

26th June

Corbettmaths

Find where the matrix $\begin{pmatrix} 0 & 5 \\ 2 & -3 \end{pmatrix}$ maps the point $(2, -1)$

The n th term of a sequence is

$$\frac{3n^2 + 8}{4n^2 - 1}$$

find the limiting value of the sequence as $n \rightarrow \infty$

Factorise

$$8x^2 - 14xy - 15y^2$$

Use Pascal's Triangle to work out the coefficient of x^3 in the expansion of $(1 + 2x)^4$

Point A lies on the curve
 $y = x^3 - x + 2$

The x-coordinate of A is -1

Find the equation of the normal to the curve at A.