Question Number	Scheme	Marks
1 (a)	$254 = 2 + 3(n-1) \Rightarrow n = ...$	M1
	85	A1
		(2)
(b)	$\frac{"85"}{2}(2\times 2 + ("85"-1)\times 3)$	M1
	10 880	A1
		(2)
		4 marks

(a)

M1: Attempts to find the number of terms.

Look for $254 = 2 + 3(n-1) \Rightarrow n = ...$, $3n - 1 = 254 \Rightarrow n = ...$ or $\left(\frac{254-2}{3}\right)+1$ o.e. condoning slips such as writing 254 as 245. The values of *a* and *d* must be correct.

Sight of either $\frac{254-2}{3}, \frac{252}{3}$ or 84 without any incorrect working can score this mark.

Note that $\frac{254}{3} = 84$ or similar calculations that give non-integer solutions (with no further working e.g. trial and error attempts) score M0 even if rounded

A1: 85.

An answer of 85 **with no incorrect working** or without any working scores both marks

…….

Alt (a) Trial and error attempts

You may see candidates using $2 + (n-1)\times 3$ with various values for *n*

M1: Attempts $2 + (n-1)\times 3$ with $n = 85$

A1: Achieves $2 + 84 \times 3 = 254$ **and** concludes 85 (terms)

……..

(b)

M1: Attempts the sum formula $\frac{n}{2}(2a + (n-1)d)$ or $\frac{n}{2}(a + l)$ following through on their value for *n*.

Look for $\frac{"85"}{2}(2\times 2 + ("85"-1)\times 3)$, $\frac{"85"}{2}(2\times 254 + ("85"-1)\times -3)$ or $\frac{"85"}{2}(2 + 254)$

The values of *a*, *d* and *l* if used must be correct (condoning a slip such as 245 for 254) but follow through on their value of *n* from part (a)

A1: 10 880.

This may be awarded even following an 85 in (a) that was found using an incorrect method

10 880 without working or following listing scores both marks.

Listing leading to an incorrect answer scores M0 A0