Work out the circumference of the circle.</p>  $\sqrt{40} = 6.325\dots$ $\Rightarrow C = \pi \times 6.325\dots$ $= 19.9 \text{ cm}$	<p><b>C4</b> Work out:</p> $\frac{22}{7} - \pi$ <p>Give your answer correct to 3 significant figures.</p> $0.00126$