

3.

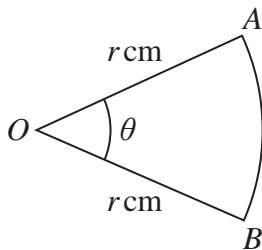


Figure 1

Figure 1 shows a sector AOB of a circle with centre O and radius r cm.

The angle AOB is θ radians.

The area of the sector AOB is 11 cm^2

Given that the perimeter of the sector is 4 times the length of the arc AB , find the exact value of r .

(4)