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This month's "free sample" is:

4133. *Proposé par D. M. Bătineţu-Giurgiu et Neculai Stanciu.*

Soit la suite (a_n) définie de façon récursive par $a_1 = 1$ et $a_{n+1} = (2n+1)!!a_n$ pour tous entiers n positifs ou nuls. Calculer

$$\lim_{n\to\infty} \frac{\sqrt[2n]{(2n-1)!!}}{\sqrt[n^2]{a_n}}.$$

. . . .

4133. *Proposed by D. M. Bătineţu-Giurgiu and Neculai Stanciu.*

Consider the sequence (a_n) defined recursively by $a_1 = 1$ and $a_{n+1} = (2n+1)!!a_n$ for all nonnegative natural numbers n. Compute

$$\lim_{n\to\infty} \frac{\sqrt[2n]{(2n-1)!!}}{\sqrt[n^2]{a_n}}.$$