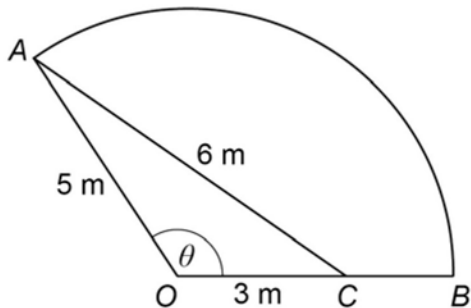


- 2 A wooden frame is to be made to support some garden decking. The frame is to be in the shape of a sector of a circle. The sector OAB is shown in the diagram, with a wooden plank AC added to the frame for strength. OA makes an angle of θ with OB .



- 2 (a) Show that the exact value of $\sin\theta$ is $\frac{4\sqrt{14}}{15}$ [3 marks]
- 2 (b) Write down the value of θ in radians to 3 significant figures. [1 mark]
- 2 (c) Find the area of the garden that will be covered by the decking. [2 marks]