9 The sum S_n of the first n terms of an arithmetic series is given by $S_n = n(2n + 3)$. The first term of the series is a.

(a) Show that $a = 5$

(2)

(b) Find the common difference of the series.

(3)

(c) Find the 12th term of the series.

(2)

Given that $1 + S_{p+4} = 2S_p$

(d) find the value of p.

(4)

Question 9 continued

Question 9 continued

Question 9 continued

(Total for Question 9 is 11 marks)