

Term	Expansion
$(a + b)^0 =$	1
$(a + b)^1 =$	$1a + 1b$
$(a + b)^2 =$	$1a^2 + 2ab + 1b^2$
$(a + b)^3 =$	$1a^3 + 3a^2b + 3ab^2 + 1b^3$
$(a + b)^4 =$	$1a^4 + 4a^3b + 6a^2b^2 + 4ab^3 + 1b^4$
$(a + b)^5 =$	$1a^5 + 5a^4b + 10a^3b^2 + 10a^2b^3 + 5ab^4 + 1b^5$

Pascal's Triangle

the power of (a), when looking at each term at any expansions and moving from left to right , follows the pattern:

$n, n-1, n-2, \dots, 2, 1, 0$

the power of (b), when looking at each term at any expansions and moving from left to right , follows the pattern:

$0, 1, 2, \dots, n-2, n-1, n$

The value of the coefficients of each of the terms in any of the expansions are symmetrical about the middle coefficient when (n) is even and symmetrical about the middle 2 coefficients when (n) is odd.

Term	Value of coefficients in the expansion					
$(a + b)^0 =$	1					
$(a + b)^1 =$	1 1					
$(a + b)^2 =$	1 2 1					
$(a + b)^3 =$	1 3 3 1					
$(a + b)^4 =$	1 4 6 4 1					
$(a + b)^5 =$	1 5 10 10 5 1					