

8 The n th term of an arithmetic series is t_n where $t_n = 2n - 3$

The sum of the first n terms of the series is S_n

(a) Show that $S_n = n(n - 2)$

(4)

(b) Find the value of n such that $5t_{n+2} = 3S_{n-3}$

(5)

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Question 8 continued

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Question 8 continued**(Total for Question 8 is 9 marks)**

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