6 The nth term of a geometric series G is U_n

The first three terms of G are given by

$$U_1 = q(4p + 1) \qquad U_2 = q(2p + 3) \qquad U_3 = q(2p - 3)$$

(a) Find the possible values of p

(5)

Given that G is convergent with sum to infinity 250

(b) find the value of q

(3)

Question 6 continued

(Total for Question 6 is 8 marks)

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