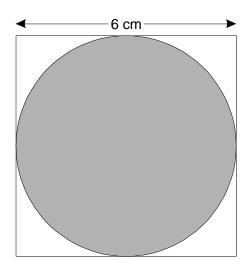
## **Circles Extra Practice**

1) Find the shaded area

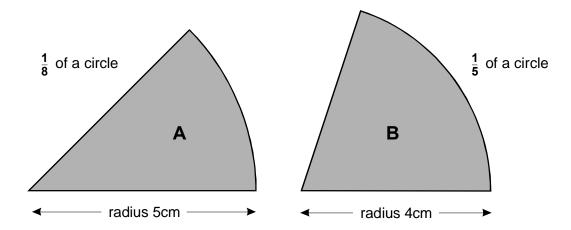


2) The diagram shows two circles and a square, ABCD. A and B are the centres of the circles. The radius of each circle is 5 cm.
Calculate the area of the shaded part of the square.

A 5 cm D

## 3) Which is Bigger?

The diagram shows parts of two circles, sector A and sector B



(a) Which sector has the bigger area?Show working to explain your answer.



(b) The perimeter of a sector is made from two straight lines and an arc.

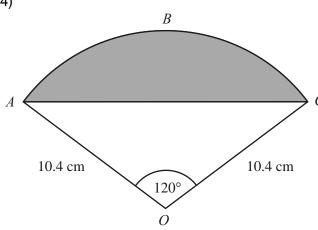
Which sector has the bigger perimeter?

Show working to explain your answer.



Date: \_\_\_\_\_

4)



The diagram shows a sector OABC of a circle with centre O. OA = OC = 10.4 cm. Angle  $AOC = 120^{\circ}$ .

(a) Calculate the length of the arc *ABC* of the sector. Give your answer correct to 3 significant figures.

.....cm

(b) Calculate the area of the shaded segment *ABC*. Give your answer correct to 3 significant figures.

.....cm<sup>2</sup>

5) A circle has a circumference of 120cm. What is the area of the circle?

Show your work.

Janine has a garden in the corner of her yard and wishes to line it with bricks, as shown in the diagram below. The area of her garden is 103.9 dm<sup>2</sup>.

What is the total length of the bricks Janine will need to wrap around her entire garden exactly once? Round the answer to the nearest tenth.

