

20th January

Corbettmaths

The n th term of a sequence is

$$\frac{1260 - 15n}{1260 + 15n}$$

Work out the position of the term that has a value of zero

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

$$f(x) = (x + 1)(x + 3)$$

for all values of x Write down the range of $f(x)$ Find the exact values of w

$$3^{w^2} = 9 \times 27^{w+5}$$

Given $2^{89} - 1$ is prime.Show that $2^{89} + 1$ is a multiple of 3