

13th December

Corbettmaths

The n th term of a sequence is

$$\frac{500 + n}{600 - 3n}$$

Write down the limiting value of the sequence $n \rightarrow \infty$

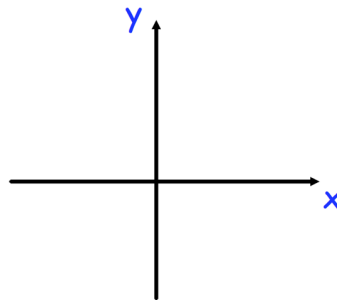
$$\mathbf{A} = \begin{pmatrix} 0 & 3 \\ 2 & 1 \end{pmatrix} \quad \mathbf{B} = \begin{pmatrix} 4 & -1 \\ -1 & 3 \end{pmatrix}$$

Work out the matrix **BA**

Sketch the curve

$$y = (x - 6)(x - 1)(x + 3)$$

Label the points where the curve crosses the axes.

Work out the equation of the normal to the curve $y = 2x^3 + x^2 - 2x - 4$ at the point $(0, -4)$

Give your answer in the form

$$y = mx + c$$