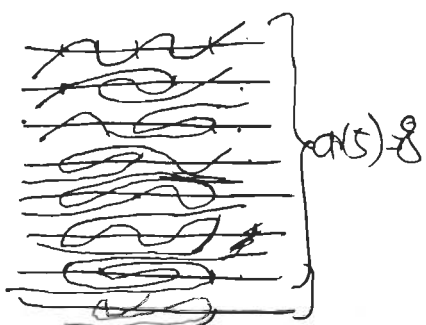
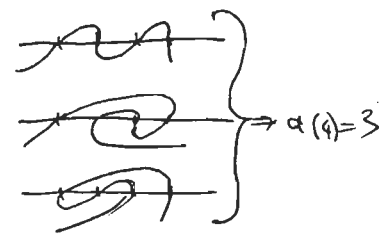
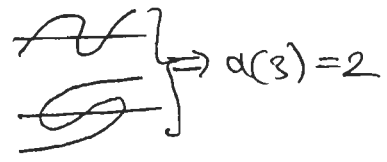
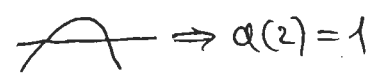
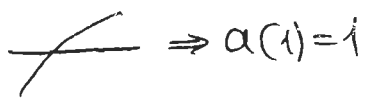


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V I Arnold
"Problem"
Manuscript
1 page

Problem: continue the sequence 1, 1, 2, 3, 8, 14, 42, 81, ...

Let a river comes from (∞) SW, intersects the NE highway at n bridges and disappears at (∞) NE if n is odd, at (∞) SE if n is even. Find the number of possible configurations, $a(n)$:



n	1	2	3	4	5	6	7	8
a_n	1	1	2	3	8	14	42	81

A lot of information on a_n is known, for instance (S. Lando)

a_n is odd $\iff n = 2^k$

but we ignore the

$\lim_{n \rightarrow \infty} \frac{\ln a_n}{n} = ?$

(it is easy to show that $c_1 4^n < a_n < C_2 16^n$ using Catalan numbers)