

S91

1850

• Don,

For 1, 6, 31, ... you sent me  
to Fredman, J. ACM Jan 1982

[The complexity of maintaining an array,  
Vol 29 1982, pp 250-260]

- but I don't find that sequence there!

Did I misunderstand your reference?

Best regards

Diagonal elements  $N(j,j)$  while  
 $N(i,j)$  is defined on page 253 (also p 254)

0	0	0	0	0	0	
0	1	2	3	4	5	6
0	2	6	12	20	30	42
0	3	12	31	64	115	188
0	4	20	64	160		
0	5					
0	6					

etc

Neil

To get generating function can use Havrus/Klarner  
paper on "diagonal of a double power  
series" c. 1970  
Fredman gives asymptotics of diagonal elements on  
top of page 255

[I opened the letter to put this in]

P.S.

$N(i,j)+c = N(i-1,j)+c + N(i,j-1)+c + N(i-1,j-1)+c + 1-2c$   
suggests that  $2N(i,j)+1$  might be simpler ...  
Then the diagonal is 1, 3, 13, 63 aha! it's #1184

A47662

47662 1850  
37 237  
6007  
47661 - 47665

1	2	3	4	5	6	7	8	9	10
2	6	12	20	30	42	56			
3	12	31	64	115	188				
4	20	64	160	340					
5	30	115	340	841					
6	42	188							
7	56								
8									
9									
10									

from  
A37237  
4\*6007  
new 47661

a := sum(n, h) opt ver ; ~~red~~

if n = 1 ~~or k~~

if ~~red~~ n = 1 or ~~h~~  
~~then k else~~

then h

elif h = 1 then 0

else ~~elif~~ + 1 fi