Name:_____

GCSE (1 - 9) Quadratic Sequences	Solutions:

These questions are compiled from released Pearson Edexcel GCSE maths exam papers

They contain exam questions from up until the ***November 2023*** exam series

More recent exam papers do exist but are withheld for mock exams

As new exam papers are released these worksheets will gradually be updated

The **most current** version of these worksheets will always be available at: kennethstafford.co.uk

Past Papers:	**Similar Worksheets:**
Solutions:	**This worksheet:**

1

Here are the first five terms of a sequence.

4 11 22 37 56

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

.....

(Total for Question 22 is 3 marks)

[Edexcel, GCSE, Summer 2017, Paper 2H, Q22]

2

The nth 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)

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 nth term of this sequence.

.....

(2)

(Total for Question 16 is 6 marks)

[Edexcel, GCSE, Summer 2018, Paper 3H, Q16]

3

Here are the first six terms of a quadratic sequence.

$$-1 \quad 5 \quad 15 \quad 29 \quad 47 \quad 69$$

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

.....

(Total for Question 16 is 3 marks)

[Edexcel, GCSE, Summer 2019, Paper 3H, Q16]

4

The nth term of a sequence is $2n^2 - 1$

The nth term of a different sequence is $40 - n^2$

Show that there is only one number that is in both of these sequences.

(Total for Question 6 is 3 marks)

[Edexcel, GCSE, Autumn 2019, Paper 2H, Q06]

5

Here are the first five terms of a sequence.

−1 0 3 8 15

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

.....

(Total for Question 20 is 2 marks)

[Edexcel, GCSE, Autumn 2019, Paper 3H, Q20]

6

Here are the first five terms of a quadratic sequence.

10 21 38 61 90

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

.....

(Total for Question 16 is 3 marks)

[Edexcel, GCSE, Autumn 2020, Paper 2H, Q16]

7

Here are the first four terms of a quadratic sequence.

3 9 17 27

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

.....

(Total for Question 15 is 3 marks)

[Edexcel, GCSE, Summer 2023, Paper 2H, Q15]

8

Here are the first six terms of a quadratic sequence.

5 11 21 35 53 75

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

.....

(Total for Question 14 is 2 marks)

[Edexcel, GCSE, November 2023, Paper 3H, Q14]