

7 The area of a sector of a circle is 36.288cm^2 . The angle of the sector is θ radians and the radius of the circle is r cm.

(a) Find an expression for θ in terms of r . [1]

The perimeter of the sector is 24.48 cm.

(b) Show that $\theta = \frac{24.48}{r} - 2$. [1]

(c) Find the possible values of r . [3]