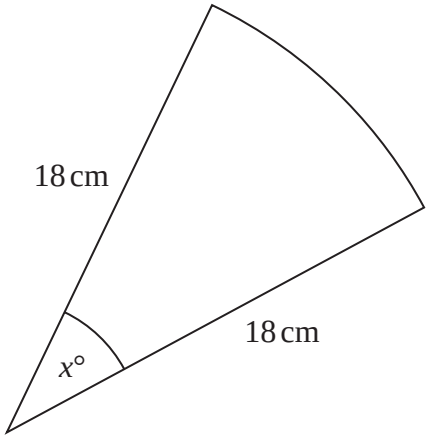
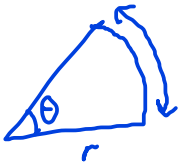
1 The diagram shows a sector of a circle of radius 18 cm.



The length of the arc is 4π cm.

Work out the value of x.

arc length formula $= \frac{\theta}{360^\circ} \times 2\pi r$



we have

$\theta = x$

$r = 18$

$\frac{x}{360} \times 2 \times \pi \times 18 = 4\pi$ (1)

$\frac{x\pi}{10} = 4\pi$ $\div \pi$

$\frac{x}{10} = 4$ $\times 10$

$x = 40$ (2)

$x =$ 40

(Total for Question 1 is 3 marks)