

- 6** **(i)** Find the first 3 terms in the expansion of $(1 + ax)^5$ in ascending powers of x . [2]
- (ii)** Given that there is no term in x in the expansion of $(1 - 2x)(1 + ax)^5$, find the value of the constant a . [2]
- (iii)** For this value of a , find the coefficient of x^2 in the expansion of $(1 - 2x)(1 + ax)^5$. [3]