7	An arithmetic series has first term a and common difference d . The n th term of the series is t_n and the sum of the first n terms of the series is S_n	es.
	(a) Write down an expression in terms of a and d for	
	(i) t ₅₈	
	(ii) S_{13}	(2)
	Given that $t_{58} = S_{13}$	
	(b) show that $d = -\frac{4}{7}a$	(2)
	(a) show that $t = 0$	
	(c) show that $t_{176} = S_{21}$	(4)
	(d) find the value of r when $t_r = 5t_9$	(3)

Question 7 continued	



Question 7 continued				

Question 7 continued		
	(Total for Question 7 is 11 marks)	

