25	$(S_{5k}=)\ \frac{5k}{2}[2(3)+(5k-1)(8)]\quad\left(=\frac{5k}{2}(40k-2)=100k^2-5k\right)$ oe **or** $(S_{3k}=)\ \frac{3k}{2}[2(3)+(3k-1)(8)]\quad\left(=\frac{3k}{2}(24k-2)=36k^2-3k\right)$ oe		5	M1	finds an expression for S_{5k} or S_{3k} by using the correct S_n formula with $a = 3$ and $d = 8$ the substitution into S_n may be seen in stages; condone slips in simplification between stages provided the expression remains quadratic in n condone use of a different letter for k including n incorrect brackets must be recovered
	eg $\frac{5k}{2}[2(3)+(5k-1)(8)]-\frac{3k}{2}[2(3)+(3k-1)(8)]=25\,560$ oe **or** $100k^2-5k-(36k^2-3k)=25\,560$ **or** $5k(40k-2)-3k(24k-2)=51120$ oe			M1	for forming an equation using their S_{5k} and S_{3k} both of which must be quadratic in k and come from an attempt to use the correct S_n formula with $a = 3$ and $d = 8$ condone use of a different letter for k including n condone invisible brackets for the subtraction eg $100k^2-5k-36k^2-3k=25\,560$
	eg $128k^2 - 4k - 51\,120\ (=0)$ oe **or** $64k^2 - 2k - 25\,560\ (=0)$ oe **or** $32k^2 - k - 12\,780\ (=0)$ oe			A1	dep on M2 for reaching a **correct** 3-term quadratic; allow if terms not all on one side
	$(u_{4k}=)\ 3+(4\times[\text{their } k]-1)\times 8$ oe **or** $(u_{4k}=)\ 8(4\times[\text{their } k])-5$ oe			M1	dep on M2 for a correct method to find u_{4k} using [their k] > 0 [their k] is what they believe to be a solution to their 3-term quadratic and must be positive allow this mark if a second value of k is used to find u_{4k} (even if this second k is negative) (note the correct value of k is 20)
	Working required	635		A1	dep on M2A1
					Total 5 marks