Question		Answer	Marks	AO	Guidance
10		First term less than 4.5 so 1, 2, 3 or 4 OR Substitutes in a value of a OR r into $\frac{a}{1-r} = 4.5$ oe where a integer, $a \leq 4$ OR $0 < r < 1$	**B1**	**3.1a**	**Note B marks may appear any order** • Evidence of considering all possible values for first term e.g. "$0 < a < 4.5$ **and** a integer" OR • Evidence of knowing **and** using that a is positive integer and less than or equal to 4 OR knowing **and** using that r is positive **and** less than 1 • If substitution **not explicitly** shown, may be implied by finding one of the following values for a or for r: $a = 1 \rightarrow r = \frac{7}{9}$ or $a = 2 \rightarrow r = \frac{5}{9}$ or $a = 4 \rightarrow r = \frac{1}{9}$ OR e.g. $r = \frac{2}{3} \rightarrow a = 1.5$ or $r = \frac{1}{2} \rightarrow a = 2.25$ • **Note:** If using $a = 3$ OR $r = \frac{1}{3}$ substitution must be explicitly shown for this B1
		Second term integer so first term is 2 or 3 OR Second term must be 1	**B1**	**2.2a**	• Making one of these conclusions about first or second term. • Implied by testing values of 2 **and** 3 for a • OR $ar = 1$
		$r = \frac{1}{3}$ only	**B1**	**1.1**	• Correct value of r not from wrong working • Must be clear this is their final answer
		$a = 3$ only	**B1**	**1.1**	• Correct value of a not from wrong working. • Must be clear this is their final answer
			[4]		