## CIRCLES

THE CIRCUMFERENCE (AND PI)


B1 Work out the length of the circumference.


| C1 |
| :--- |
| The circumference of a circle |

is 26 cm .
Work out the length of the diameter.

A2 Write the value of pi correct to six decimal places.

B2 Work out the length of the circumference.


## C2

The circumference of a circle is 28 m .
Work out the length of the radius

A3 Write the value of pi that your calculator displays.

B3 Work out the length of the circumference.


C3
The diameter of the London Eye is 120 metres.
Work out the distance that a pod travels in one revolution.

A4 Which of these fractions is the best approximation for pi?

$$
\begin{array}{cccc}
\frac{10}{3} & \frac{22}{7} & \frac{55}{17} & \\
\frac{333}{106} & & \frac{555}{177} & \frac{355}{113}
\end{array}
$$

B4 Work out the length of the circumference.


## C4

A bicycle has a wheel with a diameter of 66 cm .
How far will the bicycle travel if the wheel turns 50 complete revolutions.
Give your answer to the nearest metre.

## CIRCLES

THE CIRCUMFERENCE (AND PI)

$$
C=\pi \times D
$$

| A1 | Draw circles around the <br> symbols for pi |
| :--- | :--- |
| $\mu$ |  |

B1 Work out the length of the circumference.


C1
The circumference of a circle
is 26 cm .
Work out the length of the diameter.

$$
\begin{aligned}
D & =\frac{26}{\pi} \\
& =8.28 \mathrm{~cm}
\end{aligned}
$$

A2 Write the value of pi correct to six decimal places.

B2 Work out the length of the circumference.
C2
The circumference of a circle
is 28 m.
Work out the length of the r
$D=\frac{28}{\pi}$
$=8.9126 \ldots$

A3 Write the value of pi that your calculator displays.
3.141592654
[some calculators will be more accurate than this!]

B3 Work out the length of the circumference.


C3
The diameter of the London Eye is 120 metres.
Work out the distance that a pod travels in one revolution.

$$
\begin{aligned}
C & =\pi \times 120 \\
& =377 \text { metres }
\end{aligned}
$$

A4 Which of these fractions is the best approximation for pi?

| $\frac{10}{3}$ | $\frac{22}{7}$ | $\frac{55}{17}$ |
| :--- | :--- | :--- |
|  | $\frac{353}{106}$ | $\frac{555}{177}$ |
|  | 3.14159292 |  |
|  | B4 | Work out the length of the <br> circumference. |



C4

$$
\begin{aligned}
C & =\pi \times 66 \\
& =207.35 \mathrm{~cm}
\end{aligned}
$$

50 turns will be

$$
207.35 \times 50=10367.5 \mathrm{~cm}
$$

$$
=104 \mathrm{~m}
$$

