**8D Finding Coefficients in Expressions**

1. Find the coefficient of in
2. Find the coefficient of in
3. If , where is a constant, and the coefficient of is 15, find the value of .
4. Write down the first three terms, in ascending powers of , of the binomial expansion of , where is a non-zero constant.
5. Given that, in the expansion of , the coefficient of is and the coefficient of is , find the values of and