1035-05-1086 Lara K. Pudwell* (lpudwell@math.rutgers.edu), Department of Mathematics, Hill Center, Busch Campus, 110 Frelinghuysen Rd., Piscataway, NJ 08854. How to Cleverly Count Pattern-Avoiding Words.
A word $w$ contains a permutation $p$ as a pattern if $w$ has a subsequence that is order-isomorphic to $p$; otherwise, $w$ avoids $p$. The study of pattern avoidance in permutations is well-studied and has been accomplished by many beautiful techniques. In 1998, Doron Zeilberger introduced the notion of prefix schemes for counting pattern-avoiding permutations. This is a divide and conquer technique driven by the pattern formed by the first few letters of the permutation. I will discuss one way of extending the method of prefix schemes to enumerate pattern-avoiding words and detail its success rate. (Received September 18, 2007)

