

(a) Show that the centre of the circle lies on the line $y = \frac{1}{2}x - 4$. [4]

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

[5]

[illegible]