4	The <i>n</i> th term of a geometric series is t_n and the common ratio is r , where $r > 0$	common ratio is r , where $r > 0$	
	Given that $t_1 = 1$		
	(a) write down an expression in terms of r and n for t_n	(1)	
	Given also that $t_n + t_{n+1} = t_{n+2}$		
	(b) show that $r = \frac{1+\sqrt{5}}{2}$	(4)	
	(c) find the exact value of t_4 giving your answer in the form $f + g\sqrt{h}$, where f , g and h are integers.		
		(3)	

Question 4 continued	
	(Total for Question 4 is 8 marks)

