

Exercises

Here are some exercises. In each, use the Binomial Formula:

1. Expand $(a + b)^5$
2. Expand $(1 + i)^4$ where $i^2 = -1$.
3. Expand $(1 - i)^6$ where $i^2 = -1$.
4. What is the coefficient of x^3 in $(1 + x)^{150}$?
5. What is the coefficient of x^3 in $(2x + 1)^{150}$?
6. What is the coefficient of x^3 in $(x + 2)^{150}$?