Question Number	Scheme	Marks
1.(a)	(i) $a_2 = 1$	B1
	(ii) $a_{107} = 3$	B1 **(2)**
(b)	$\sum_{n=1}^{200}\left(2a_n - 1\right) = 5+1+5+1+.....5+1 = 100\times\left(5+1\right)$	M1
	= 600	A1 **(2)**
		(4 marks)

Notes

(a) (i)

B1 $a_2 = 1$ Accept the sight of 1. Ignore incorrect working

(a)(ii)

B1 $a_{107} = 3$ Accept sight of just 3. Ignore incorrect working

If there are lots of 1's and 3's without reference to any suffices they need to choose 3.

(b)

M1 Establishes an attempt to find the sum of a series with two distinct terms.

Look for $100\times a + 100\times b$ or $200\times a + 200\times b$ where *a* and *b* are allowable terms.

Examples of allowable terms are

$a,b = 1,5$ (which are correct)

$a,b = 1,3$ (which are the values for (a))

$a,b = 3,7$ (which is using $2a_n + 1$)

$a,b = 0,5$ (which is a slip on the first value)

Methods using AP (and GP) formulae are common and score 0 marks.

A1 600.

600 should be awarded both marks as long as no incorrect working is seen