

6230

Neil Sloane, Esq
 Bell Laboratories
 Murray Hill, N.J. 07974

Dec 2, 1976

Neil: It was a great relief to have your letter of 30.x.76 (what an odd notation!): of course I knew of your new book, and Jessie & Ron produced little snacks of data, on my visit to M.H., but not what I needed. Incidentally I was staggered by the effect of the new M.H. building; it destroyed all my landmarks, addled my sense of coming home.

Most of all I am pleased by the continued existence of Anne in the proper context, rather than, say, Green Gables. I shall have to overcome my aversion to the constant fundraising of W.B.H.I., now that I know of her continuing association!

I expect that your herculean activity for THE CODE BOOK, will bring big dividends, and perhaps also reveal the mind behind the Integer Sequences. For the latter, I enclose a table on Bitrangular Permutations, from a paper by Kaplansky and me; not mentioned in Intro to Comb. Analysis (now out of print, to be joined shortly by Comb. Identities). Royalties over, what will the old man do then, poor thing.

I hope you will take notice of the tables in The Blossoming of Schröder's Fourth Problem (written mainly to establish the math. respectability of series-parallel arrangements).

2.

When I have established a file for our correspondence,
to moderate duplication of results, I may have more
for your revision of SEQUENCES.

Love to Ann

Yours
John

Batriangular Permutations*

$$B_{n,m} = \sum S(m+1, j+1) (-1)^{m-j} j^{n-m} j!$$

$S(n, k)$ is Stirling II

$S_{n,m}$	1	1	2	7	28	133	726	4483	30896	235005
$m \setminus n$	1	2	3	4	5	6	7	8	9	10
1	1	1	1	1	1	1	1	1	1	1
2			1	5	13	29	61	123	253	509
3				1	13	73	301	1081	3613	11543
4					1	29	301	2069	11581	57749
5						1	61	1081	11581	95401
6							1	123	3613	57749
7								1	253	11543
8									1	509
9										1

2^{n-3}

new

new - omit

new ← (6230)

3 new seqs to enter
6/9/1

* The Problem of the Rooks and Its Applications, Irving Kaplansky and John Riordan
Duke Math. Journal 13 (1946) 259-268 (Table on p. 267)
12/1/76