

A curve has equation $x^2y + 2y^3 = 48$.

Find the equation of the normal to the curve at the point $(4, 2)$, giving your answer in the form $ax + by + c = 0$ where a , b and c are integers. [7]

This image shows a full page of white paper with horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.