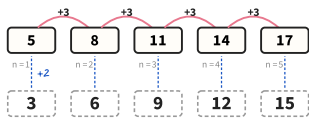


The n th Term of a Linear Sequence

ANSWERS

1

Find the n th term of the sequence 5, 8, 11, 14, 17, ...

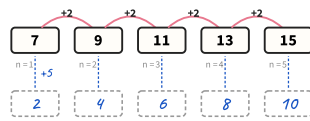


times table row underneath
goes up by 3, so $3n$; $3n + 2$ matches

Answer $3n + 2$

2

Find the n th term of the sequence 7, 9, 11, 13, 15, ...

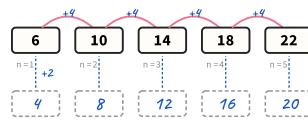


times table row underneath
goes up by 2, so $2n$; $2n + 5$ matches

Answer $2n + 5$

3

Find the n th term of the sequence 6, 10, 14, 18, 22, ...

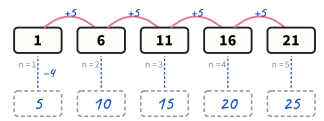


times table row underneath
goes up by 4, so $4n$; $4n + 2$ matches

Answer $4n + 2$

4

Find the n th term of the sequence 1, 6, 11, 16, 21, ...

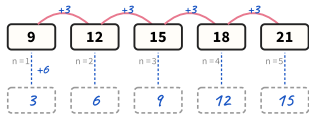


times table row underneath
goes up by 5, so $5n$; $5n - 4$ matches

Answer $5n - 4$

5

Find the n th term of the sequence 9, 12, 15, 18, 21, ...

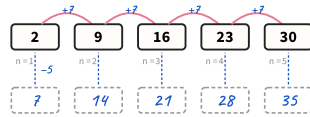


goes up by 3, so $3n$; $3n + 6$ matches

Answer $3n + 6$

6

Find the n th term of the sequence 2, 9, 16, 23, 30, ...



goes up by 7, so $7n$; $7n - 5$ matches

Answer $7n - 5$

7

The n th term of a sequence is $4n + 3$.
Is 50 in the sequence?
Show how you know.

$4n = 47$, and $47 \div 4$ is not whole

Answer No

8

The n th term of a sequence is $5n - 2$.
Which term is equal to 73?

$5n - 2 = 73$

Answer the 15th

The n th Term of a Linear Sequence *further practice*

ANSWERS

9

Find the n th term of the sequence 8, 15, 22, 29, 36, ...

goes up by 7, so $7n$; $7n + 1$ matches

Answer $7n + 1$

10

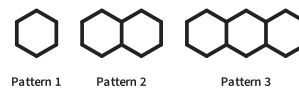
The n th term of a sequence is $6n - 1$.
Write down the first three terms and the 10th term.

First three 5, 11, 17

10th term 59

11

Here are the first three patterns made of sticks. Find the n th term for the number of sticks.



6, 11, 16: up by 5, so $5n + 1$

Answer $5n + 1$

12

Find the n th term of the sequence 30, 26, 22, 18, 14, ...

down by 4, so $34 - 4n$

Answer $34 - 4n$

13

A climbing wall charges a joining fee and then the same amount each month. The total cost after 1, 2, 3 and 4 months is £37, £49, £61 and £73. Find the n th term, and the total cost after 12 months.

n th term $12n + 25$

12 months £169

14

Which term of the sequence 9, 13, 17, 21, ... is equal to 101?

n th term is $4n + 5$

$4n + 5 = 101$, so $4n = 96$

Answer the 24th term

15

Asha has £30 in a jar. She puts in £5 at the end of every week. Ben has £6 in a jar. He puts in £8 at the end of every week. After how many weeks will they have the same amount?

Asha $5n + 30$, Ben $8n + 6$

both have £70 after 8 weeks

Answer 8 weeks

16

Leo says the n th term of the sequence 4, 9, 14, 19, ... is $n + 5$. Is Leo right? Explain.

$n + 5$ gives 6, 7, 8, ...

up by 5, so it is $5n - 1$

Answer No