22nd June

Corbettmaths

The nth term of a sequence is $\dfrac{3n}{8n + 13}$

Work out the position of the term that has a value of $\dfrac{1}{3}$

Factorise

$x^3 + 3x^2 - 13x - 15$

$\mathbf{A} = \begin{pmatrix} -7 & 8 \\ 10 & -3 \end{pmatrix}$ $\mathbf{B} = \begin{pmatrix} 4 \\ -3 \end{pmatrix}$

Work out the matrix **AB**

A curve has equation $y = x^3 - 6x^2 + 8$

Show the curve has a minimum point at (4, −24).

Show the tangent to the curve at the minimum point meets the curve again when x $= -2$