6 The sum of the first 21 terms of an arithmetic series is 987 and the 8th term of the series is 35

The first term of the series is a and the common difference is d.

- (a) Find the value of
 - (i) *a*,
 - (ii) *d*.

(5)

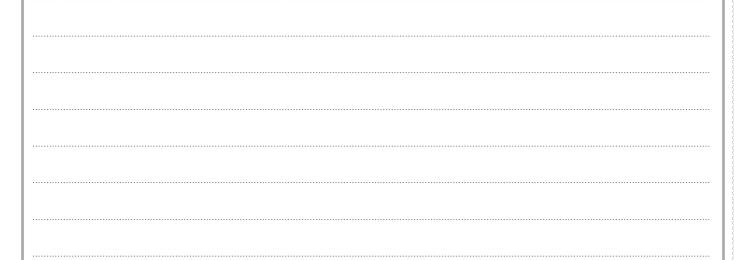
The sum, S_n , of the first *n* terms of the series is given by $S_n = \sum_{r=1}^{n} (Ar + B)$, where *A* and *B* are integers.

- (b) Find the value of
 - (i) *A*,
 - (ii) B.

(3)

(c) Find the least value of n such that $S_n > 2000$

(5)





Question 6 continued	

Question 6 continued
(Total for Question 6 is 13 marks)

