

Linear nth term rule.

## Literacy

Unscramble the anagrams and define the words.

netatpr

eqensuce

mert

lure

ficedfener

## Research



What is Fibonacci sequence and where is it seen within nature.

When finding the nth term rule remember to find the differences between the terms. This tells you the co-efficient in front of the n.

Sequence	1	4	7	10
n =	1	2	3	4
3n =	3	6	9	12
	-2	-2	-2	-2
	1	4	7	10

Nth term  
 $3n - 2$

Memory

## Skill 1

List the first five terms of the sequences.

1)  $3n$

2)  $2n + 4$

3)  $5n - 4$

4)  $0.5n$

5)  $9 - 3n$

6)  $n^2$

## Skill 2

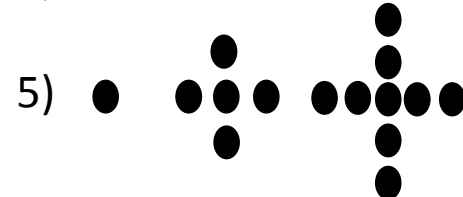
Find the nth term rule of each linear sequence

1) 3, 5, 7, 9, ...

2) 4, 11, 18, 25, ...

3) 4, 9, 14, 19, ...

4) 12, 4, -4, -12, -20



## Stretch

Find the nth term rule of these quadratic sequences

1) 2, 8, 18, 32, 50, ...

2) 3, 6, 11, 18, 27, ...

3) 0, 6, 16, 30, 48, ...

Challenge

What is the 20<sup>th</sup> term of each sequence?