

A46859



Room 2C-363  
Bell Telephone Laboratories  
Mountain Avenue, Murray Hill, N. J. 07974

May 22, 1970  
Telephone 201-582-3000

Dear Don,

Here's version 4; version 5 (with an index & expanded introduction) is in preparation, and hopefully will be a book fairly soon, although I haven't approached publishers yet.

What was the sequence for which you found two explanations? (I'm collecting such examples for the introduction)

Don't forget also to send any other sequences you may come across which are not in the table!

Best regards

Neil Sloane

To test your new table I checked out a sequence that appeared on my blackboard when I opened your letter: 1, 2, 4, 7, 12, 20, ... I had deduced it was  $F_n - 1$  (Fib. numbers less 1).

My colleague Bob Floyd suggests the following famous non-primitive-recursive function: Ackermann's function  $A(n, n) = 1, 3, 7, 61, 2^{2^{2^{16}}} - 3, \dots$  [TT2]  
ref: Hermes, Computability.

46859 Don