

Q	Marking instructions	AO	Marks	Typical solution
10(a)	Substitutes $n = 300, a = -7$ and $l = 32$ Into $S_n = \frac{n}{2}(a + l)$ Or Substitutes $n = 300, a = -7$ and $d = \frac{39}{299} = \frac{3}{23}$ into $S_n = \frac{n}{2}(2a + (n - 1)d)$ Condone $n = 299$ or 301 and $d = \text{AWRT } 0.13$	3.1a	M1	$S_{300} = \frac{300}{2}(-7 + 32)$ $= 3750$
	Obtains 3750	1.1b	A1	
	Subtotal		2	

Q	Marking instructions	AO	Marks	Typical solution
10(b)	Forms an equation using $S_9 = 1260$ Might see $\frac{9}{2}(2a + 8d) = 1260 \Rightarrow a + 4d = 140$	3.4	M1	$\frac{9}{2}(a + l) = 1260 \Rightarrow a + l = 280$ $l = 6a$ $7a = 280$ $a = 40, l = 240$ Value of top prize = £240
	Forms an equation using the relationship between the highest and least values. eg $a + 8d = 6a$ or $l = 6a$ OE Might see $l = \frac{1}{6}a$ which may indicate the candidate is correctly working from the highest term to the lowest term.			
	Obtains and solves an equation in one variable having formed one equation using $S_9 = 1260$ OR used the relationship between the highest and least values.	3.1a	M1	
	Obtains £240 Must have correct units. CAO	3.2a	A1	
	Subtotal		4	

	Question 10 Total		6	
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