

Diagram **NOT**  
accurately drawn

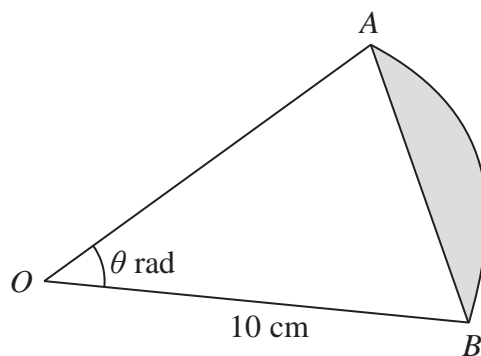


Figure 1 shows a sector of a circle of radius 10 cm and centre  $O$ . The area of triangle  $OAB$  is  $20 \text{ cm}^2$  and the size of angle  $AOB$  is  $\theta$  radians.

(a) the value of  $\theta$ ,

(b) the length of the arc  $AB$ ,

(c) the area of the shaded segment.

**(Total for Question 4 is 7 marks)**

