



# $n^{\text{th}}$ term of Linear Sequences



REVISE THIS TOPIC

CHECK YOUR ANSWERS



1 The first four terms of an arithmetic sequence are

3      6      9      12      ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 1 is 2 marks)

2 The first four terms of an arithmetic sequence are

6      8      10      12      ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 2 is 2 marks)

3 The first four terms of an arithmetic sequence are

2      5      8      11      ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 3 is 2 marks)



4 The first four terms of an arithmetic sequence are

9      13      17      21      ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 4 is 2 marks)

5 The first four terms of an arithmetic sequence are

7      8      9      10      ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 5 is 2 marks)

6 The first four terms of an arithmetic sequence are

2      7      12      17      ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 6 is 2 marks)



7 The first four terms of an arithmetic sequence are

50    56    62    68    ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 7 is 2 marks)

8 The first four terms of an arithmetic sequence are

-3    7    17    27    ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 8 is 2 marks)

9 The first four terms of an arithmetic sequence are

4    4.5    5    5.5    ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 9 is 2 marks)



10 The first four terms of an arithmetic sequence are

9      7      5      3      ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 10 is 2 marks)

11 The first four terms of an arithmetic sequence are

15      11      7      3      ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 11 is 2 marks)

12 The first four terms of an arithmetic sequence are

9      4      -1      -6      ...

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 12 is 2 marks)



13 The first four terms of an arithmetic sequence are

$$1 \quad -8 \quad -17 \quad -26 \quad \dots$$

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 13 is 2 marks)

14 The first four terms of an arithmetic sequence are

$$100 \quad 89 \quad 78 \quad 67 \quad \dots$$

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 14 is 2 marks)

15 The first four terms of an arithmetic sequence are

$$6 \quad 5.8 \quad 5.6 \quad 5.4 \quad \dots$$

Write down an expression, in terms of  $n$ , for the  $n$ th term of the sequence.

.....  
(Total for Question 15 is 2 marks)



16 The first five terms of an arithmetic sequence are

6      11      16      21      26      ...

Work out the 20<sup>th</sup> term of the sequence.

.....  
(Total for Question 16 is 3 marks)

17 The first five terms of an arithmetic sequence are

1      7      13      19      25      ...

Work out the 50<sup>th</sup> term of the sequence.

.....  
(Total for Question 17 is 3 marks)

18 The first five terms of an arithmetic sequence are

2      6      10      14      18      ...

Work out the 100<sup>th</sup> term of the sequence.

.....  
(Total for Question 18 is 3 marks)



19 The first five terms of an arithmetic sequence are

4      7      10      13      16      ...

Is the number 91 in the sequence?  
You must show how you get your answer.

(Total for Question 19 is 3 marks)

20 The first five terms of an arithmetic sequence are

3      7      11      15      19      ...

Is the number 201 in the sequence?  
You must show how you get your answer.

(Total for Question 20 is 3 marks)



21 The first five terms of an arithmetic sequence are

7      13      19      25      31      ...

Is the number 124 in the sequence?  
You must show how you get your answer.

(Total for Question 21 is 3 marks)

22 The first five terms of an arithmetic sequence are

50      47      44      41      38      ...

Is the number  $-10$  in the sequence?  
You must show how you get your answer.

(Total for Question 22 is 3 marks)

