

9th September

Corbettmaths

The n th term of a sequence is $\frac{1 - 3n}{4n + 2}$

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

A line has equation $y = 2x + 11$

The line crosses the x -axis at the point A

The line crosses the y -axis at the point B

The point C has coordinates (1, 9)

The point D is the midpoint of AB

Find the equation of the line that passes through C and D

$$y = 3x^{10} - \frac{3}{x^2}$$

Work out $\frac{dy}{dx}$

Prove $n^3 - n$ is always divisible by 6.

n is an integer greater than 1.