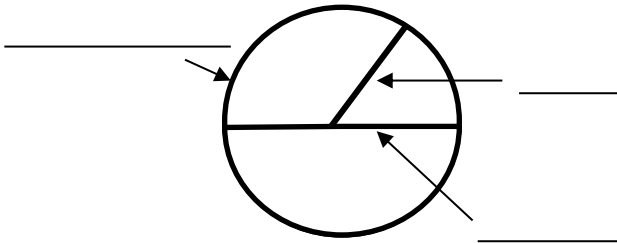# Building Blocks - Circles

Block 1

Label the circle

_____

Fill in the gaps

a) Radius = 4 cm, diameter = _____

b) Radius = _____, diameter = 3 m

c) Circumference = _____ r or _____ d

d) Area of a circle = π _____

Find the exact circumference and area of the circles.

a) Radius = 9 m

b) Diameter = 4 cm

c) Diameter = 5 mm

Block 2
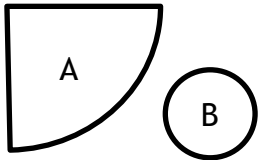
Jane digs a circular flower bed in the garden.
The radius of the flower bed is 0.82 m.
Calculate the circumference of the flower bed.

The top of a table is a circle.
The diameter of the top of the table is 1.7 m.
Work out the area of the top of the table.

Peter has a flower garden in the shape of a circle.
The diameter of the garden is 7 metres.
Peter wants to put fencing around the edge of the garden.
The fencing costs £5.60 per metre.
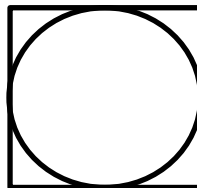Work out the total cost of the fencing.

Block 3

A is in the shape of a quarter circle of radius 12 cm.
B is in the shape of a circle.

A

B

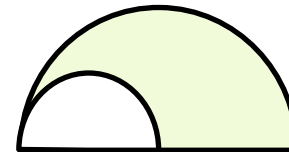The area of A is 9 times the area of B.
Work out the radius of B.

The area of the square is 49 cm².
Work out the circumference of the circle.

The shaded shape is made using two semicircles.

One semicircle has a diameter of 25 cm.
The other has diameter 10 cm.

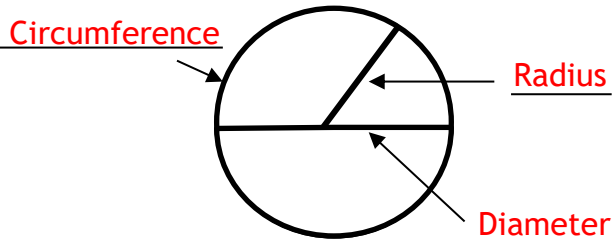Calculate the perimeter of the shaded shape.

Building Blocks - Circles

Block 1

Label the circle

Circumference

Radius

Diameter

Fill in the gaps

a) Radius = 4 cm, diameter = 8 cm

b) Radius = 1.5 m, diameter = 3 m

c) Circumference = $2\pi r$ or πd

d) Area of a circle = πr^2

Find the exact circumference and area of the circles.

a) Radius = 9 m
$C = 18\pi$ cm
$A = 81\pi$ cm^2

b) Diameter = 4 cm
$C = 4\pi$ cm
$A = 4\pi$ cm^2

c) Diameter = 5 mm
$C = 5\pi$ cm
$A = \frac{25}{4}\pi$ cm^2

Block 2

Jane digs a circular flower bed in the garden.
The radius of the flower bed is 0.82 m.
Calculate the circumference of the flower bed.   5.15 m

The top of a table is a circle.
The diameter of the top of the table is 1.7 m.
Work out the area of the top of the table.   2.27 m^2

Peter has a flower garden in the shape of a circle.
The diameter of the garden is 7 metres.
Peter wants to put fencing around the edge of the garden.
The fencing costs £5.60 per metre.
Work out the total cost of the fencing.   £123.15

Block 3

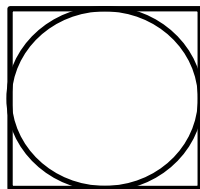A is in the shape of a quarter circle of radius 12 cm.
B is in the shape of a circle.

Area A = 36π
Area B = 4π

A

B
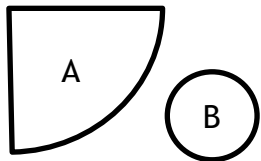
$r = 2$

The area of A is 9 times the area of B.
Work out the radius of B.

The area of the square is 49 cm^2.
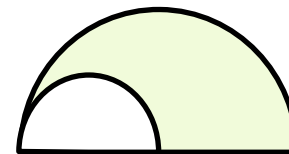Work out the circumference of the circle.

$d = 7$
$C = 22$ cm

The shaded shape is made using two semicircles.

One semicircle has a diameter of 25 cm.
The other has diameter 10 cm.

Calculate the perimeter of the shaded shape.

$25 - 10 + \frac{25\pi}{2} + \frac{10\pi}{2}$
$= 70$ cm

Dr Frost LEARNING