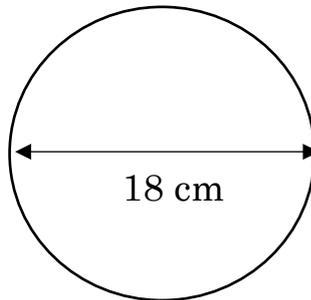


## Circles Exam Practice

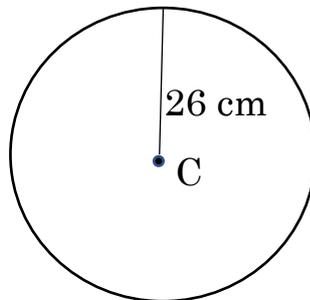


1. Work out the area of the shape below correct to 1 decimal place, stating the correct units.



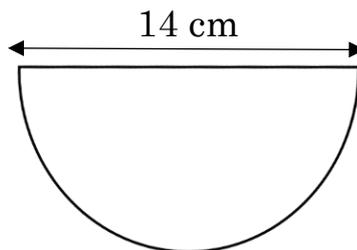
(2 marks)

2. Work out the area of the circle with centre C correct to 1 decimal place, stating the correct units.



(2 marks)

3. a) Work out the area of the semi-circle below correct to 1 decimal place, stating the correct units.



(2 marks)

- b) Work out the perimeter of the shape.

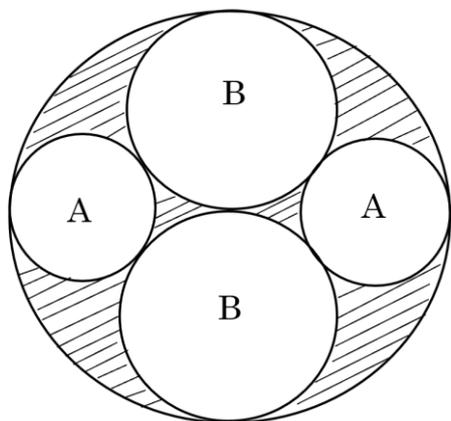
(2 marks)

4. Jo orders two pizzas which are in the shape of a circle: a mushroom pizza, which is 8 inches in diameter, and a four cheese pizza, which is 12 inches in diameter. If she eats half of the mushroom pizza and  $\frac{3}{4}$  of the four-cheese pizza, work out what percentage of the pizzas she has left, giving your answer to the nearest whole number.

(4 marks)



5. The diagram below shows a circle containing 4 touching circles.

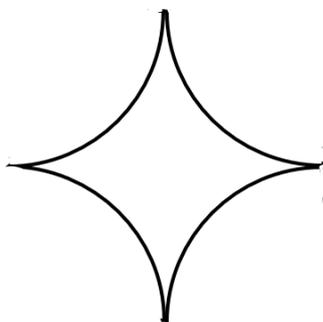


The circles marked A have radius 10 cm, whilst the radius of the circles marked B have radius 15 cm.

Find the percentage of the shape which is shaded, giving your answer to 1 decimal place.

(5 marks)

6.

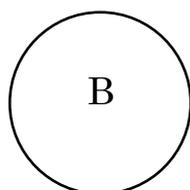
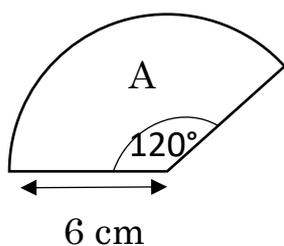


The shape below has been formed from 4 quarter-circles. Each full circle has a radius of 20 cm.

Find the circumference of the shape, giving your answer in terms of  $\pi$ .

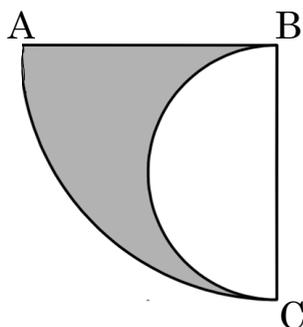
(3 marks)

7. Shape A is a sector of a circle. The area of shape A is 3 times larger than shape B. Find the radius of shape B.



(4 marks)

8.



In this shape, angle ABC is a right-angle. The radius of the white semi-circle is 16 cm.

Find the circumference of the shaded region, giving your answer in terms of  $\pi$ .

(4 marks)