

Q1.(a) Draw a circle with **diameter** 12 cm, centre P .



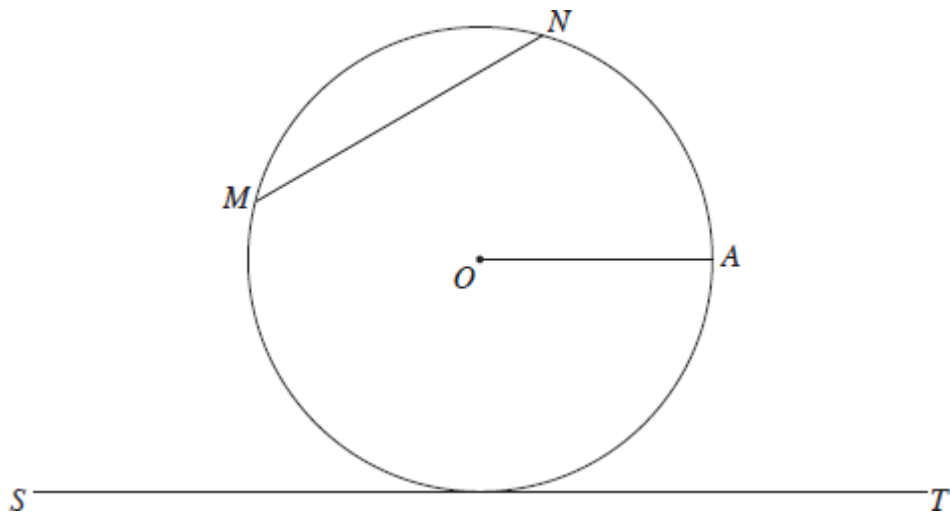
(2)

(b) On your circle draw a sector of angle 60°

(2)

(Total 4 marks)

Q2. O is the centre of the circle.



Circle the word to complete each sentence.

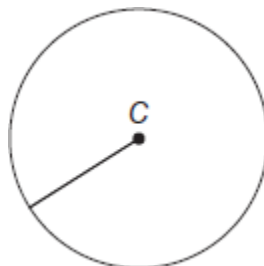
- (a) The line OA is a
chord circumference diameter radius tangent (1)

- (b) The line MN is a
chord circumference diameter radius tangent (1)

- (c) The line ST is a
chord circumference diameter radius tangent (1)
(Total 3 marks)

Q3.

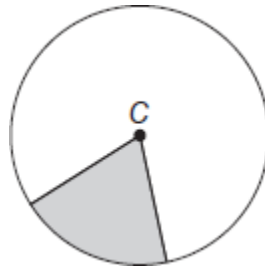
- (a) Complete the sentence for this circle, centre C .



The straight line from C to the circumference is called a

(1)

(b) Complete the sentence for this circle, centre C .



The shaded area is called a

(1)

(c) Write down a difference between a diameter and any other chord.

.....
.....

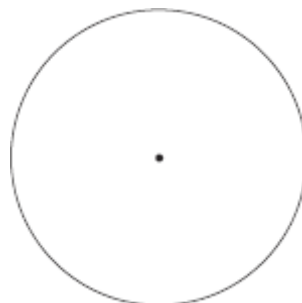
(1)

(Total 3 marks)

Q4.

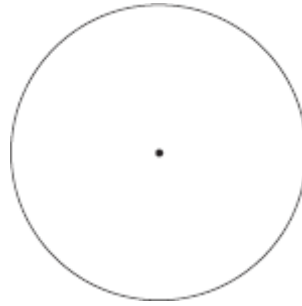
Draw the following on the circles below.

(a) Radius.



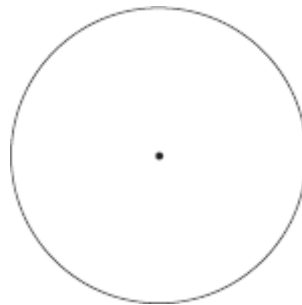
(1)

(b) Chord.



(1)

(c) Tangent.



(1)
(Total 3 marks)

Q5.

A Maths Club has a competition.

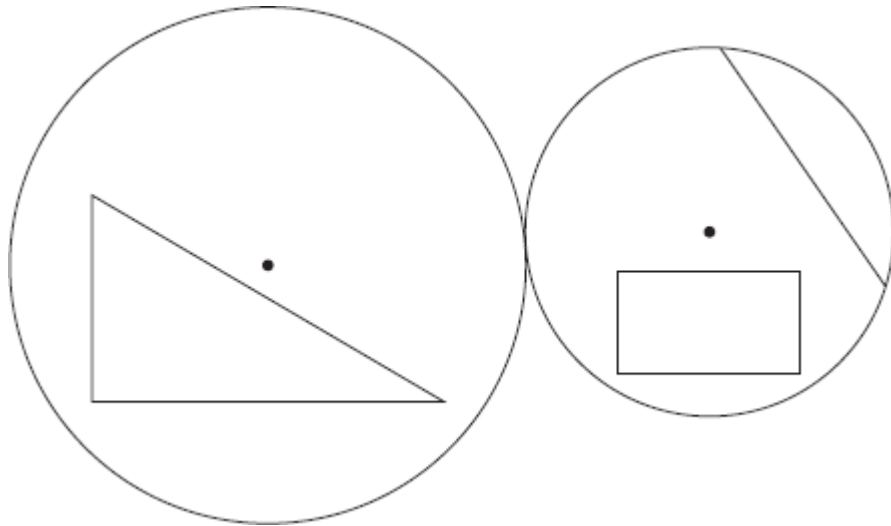
Design a logo

The logo **must** have

- a large circle with **radius** between 4 cm and 8 cm
- a small circle with **diameter** between 45 mm and 55mm
- the circles touching
- a **square** inside the small circle
- an **isosceles triangle** inside the large circle
- a **chord** inside the small circle.

