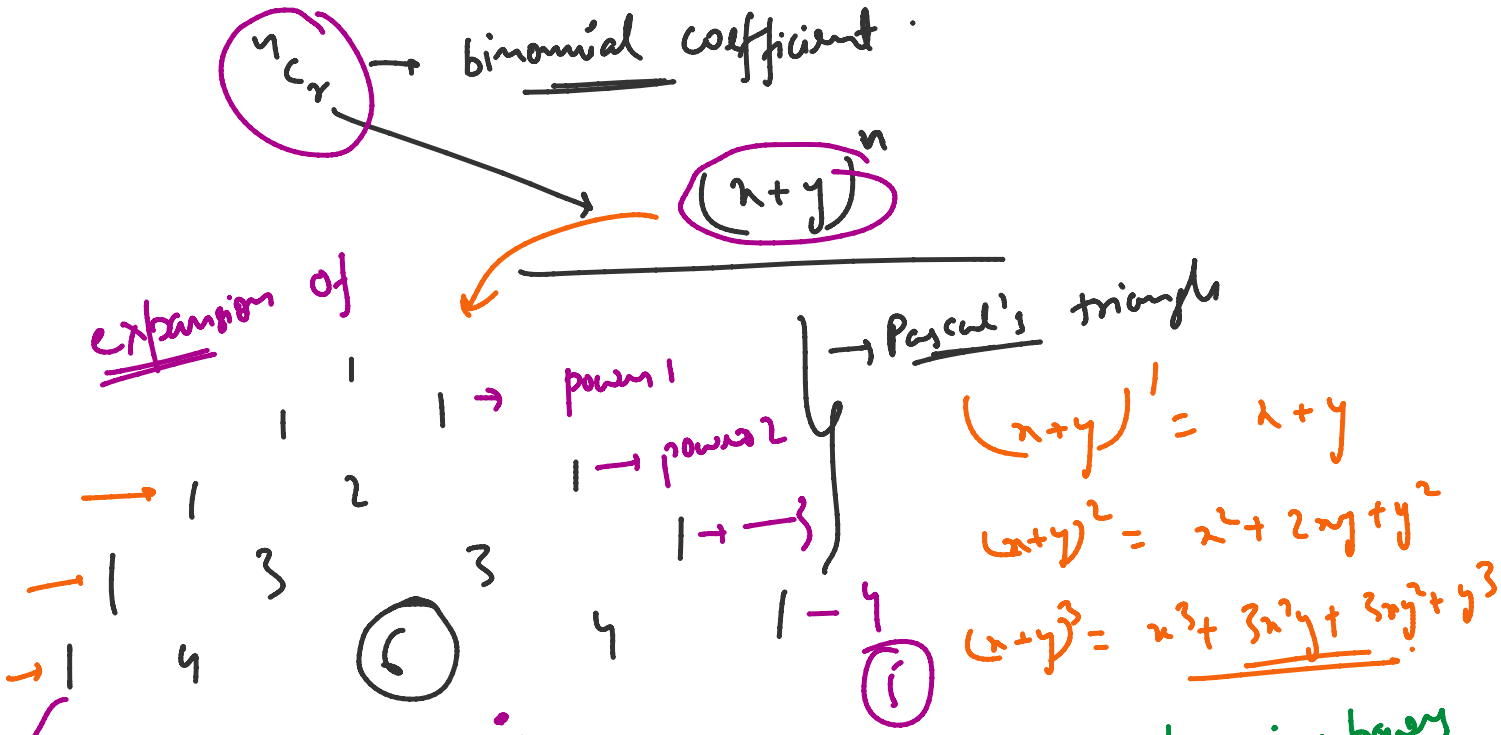
Factorial of a number

20 June 2023 22:06

$5! = 5 \times 4 \times 3 \times 2 \times 1$

$4! = 4 \times 3 \times 2 \times 1$



Pascal's triangle represent the coefficients of terms powers of x & terms powers of y.

$(x+y)^4$

dec power of x → ← inc power of x

$x^4 + 4x^3y + 6x^2y^2 + 4xy^3 + y^4$

inc power of y → ← dec power of y

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power C term

$^nC_r = \frac{n!}{r!(n-r)!}$

$^4C_2 = \frac{4!}{2!(4-2)!} = \frac{4 \times 3 \times 2 \times 1}{2 \times 1 \times 2 \times 1} = \frac{6}{1}$

$\frac{1}{2}$

$$\left|\frac{i(z-w)\,iz}{iw}\right| = 1 > w$$