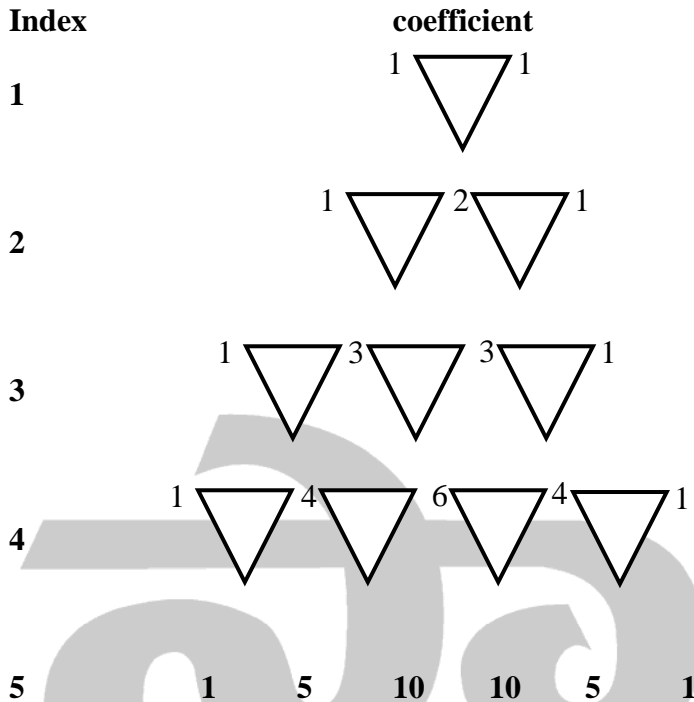


BINOMIAL THEOREM --1

Binomial :- An expression which contains two terms is called a binomial

Pascal Triangle:-



In each row 1st and last elements '1' remaining terms are obtained by adding the 2 terms

Theorem :-

If n is a positive integer x, a are real number then

$$(x + a)^n = nc_0x^n + nc_1x^{n-1}a + nc_2x^{n-2}a^2 + nc_3x^{n-3}a^3 + \dots + nc_n a^n$$

Note 1: This theorem is called binomial theorem for positive integer index.

Note 2: This expansion contains (n + 1) terms

Note 3: In the expansion the sum of powers of x and 'a' in each term is equal to n.

Note 4: In this expansion the power term x is decreased by 1 and the power of a is increased by 1 except in the first term

