



$$(A+B)^0 = 1$$

$$(A+B)^1 = A+B$$

$$(A+B)^2 = A^2 + 2ab + b^2$$

$$(a+b)^3 = A^3 + 3a^2b + 3ab^2 + b^3$$

$$(a+b)^4 = A^4 + 4a^3b + 6a^2b^2 + 4ab^3 + b^4$$

$$(a+b)^5 = A^5 + 5a^4b + 10a^3b^2 + 10a^2b^3 + 5ab^4 + b^5$$

$$(a+b)^6 = A^6 + 6a^5b + 15a^4b^2 + 20a^3b^3 + 15a^2b^4 + 6ab^5 + B^6$$