

1. The first four terms of a quadratic sequence are shown below
Work out the next term.

7 11 17 25

.....
(2)

2. The first four terms of a quadratic sequence are shown below
Work out the next term.

6 12 22 36

.....
(2)

3. The n^{th} term of a quadratic sequence is $n^2 - 2n + 8$
Work out the first three terms of this sequence

.....
(2)

4. A quadratic sequence has an n^{th} term of $2n^2 + 3n - 1$
Work out the value of the 6th term of the sequence

.....
(2)

5. A sequence has an n^{th} term of $n^2 - 6n + 7$

Work out which term in the sequence has a value of 23.

.....
(2)

6. Here are the first 5 terms of a quadratic sequence

4 11 20 31 44

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

.....
(3)

7. Here are the first 5 terms of a quadratic sequence

4 10 18 28 40

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

.....
(3)

8. Here are the first 5 terms of a quadratic sequence

9 17 29 45 65

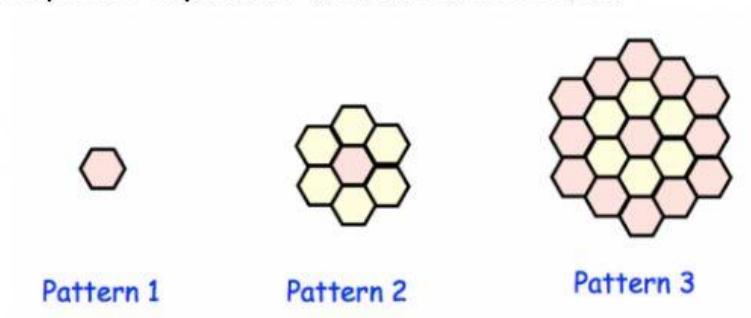
Find an expression, in terms of n , for the n th term of this quadratic sequence.

.....
(3)

9. Here is a tile.



Here is a sequence of patterns made from these tiles.



How many of these tiles are needed to make Pattern number 10?

.....
(5)

10. The n th term of a sequence is $n^2 + 3n$
Two consecutive terms in the sequence have a difference of 38

Work out the two terms.

..... and
(4)

11. Prove that every term in the sequence $n^2 - 4n + 21$ is positive

(4)