PMT

5 The nth term of a geometric series with common ratio r is u_n

Given that $u_2 + u_4 = 212.5$ and that $u_3 + u_4 = 62.5$

(a) find the two possible values of r.

(5)

Given that the series is convergent with sum to infinity S,

(b) find the exact value of S.

(2)

P 6 6 0 2 5 A 0 1 4 3 6

Question 5 continued

(Total for Question 5 is 7 marks)

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