

- 5 (a) Expand $(1 + ax)^n$ in ascending powers of x up to and including the term in x^3

Express each coefficient of x in terms of a and n where a and n are constants and $n > 2$

(2)

The coefficient of x is 15 and the coefficient of x^2 is equal to the coefficient of x^3

- (b) Find the value of a and the value of n .

(6)

- (c) Find the coefficient of x^3

(2)

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Question 5 continued

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(Total for Question 5 is 10 marks)

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