1 Write down the next two terms in the following quadratic sequence.

9, 13, 19, 27...

(2)

2 Write down the next two terms in the following quadratic sequence.

−5, 0, 9, 22...

(2)

3 The nth term of a sequence is

$2n^2 + 4n - 1$

Work out the 10th term of the sequence

(2)

4 The nth term of a sequence is

$n^2 + 2n$

Work out the first 5 terms in the sequence

(2)

5 Work out the formula for the nth term of the quadratic sequence:

5, 11, 19, 29...

(4)

6 Work out the formula for the nth term of the quadratic sequence:

2, 10, 22, 38...

(4)

7 Work out the formula for the nth term of the quadratic sequence:

15, 19, 25, 33...

(4)

8 Work out the formula for the nth term of the quadratic sequence:

2, 10, 24, 44...

(4)

9 Work out the formula for the nth term of the quadratic sequence:

19, 15, 9, 1...

(4)

10 Work out the formula for the nth term of the quadratic sequence:

−2, −1, 1, 4...

(4)

11 A quadratic sequence starts:

6, 10, 16, 24...

a) Show that the nth term is $n^2 + n + 4$

(4)

b) Hence find the term that has value 136

(2)

12 A quadratic sequence starts:

−8, 2, 16, 34...

a) Show that the nth term is $2n^2 + 4n - 14$

(4)

b) Hence find the term that has value 272

(2)