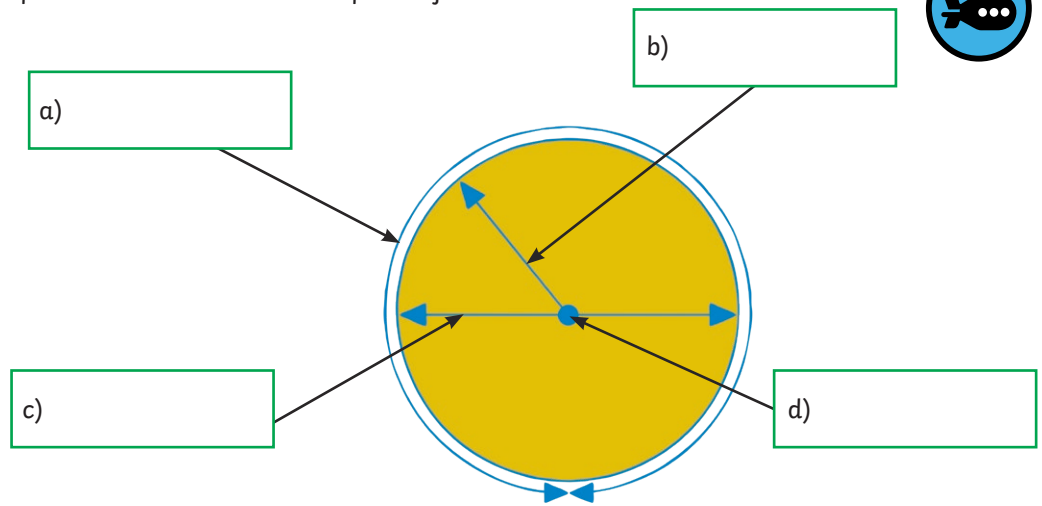**1)** Use the words below to complete the labels to show the parts of a circle.

| radius |
| diameter |
| centre |
| circumference |

a) [   ]

b) [   ]

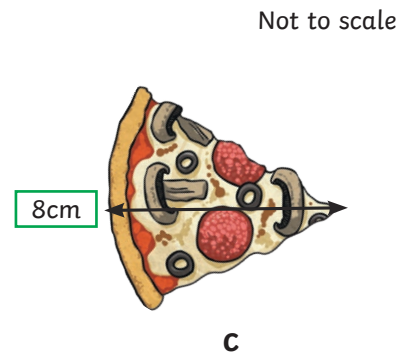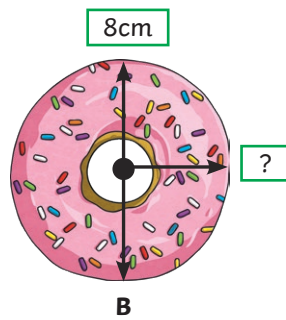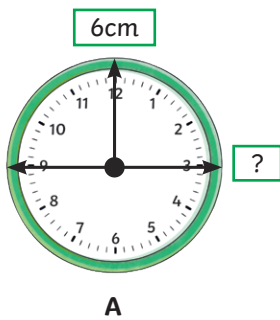c) [   ]

d) [   ]

2) Complete these sentences

The diameter of a circle is _____ the length of the radius.

The radius of a circle is _____ the length of the diameter.

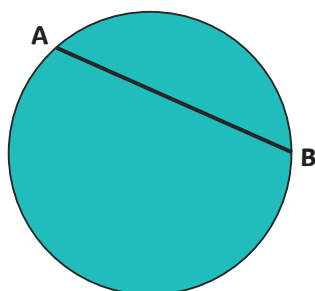**3)** Find the diameter and radius of these objects.

Not to scale

6cm   ?

A

8cm   ?

B

8cm

C

	Radius	Diameter
A		
B		
C		

4) Complete the table.

Radius	Diameter
5.5cm	
	13cm
3.75cm	

1) Jack says this is the diameter of the circle. Kia says this is the radius of the circle. Who do you agree with? Explain your answer.

