



EXAM PAPERS PRACTICE

GCSE OCR Math J560

Sequence Quadratic

Question Paper

*"We will help you to
achieve A Star "*



Question 1

Here are the first five terms of an arithmetic sequence.

4 9 14 19 24

(a) Find, in terms of n , an expression for the n th term of this sequence.

[2 marks]

Question 2

Here are the first 5 terms of a quadratic sequence.

1 3 7 13 21

Find an expression, in terms of n , for the n th term of this quadratic sequence.

[3 marks]

Question 3

(b) The 3rd term of this sequence is 21 and the 6th term is 96.

Find the value of a and the value of b .
You must show all your working.

[4 marks]



Question 4

The n th term of a number sequence is $n^2 + 1$

Write down the first three terms of the sequence.

[2 marks]

Question 5

Here are the first five terms of a different sequence.

2 2 0 -4 -10

An expression for the n th term of this sequence is $3n - n^2$

(b) Write down, in terms of n , an expression for the n th term of a sequence whose first five terms are

4 4 0 -8 -20

[1 mark]

Question 6

The n th term of a sequence is $an^2 + bn$.

(a) Write down an expression, in terms of a and b , for the 3rd term.

[1 mark]



Question 7

The n th term of a sequence is given by $an^2 + bn$ where a and b are integers.

The 2nd term of the sequence is -2

The 4th term of the sequence is 12

(a) Find the 6th term of the sequence.

[4 marks]

Question 8

Find the n th term of each sequence.

(a) $4, 8, 12, 16, 20, \dots$

[1 mark]

Question 9

Find the n th term of each sequence.

(a) $7, 13, 19, 25, 31, \dots$

[2 marks]



Question 10

Here are the first five terms of a sequence.

4 11 22 37 56

Find an expression, in terms of n , for the n th term of this sequence.

[3 marks]

Question 11

Here are the first five terms of a different quadratic sequence.

0 2 6 12 20

(b) Find an expression, in terms of n , for the n th term of this sequence.

[2 marks]

Question 12

(b) 11, 20, 35, 56, 83,

[2 marks]

Question 13

(b) 9, 16, 25, 36, 49, ...

[2 marks]