1146-05-224   **Dennis Eichhorn*** (`deichhor@math.uci.edu`). *What's the Difference? $p(n)$, $p(2n)$, and $p(2n + 1)$.*

In many ways, the sequences $p(2n)$ and $p(2n+1)$ are each more well poised than $p(n)$ itself. Several empirical observations highlight this fact, and in particular the iterated differences of these sequences are somewhat surprising. The behavior of various statistics on the sets of partitions these sequences count are also of interest. A priori, it is not obvious that these partition statistics should behave differently according to the parity of the number being partitioned; however, several of them do.

Both analytic heuristics and a new combinatorial proof will be included. (Received January 23, 2019)