

- 2 (a) Find the exact values of x for which $\cosh 2x = 6 \sinh^2 x$, giving your answers in logarithmic form.

[4]

This image shows a full page of white paper with ten horizontal dashed lines, evenly spaced from top to bottom. The lines are thin and black, typical of handwriting practice paper. There are no margins, text, or other markings on the page.

- (b)** Sketch the curves $C_1 : y = \cosh 2x$ and $C_2 : y = 6 \sinh^2 x$ on the same diagram. [2]

[2]