Binomialkoefficienter i utveckling av potenser av binomet $x + y$

$$(x+y)^n = \sum_{k=0}^{n} \binom{n}{k} x^k y^{n-k}$$

$$\binom{n}{k} = \frac{n!}{k!\,(n-k)!}$$

$$(x+y)^4 = \binom{4}{0} x^0 y^{4-0} + \binom{4}{1} x^1 y^{4-1} + \binom{4}{2} x^2 y^{4-2} + \binom{4}{3} x^3 y^{4-3} + \binom{4}{4} x^4 y^{4-4}$$

$$(x+y)^4 = y^4 + 4xy^4 + 6x^2y^2 + 4x^3y + x^4$$

Khayyam-Pascal Triangel