

6 **(a)** The curve $y = \ln x$ is stretched by a scale factor 3 in the x -direction.

State the equation of the curve after it has been stretched. **[2]**

(b) Describe fully the **single** transformation that transforms the curve $y = x^2 + 1$ to the curve $y = x^2 - 6x + 8$. **[4]**