This is Sam's design.

The dots show the centres of the circles.



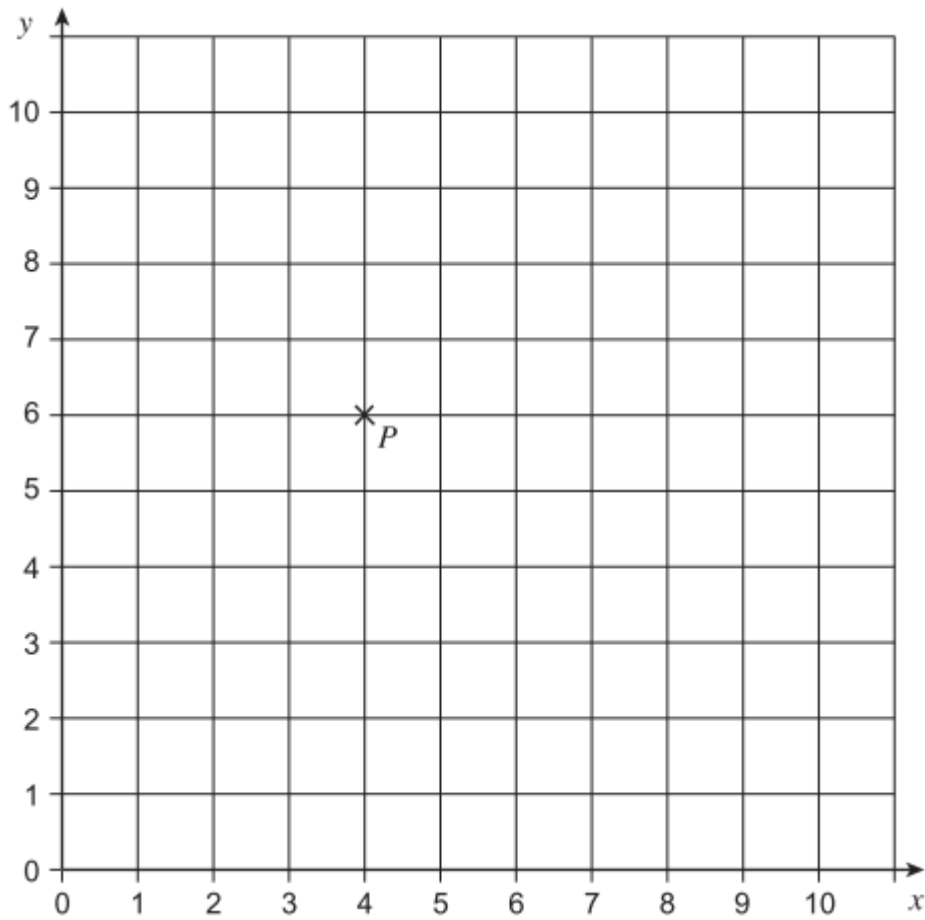
Check Sam's design.

Write YES or NO against each item in the list.
One has been done for you.

• A large circle with radius between 4 cm and 8 cm
• A small circle with diameter between 45 mm and 55 mm
• The circles touching	YES
• A square inside the small circle
• An isosceles triangle inside the large circle
• A chord inside the small circle

(Total 5 marks)

Q6. Here is a centimetre grid with point *P* plotted.



A circle has centre P and radius 4 cm.
The circle passes through the points A , B , C and D .

Complete the coordinates for A , B , C and D .

A (..... , 2)

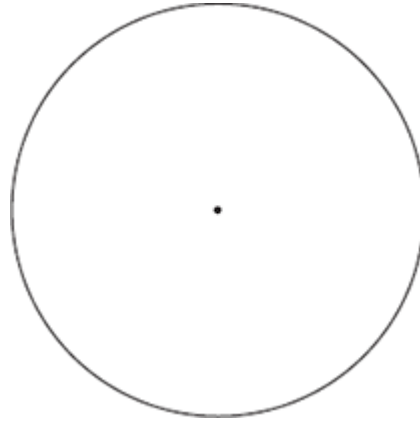
B (8 ,)

C (..... , 10)

D (0 ,)

(Total 4 marks)

Q7.(a) Measure the radius of this circle in centimetres.



Answer cm

(1)

- (b) Measure or work out the diameter of the circle in centimetres.

.....

Answer cm

(1)

- (c) Write down a formula in words connecting the diameter and the radius.

.....

(1)

(Total 3 marks)