

4th June

Corbettmaths

The n th term of a sequence is

$$\frac{3n}{7n - 8}$$

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

Solve

$$x^{-\frac{2}{5}} = 1\frac{7}{9}$$

Work out the values of x between 0° and 360° for which

$$9\cos x + 4\sin x = 0$$

The transformation matrix \mathbf{M} is

$$\begin{pmatrix} 3 & a \\ -1 & 2 \end{pmatrix}$$

The image of the point $(b, -2)$ under \mathbf{M} is $(26, -10)$ Find a and b

Work out the equation of the tangent to

the curve $y = \frac{2}{x}$ at the point $(8, \frac{1}{4})$