

Question Number	Answer	Notes	Marks
1	$\sum_{r=4}^{40} (7r-2) = \frac{37}{2}(26+278)$ $= 5624$	B1 M1A1 A1	(4)

Notes

Method 1

B1 for $n = 37$

M1 attempts to use their a and d in either $S_n = \frac{n}{2}(2a + (n-1)d)$,

or a and l in $S_n = \frac{n}{2}(a+l)$ with their n , where $n = 36$ or 37 only

A1 for a fully correct expression for S_n

A1 for 5624 cso.

Method 2

B1 correct limits of r in $\sum_{r=1}^{40} (7r-2) - \sum_{r=1}^3 (7r-2)$

M1 attempts to use their a and d in either $S_n = \frac{n}{2}(2a + (n-1)d)$,

or a and l in $S_n = \frac{n}{2}(a+l)$ where the upper limit for n is $n = 40$ and 4 or 3 respectively

only, **AND** subtracts the two summations.

A1 for a fully correct expression for S_n

A1 for 5624 cso.

$S = 5624$ seen with no working or a list achieves full marks