Jack

Kia

A

B

_____

_____

_____

2) True or false? Prove it.

a) The radius of a circle is twice its diameter. _____

_____

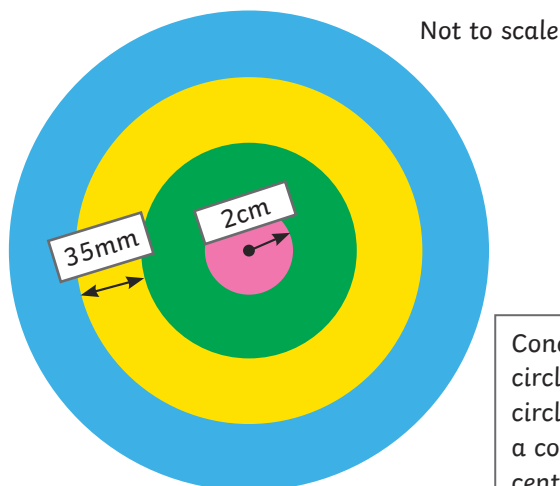**b)** A circle with a diameter of 7cm has a radius of 3.5cm. _____

_____

c) The radius of a circle can be bigger than its diameter. _____

_____

3) The diameter of circle A is $\frac{1}{3}$ of the radius of circle B. Find 3 examples of their diameters that make this statement true.

Diameter of A	Diameter of B

4) Here are 4 concentric circles. The radius of the smallest circle is 2cm. The gap between the remaining circles is 35mm. What is the diameter of the largest circle? Show how you know.
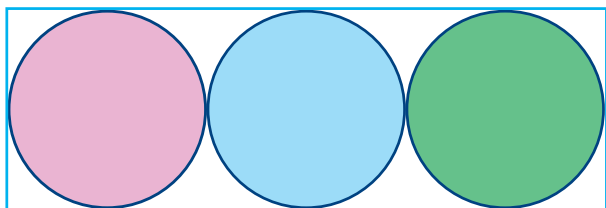

Not to scale

35mm

2cm

Concentric circles are circles with a common centre.

1) This design is made from a rectangle and three congruent circles.

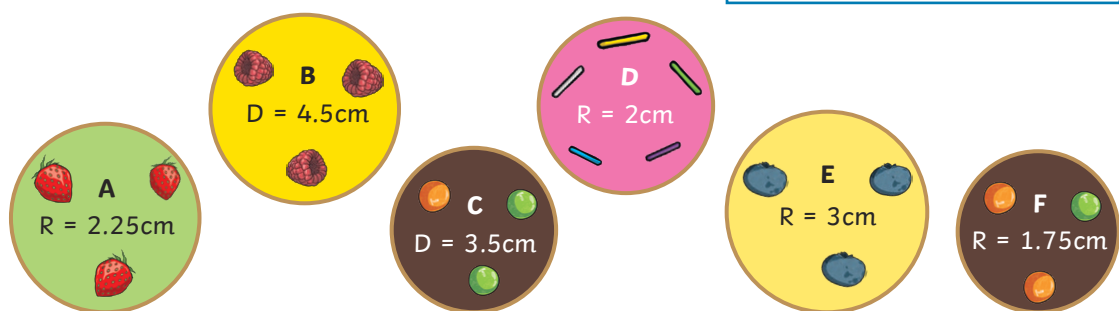The length of the rectangle is 15cm. What is the radius of each circle? Explain your answer.

Not to scale

_____

_____

_____

_____

2) Tayla is packing cakes into boxes, ready to send out to the shops.

Here are her cakes:

R - radius   D - diameter

A R = 2.25cm

B D = 4.5cm

C D = 3.5cm

D R = 2cm

E R = 3cm

F R = 1.75cm

Tayla
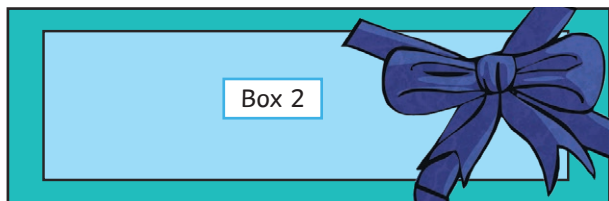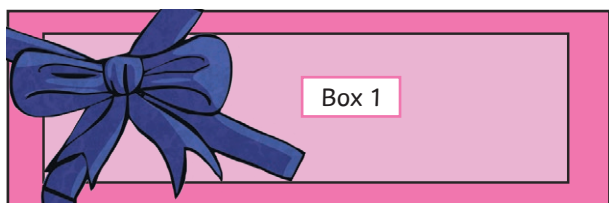
Not to scale

They must be packed in a row, next to each other. They must all be packed into these 2 boxes which each have a length of 13cm.

a) How should Tayla arrange them?

Box 1

Box 2

Not to scale

b) Tayla now wants to pack them in 2 rows in one box. The length of the box is 13cm. What is the minimum width it could be?