1　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.

$$0 \qquad 2 \qquad 6 \qquad 12 \qquad 20$$

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

....

(2)

(Total for Question   is 6 marks)

2   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   is 3 marks)

3   Here are the first five terms of a sequence.

$$-1 \qquad 0 \qquad 3 \qquad 8 \qquad 15$$

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

....

(Total for Question   is 2 marks)

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

$$10 \quad 21 \quad 38 \quad 61 \quad 90$$

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

....

(Total for Question   is 3 marks)