

3 The curve

$$y = \log_4 x$$

is transformed by a stretch, scale factor 2, parallel to the  $y$ -axis.

State the equation of the curve after it has been transformed.

Circle your answer.

**[1 mark]**

$$y = \frac{1}{2} \log_4 x$$

$$y = 2 \log_4 x$$

$$y = \log_4 2x$$

$$y = \log_8 x$$