23		$a + d = 8.5$, $a + 4d = 13$ oe		5	M1	for at least 1 correct equation **or** for $d = 1.5$
		$a = 7$, $d = 1.5$			A1	both values correct
		$\frac{N}{2}(2\times 7+(N-1)1.5)=292$ (eg $3N^2 + 25N - 1168$ [= 0] **or** $1.5N^2 + 12.5N - 584$ [= 0])			M1	A correct equation for the total of the first N terms of the series with a and d substituted in. The mark can be gained by using **their** values of a and d even if no previous marks awarded.
		eg $(3N + 73)(N - 16)$ [=0] [N =] $\frac{-25\pm\sqrt{25^2-4\times 3\times -1168}}{2\times 3}$			M1	A correct method dep on the previous M1 for solving **their** 3 term quadratic equation using any correct method (allow one sign error and some simplification – allow as far as $\frac{-25\pm\sqrt{625+14016}}{6}$) oe (may be ± or just +) or if factorising, allow brackets which expanded give 2 out of 3 terms correct, or if completing the square allow as far as the stage $3((N+\frac{25}{6})^2-\frac{25^2}{6^2})-1168$ (= 0)
		Working required	16		A1	dep on M2
						Total 5 marks