1062-05-11Rod Canfield* (erc@cs.uga.edu), Department of Computer Science, Graduate Studies Building,
University of Georgia, Athens, GA 30602, and Carl Pomerance, Department of Mathematics,
Kemeny Hall, Hanover, NH 03755. The maximum Stirling number(s) of the second kind.

The Stirling numbers of the second kind, S(n, k), count the partitions of an *n*-set into *k* blocks. For each *n* the maximum S(n, k) is achieved either at a unique $k = K_n$, or is achieved twice consecutively at $k = K_n, K_n + 1$. Call those *n* of the latter type *exceptional*. Is n = 2 the only exceptional integer? The attempt to answer this question has led to some interesting analytic considerations. (Received May 17, 2010)