Geometric Sequences

1	The first term of a geometric progression is 24 and the second term is 18. Find the sum to infinity.						
	*			,			[3]
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					4 5		
			•.0	•		a .	
	d	8	2		18		
7	The first term of a geometric	progression is	6 and the s	um to infin	itala 10 Ei	. 1 /1	
Carre	The first term of a geometric	progression is	o and the s	um to mun	11y 18 10. F1	nd the comm	ion ratio.
			•	÷			[5]
						2	
			24				
	¥						
		n 9	2				
3	A geometric progression u_1 , u_2	u_2, u_3, \dots is def	fined by	Si		150	18
i				6		20	;
		$u_1 = 5$,	$u_{n+1}=0$	u_n .		1. E	,
	(i) Find u_4 .			160			503
	(i) $1 \operatorname{md} u_4$.				v - F		[2]
	(ii) Find the sum to infinity of	of the terms of t	he geometr	ic progress	ion.		[2]
	/ :			6) (4		y 8	
	9			8			
	2		97		girma tot		
4	A geometric progression has	first term 30 a	nd commor	ratio 0.8	Find	×	ë
	(i) the 20th term, giving yo	5 12 136					· roı
				, •		20 4	[2]
	(ii) the sum of the first 20 to	erms, giving yo	ur answer	correct to 3	significant	figures,	[2]
	(iii) the sum to infinity.						[2]