Question		Answer	Marks	AO	Guidance
7	(a)	$u_2 = 3, u_3 = 8, u_4 = 13$	B1 [1]	1.1	**B0** if wrongly attributed
7	(b)	divergent because difference between consecutive **terms** is not decreasing	E1 [1]	2.4	allow divergent because ratio of consecutive **terms** is tending to 1 not 0; divergent because the **terms** (in the sequence) are not tending to a finite limit **oe** divergent because **terms** tend to infinity **oe** do **not** allow divergent because not convergent **oe** divergent because **terms** (in the sequence) increase infinitely **oe** divergent because **terms** get bigger **oe**
7	(c)	$u_{30} = -2 + (30 - 1) \times 5$ used **oe**	M1	2.1	**eg** may see $3 + (29 - 1) \times 5$; a must be u_0, u_1, u_2, u_3 or u_4 in the AP and d must be 5; allow correct full list of terms from 3 to 138 for **M1** must see at least eg $-2 + 29 \times 5$
		143	A1 [2]	1.1	if **M0** allow **SCB1** for 143 not fully supported
7	(d)	$S_{30} = \frac{30}{2}(-2 + \textit{their}\ 143)$ **oe** **or** $S_{30} = \frac{30}{2}(2 \times (-2) + (30 - 1) \times 5)$ **oe**	M1	2.1	a must be -2 and d must be 5; allow sum of full list of terms from -2 to 143 for **M1;** allow if correct full list seen in part **(c)** only must see at least $15 \times (-2 +$ their 143) or $15 \times (-4 + 29 \times 5)$ for **M1**
		2115	A1 [2]	1.1	if **M0** allow **SCB1** for 2115 not fully supported