

1 The equation of a curve is  $y = 4x^2 + 8x + 1$ .

The curve is stretched parallel to the  $x$ -axis with scale factor 2.

Find the equation of the new curve, giving your answer in the form  $y = ax^2 + bx + c$ , where  $a$ ,  $b$  and  $c$  are integers to be determined. **[2]**