23	$(7p-3)-(8p)=(4p+2)-(7p-3)$ oe or $-p-3=-3p+5$ oe or (p =) 4		5	M1 for using $U_2-U_1=U_3-U_2$ or $U_1-U_2=U_2-U_3$ Condone missing brackets around $7p-3$
	a = 32 **or** d = –7 **or** 32 25 18			A1 dep on M1 (32 and –7 may be embedded in the S_n formula or embedded in U_n formula)
	$\frac{n}{2}\left[2(32)+(n-1)(-7)\right]=-1914$			M1 The values of a and d must be correct Condone missing brackets around $n-1$
	$7n^2-71n-3828(=0)$ oe			A1 (can be implied by n = 29 and/or $n=-\frac{132}{7}$)
	Working required	29		A1 dep on M2
				Total 5 marks

23 **ALT**	$7p - 3 = 8p + d$ $4p + 2 = 8p + 2d$ $4p + 2 = 7p - 3 + d$	$-3 = p + d$ $2 = 4p + 2d$ $5 = 3p + d$		5	M1 for using $U_n = a + (n-1)d$ to set up 2 equations for U_2 **and** U_3
	$a = 32$ **or** $d = -7$ **or** 32 25 18				A1 dep on M1 (32 and –7 may be embedded in the S_n formula or embedded in U_n formula)
	$\frac{n}{2}\left[2(32) + (n-1)(-7)\right] = -1914$				M1 The values of a and d must be correct Condone missing brackets around $n - 1$
	$7n^2 - 71n - 3828 (= 0)$ oe				A1 (can be implied by $n = 29$ and/or $n = -\frac{132}{7}$)
	Working required		29		A1 dep on M2
					Total 5 marks