## mathsgenie.co.uk mathsgenie.co.uk Please do not write on this sheet 4 AOB is a sector of a circle, centre O and radius 6 cm. The diagram shows a sector, centre *O*. The angle of the sector is $60^{\circ}$ . The radius of the circle is 8 cm. The angle of the sector is 150°. 8 cm Calculate the area of the sector. Find the length of the arc AB. Give your answer correct to 3 significant figures. 6 cm 150° 6 cm Give your answer in terms of $\pi$ . 8 cm (2 marks) The diagram shows a sector, centre O. (2 marks) The radius of the circle is 11 m. The angle of the sector is 200°. AOB is a sector of a circle, centre O and radius 18 cm. 2 The angle of the sector is 125°. Calculate the length of the arc AB. 200° Give your answer in terms of $\pi$ . 11 m Calculate the area of the sector. 18 cm 18 cm Give your answer correct to 3 significant figures. 0 (2 marks) (2 marks) AOB is a sector of a circle, centre O and radius 5.2 cm. 6 The angle of the sector is 80°. The diagram shows a sector, centre O. 3 The radius of the circle is 15.2 cm. Find the **perimeter** of the sector. The angle of the sector is 165°. Give your answer correct to Calculate the area of the sector. 3 significant figures. Give your answer correct to 165° 5.2 cm 5.2 cm 3 significant figures. 15.2 cm (3 marks) (3 marks) Grade 5 Grade 5 Sector Area and Arc Length

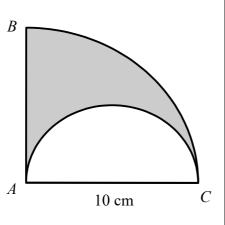
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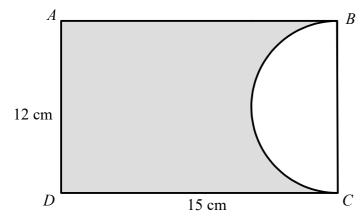
7 BAC is a sector of a circle, centre A. AC is the diameter of a semi circle. AC is 10 cm.

Find the area of the shaded region. Give your answer in terms of  $\pi$ .



(4 marks)

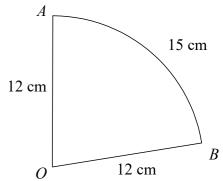
The diagram shows a rectangle, *ABCD*, and a semi circle. *BC* is the diameter of a semi circle.



Calculate the percentage of the area of the rectangle that is shaded. Give your answer correct to 1 decimal place.

(4 marks)

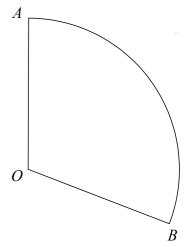
AOB is a sector of a circle, centre *O* and radius 12 cm. The length of arc AB is 15 cm.



Find the area of the sector.

(4 marks)

AOB is a sector of a circle, centre O and radius 9 cm. The length of arc AB is  $6\pi$  cm.



Find the area of the sector. Give your answer in terms of  $\pi$ .

(4 marks)