

Question	Answer	Marks	Guidance
(a)	$\frac{n}{2}[8+(n-1)d] = 5863$ leading to $n[8+(n-1)d] = 11726$ leading to $(n-1)d = \frac{11726}{n} - 8$	B1	Must show a useful intermediate step. WWW AG.
		1	
(b)	$4+(n-1)d = 139$ leading to $\frac{11726}{n} - 8 = 135$	*M1	OE Use of correct u_n formula with expression from (a) or S_n formula to eliminate d .
	$n = \frac{11726}{143} = 82$	A1	
	$81d = \frac{11726}{82} - 8$	DM1	Substitute <i>their</i> n into a correct u_n or S_n formula
	$d = \frac{5}{3}$	A1	Accept $\frac{138}{81}$ OE fraction only If M0 DM0 scored them SC B1 B1 for correct n and d values only.
		4	

