



The diagram shows part of the graph of $y = \sin(a(x + b))$, where a and b are positive constants.

- (a) State the value of a and one possible value of b . [2]

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Another curve, with equation $y = f(x)$, has a single stationary point at the point (p, q) , where p and q are constants. This curve is transformed to a curve with equation

$$y = -3f\left(\frac{1}{4}(x + 8)\right).$$

- (b)** For the transformed curve, find the coordinates of the stationary point, giving your answer in terms of p and q . [3]

This image shows a full page of white paper with ten horizontal dashed lines, typical of primary school handwriting practice paper. The lines are evenly spaced and extend across the entire width of the page. There is no text or other markings on the paper.