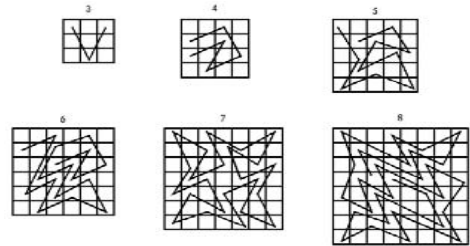
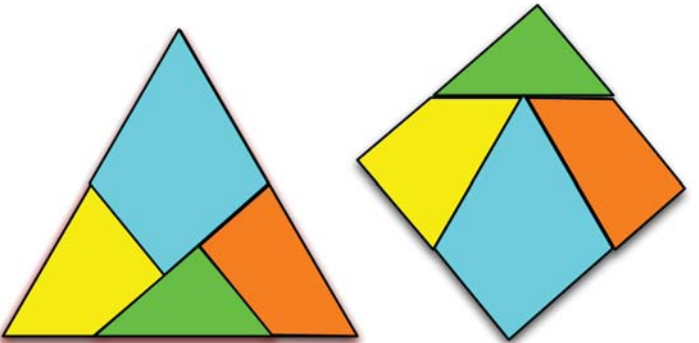
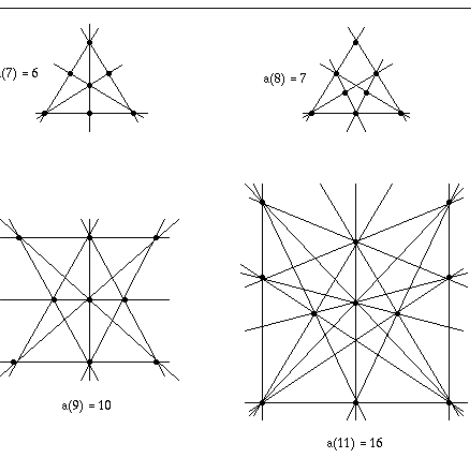
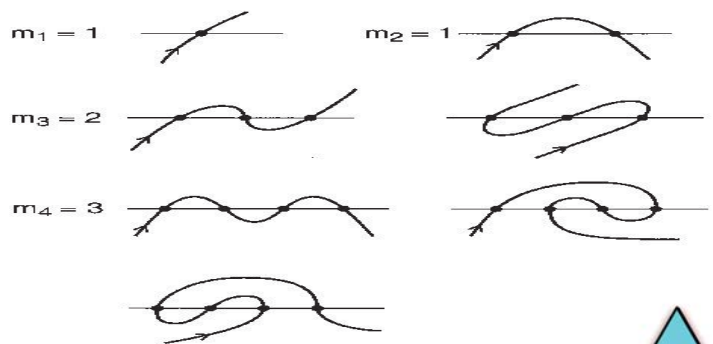


$$1^2 = 1, 2^2 = 2, 3^2 = 3, \dots, 9^2 = 9, 10^2 = 100,$$

$$11^2 = 111, 12^2 = 112, \dots, 20^2 = 100, 21^2 = 211, \dots$$

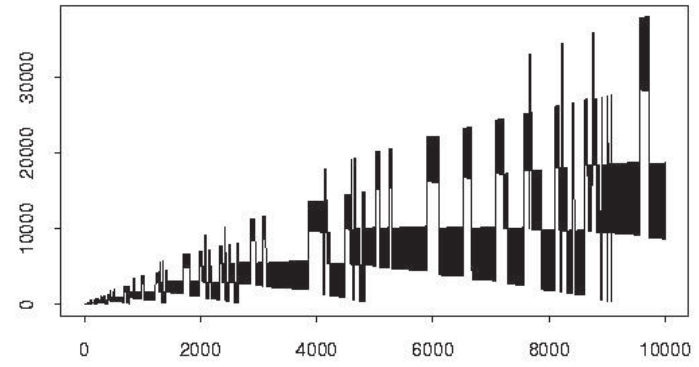
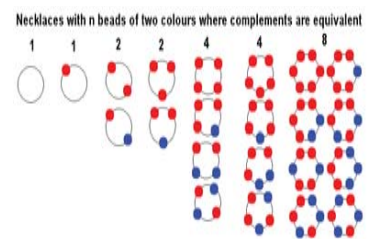
THE ONLINE ENCYCLOPEDIA OF INTEGER SEQUENCES: SOLVED AND UNSOLVED PROBLEMS



The OEIS is a database of some 130,000 number sequences. I will show numerous examples, emphasizing sequences that have arrived in the past few months, taken from number theory, combinatorics, graph theory and geometry.

The talk will also demonstrate two features recently been added to the OEIS: the ability to display the graph of a sequence or to hear it played on a musical instrument.

10, 10₁₁, 10₁₁₁₂, 10₁₁₁₂₁₃, 10₁₁₁₂₁₃₁₄, ...
 = 10, 11, 13, 16, 20, 25, 31, 38, 46, 55, 65, 87,
 135, 239, 463, 943, 1967, 4143, 8751, 18479, ...



NEIL J. A. SLOANE

Neil Sloane is a Fellow at AT&T Shannon Labs in Florham Park, NJ. He is a member of the National Academy of Engineering, an IEEE Fellow, and recipient of the IEEE Hanning Medal and the MAA Chauvenet Prize. He is the author or co-author of numerous books, including "The Theory of Error-Correcting Codes" (with F. J. MacWilliams) and "Sphere Packing, Lattices and Groups" (with J. H. Conway).

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