

LO- Find the nth terms of a sequence

**Some Help!**

- (1) Find what the pattern is going up by each time. Is it going up by 1, 2, 3..?
- (2) Multiply n by that number so if it goes up by 3 each time, start with 3n
- (3) Start with n = 1, so 3n would be 3
- (4) Find out what you have to add or subtract to get the number in the sequences
- (5) Check it works for all the numbers in the sequence.

**Example:**

4, 7, 10, 13, 16

Put the numbers in a table

n	1	2	3	4	5
t	4	7	10	13	16

It's going **UP** by 3, so its 3n plus or minus something.

- 3(1) = 3, so to get 4 we need to add 1
- 3(2) = 6, to get to 7 we need to add 1

**Therefore**

The sequence 'nth term' is 3n+1

Try theses ones!

(1) 3, 7, 10, 13, 16
(2) 5, 7, 9, 11, 13
(3) 2, 6, 10, 14, 18
(4) 5, 8, 11, 14, 17
(5) 6, 8, 10, 12, 14
(6) -1, 2, 5, 8, 11
*(7) 12, 9, 6, 3, 0
*(8) 6, 4, 2, 0, -2
(9) 1, 3, 5, 7, 9
*(10) 15, 10, 5, 0, -5
(11) 5, 6, 7, 8, 9, 10
(12) 2, 7, 12, 17, 22
(13) 1, 2, 3, 4, 5
(14) 4, 6, 8, 10, 12
*(15) -2, 0, 2, 4, 6
(16) 3, 8, 13, 18, 23

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