26*	$(d=)\ 3$		6	M1 May be embedded in S_n or S_{2n} or an expression in the form $3n \pm$ ….. oe or an expression in the form $a + (n-1)3$ oe	
	$(S_{2n}=)\dfrac{2n}{2}\left[2(k+2)+(2n-1)3\right]\left(=n(2k+6n+1)\right)$ oe **or** $(S_{2n}=)\dfrac{2n}{2}\left[2a+(2n-1)3\right]\left(=n(2a+6n-3)\right)$ oe			M1	M2 for $d = 2a$ oe or $d = 2(k+2)$ oe
	$\dfrac{2n}{2}\left[2(k+2)+(2n-1)3\right]=4\times\dfrac{n}{2}\left[2(k+2)+(n-1)3\right]$ oe or $n(2k+6n+1)=4\times\dfrac{n}{2}(2k+3n+1)$ oe or $n(2k+6n+1)=n(4k+6n+2)$ oe **or** $\dfrac{2n}{2}\left[2a+(2n-1)3\right]=4\times\dfrac{n}{2}\left[2a+(n-1)3\right]$ oe or $n(2a+6n-3)=4\times\dfrac{n}{2}(2a+3n-3)$ oe or $n(2a+6n-3)=n(4a+6n-6)$ oe			M1 dep on M2 for using $S_{2n}=4\times S_n$ oe S_{2n} and S_n must be correct initially	
	$k=-0.5$ or $a=1.5$			A1 dep on M3 oe	
	$-0.5+2+(100-1)3$ oe **or** $1.5+(100-1)3$ oe			M1 for substituting the **correct** value of $d=3$ **and** $k=-0.5$ or $a=1.5$	
	Working required	298.5		A1 dep on M3 oe eg $\dfrac{597}{2}$	
					Total 6 marks

26 ALT	eg $n = 1$ $(S_2 =) k + 2 + k + 5 (= 2k + 7)$ oe **or** $(S_2 =) a + a + 3 (= 2a + 3)$ oe	eg $n = 2$ $(S_4 =) k + 2 + k + 5 + k + 8 + k + 11 (= 4k + 26)$ oe **or** $(S_4 =) a + a + 3 + a + 6 + a + 9 (= 4a + 18)$ oe		6	M1
	$(4 \times S_1 =) 4 \times (k + 2)$ oe **or** $(4 \times S_1 =) 4 \times a$ oe	$(4 \times S_2 =) 4 \times (k + 2 + k + 5) (= 8k + 28)$ oe **or** $(4 \times S_2 =) 4 \times (a + a + 3) (= 8a + 12)$ oe			M1
	$2k + 7 = 4 \times (k + 2)$ oe **or** $2a + 3 = 4 \times a$ oe	$4k + 26 = 8k + 28$ oe **or** $4a + 18 = 8a + 12$ oe			M1 dep on M2 for using $S_2 = 4 \times S_1$ oe or $S_4 = 4 \times S_2$ oe NB S_2 and S_1 or S_4 and S_2 must be correct initially
	$k = -0.5$ or $a = 1.5$				A1 dep on M3 oe
	$-0.5 + 2 + (100 - 1)3$ oe **or** $1.5 + (100 - 1)3$ oe				M1 for substituting the **correct** value of $d = 3$ **and** $k = -0.5$ or $a = 1.5$
	Working required		298.5		A1 dep on M3 oe eg $\frac{597}{2}$
					Total 6 marks