1022-05-151 Fu Liu* (fuliu@alum.mit.edu) and Brian Osserman. On pure-cycle Hurwitz numbers.

Hurwitz numbers count branched covers of Riemann surfaces with prescribed branch type. This has an equivalent formulation in purely group theoretic terms, counting the number of tuples of permutations of given type, having trivial product, and generating a transitive subgroup of the symmetric group. We study the case where each branch point has only one ramified point over it, which corresponds to each permutation being a cycle. After giving a brief introduction to this subject, we present formulas in some special cases. (Received September 12, 2006)