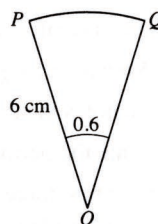


**Miscellaneous exercise 18**

- 1 The diagram shows a sector of a circle with centre  $O$  and radius 6 cm. Angle  $POQ = 0.6$  radians. Calculate the length of arc  $PQ$  and the area of sector  $POQ$ .



- 2 A sector  $OAB$  of a circle, of radius  $a$  and centre  $O$ , has  $\angle AOB = \theta$  radians. Given that the area of the sector  $OAB$  is twice the square of the length of the arc  $AB$ , find  $\theta$ .





