



The diagram shows a sector ABC of a circle with centre A and radius r . The line BD is perpendicular to AC . Angle CAB is θ radians.

- (a) Given that $\theta = \frac{1}{6}\pi$, find the exact area of BCD in terms of r . [3]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

