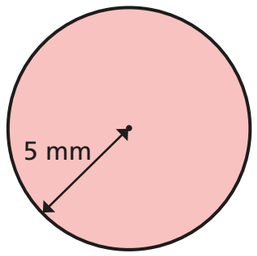
Calculate the area of a circle and parts of a circle with a calculator

1 Find the area of each circle.

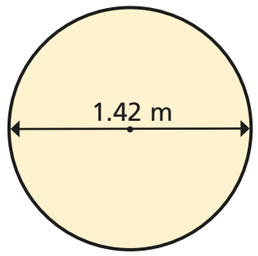
Give your answers to 1 decimal place.

a)



area = ☐ mm^2

b)

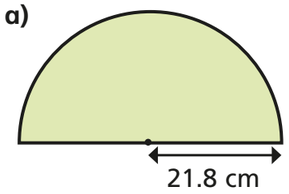


area = ☐ m^2

2 Find the area of each semicircle.

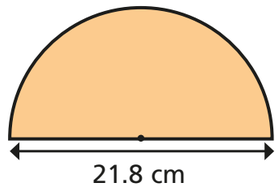
Give your answers to 3 significant figures.

a)



area = ☐ cm^2

b)



area = ☐ cm^2

3 The area of a circle is 120 cm^2

a) Find the radius of the circle.

Give your answer to 1 decimal place.

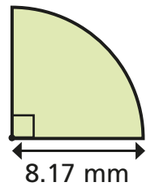
radius = ☐

b) What is the diameter of the circle?

diameter = ☐

4 Draw a circle with an area of approximately 60 cm^2

5 Find the area of the shape.



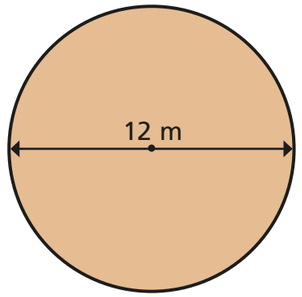
☐ mm^2

6 Ms Potter is covering a flower bed in compost.

The flower bed has a diameter of 12 m.

A bag of compost can cover 15 m^2 of garden.

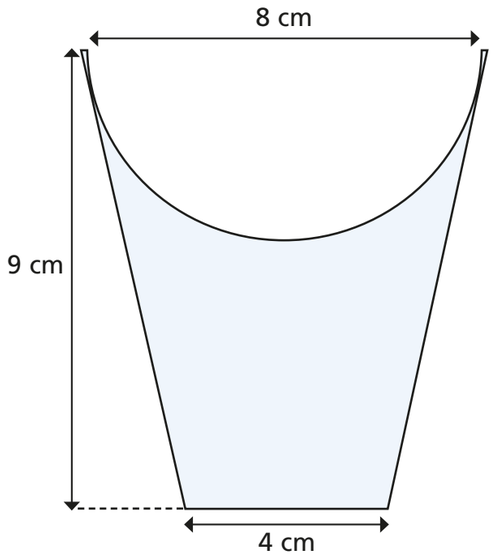
How many bags of compost will Ms Potter need?



7 A semicircle has been cut from this trapezium.

Find the area of the remaining shape.

Give your answer in terms of π first and then to 3 significant figures.



area = _____

area =

8 The diagram shows a target board used in an archery style game.

The diameters of the circles are 30 cm, 60 cm, 90 cm and 120 cm.

a) Find the area of the target that is red.

Give your answer in terms of π first and then to 3 significant figures.

area = _____

area =

b) What percentage of the target is red?

%

9 Dora and Jack are cutting shapes out of card.

Each sheet of card is 24 cm by 20 cm.

Dora cuts out the largest circle she possibly can.

Jack cuts out the largest semicircle he possibly can.

Who has the greatest amount of card left over?

_____