

7th April

Corbettmaths

Line L_1 is parallel to $5x - 7y = 31$ and passes through the point $(4, 16)$

Find the coordinates of the point where L_1 intersects the x-axis.

Use factor theorem to show $(x + 1)$

is a factor of $x^3 - x^2 - 50x - 48$

Solve $x^3 - x^2 - 50x - 48 = 0$

The equation of a curve is
 $y = (x - 1)(x + 6)$

P is a point on the curve.
The tangent to the curve at P has gradient -9

Work out the coordinates of P