

Section 1: Using binomial expansions

Section test

1. The value of ${}_{12}C_3$ is
2. The value of ${}_{15}C_{11}$ is
3. In the expansion of $(a-b)^5$, find the term in a^2 and the term in b^4 .
4. In the expansion of $(x+3)^8$, find the coefficient of x^3 , the coefficient of x^4 and the coefficient of x^6 .
5. In the expansion of $(2x-1)^{30}$, find the coefficient of x^2 and the coefficient of x^3 .
6. Using the first three terms of the expansion of $(1-2x)^{12}$ and the substitution $x=0.01$, find an approximate value for 0.98^{12} . Give your answer to four decimal places.