

Scan

5317

Peter C Fishburn
letter to NJAs

2 sides

one sequence

f 91

Neil

5317
3/3/87

Peter Fishburn
to
NJAs

n	a_n
1	2
2	5
3	14
4	43
5	142
6	494
7	1780
8	6563
9	24566
10	92890

Peter

(See other side)

Peter, I used this one - is there a reference for it?

Neil, ↓

Neil

Not that I'm aware of.

It was derived in some notes on uniqueness for finite sets, done after the attached.

Maybe we can talk about this some time. I'd like to pursue several ideas about it.

Pete

$$a_n = \frac{2^n + \binom{2n}{n}}{2}$$

= number of nonisomorphic sets of uniqueness
in $\{1, \dots, n\} \times \{1, \dots, n\}$.

= no. of monotonic 1-0 matrices (1 lower left)
 $n \times n$

$$\begin{bmatrix} 0 & 0 & 0 \\ 1 & 1 & 0 \\ \vdots & \vdots & \vdots \\ 1 & 1 & 1 \end{bmatrix}$$

up to interchange of axes.

e.g. $\begin{bmatrix} 1 & 0 & 0 \\ 1 & 0 & 0 \\ 1 & 0 & 0 \end{bmatrix} = \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 1 & 1 & 1 \end{bmatrix}$

Math

NOT right in our case. It is only in some cases of uniqueness that sets, even after the above, can be distinguished. For example, we can take a set of uniqueness and its complement. If we try to distinguish them, we find...

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