Fermats

$x^c + y^c = z^c$

$^{=}(x + y)^{c\,-}$ 1 2 c cCc1

Where the coefficients are the 1/x root of each of the c numbers…

Beals…

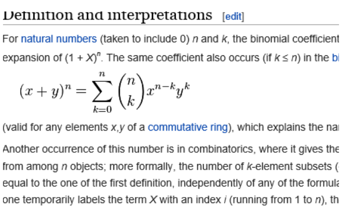
$x^c + y^v = z^{c1}$

$^{=}(x + y)^c\,(1 - y)^{(v + -\ c\ ) -}y^c\ x^c y^{(c\text{-}v)v\ -\ -}$ 1 2 c cCc1

Again… the coefficients of the cth root are only addable to the number c so they cannot multiply to make the number of the c

Where “1 2 c cCc1

“ means one less that the right hand formula of the binomial coefficient formula below.. (c-1 k)



Definition and interpretations [edit]

For natural numbers (taken to include 0) n and k, the binomial coefficient

expansion of $(1 + X)^n$. The same coefficient also occurs (if $k \le n$) in the bi

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

(valid for any elements x,y of a commutative ring), which explains the na

Another occurrence of this number is in combinatorics, where it gives the

from among n objects; more formally, the number of k-element subsets (

equal to the one of the first definition, independently of any of the formula

one temporarily labels the term X with an index i (running from 1 to n), th