

Sequences

The nth Term is a rule for any term in a sequence

Write the first 5 terms of the sequence $3n + 5$

For the 1st number n is 1

For the 2nd number n is 2

For the 3rd number n is 3

And so on...

$$3 \times 1 + 5 = 8$$

$$3 \times 2 + 5 = 11$$

$$3 \times 3 + 5 = 14$$

$$3 \times 4 + 5 = 17$$

$$3 \times 5 + 5 = 20$$

The first 5 terms are: 8, 11, 14, 17, 20

Find the nth term for this sequence:

3, 7, 11, 15, 19...

We can see it is going up by 4 each time

The 4 times table is $4n$

4, 8, 12, 16, 20...

Our sequence is one less than the 4 times table

The rule for our sequence is: $4n - 1$