

sci.math: Re: what is coefficients of expanding $(1+x+x^2+\dots+x^k)^n$?

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From: Phil Carmody (*thefatphil_demunged_at_yahoo.co.uk*)

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zhora@univ.kiev-dot-ua.no-spam.invalid (zhora) writes:

> > *L.P.wrote:*

> *The formulae is well known for $k=2,3,4,5..$ —binomial, trinomial,*

> *quadromial, hexanomial numbers..What is general formulae for*

> *arbitrary k ???*

> *If you mean x^k "x to the power k", then the coefficient before x^j in*

> *your expansion is equal to the number of non-negative integer*

> *solutions to the equation $j_1+\dots+j_k=j$, the last number equals to*

> *the binomial coefficient $\binom{k+j-1}{k-1}$.*

That doesn't depend on n.

Phil

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1st bug in MS win2k source code found after 20 minutes: scanline.cpp

2nd and 3rd bug found after 10 more minutes: gethost.c

Both non-exploitable. (The 2nd/3rd ones might be, depending on the CRTL)