1060-20-167   **Robert H. Gilman*** (`rgilman@stevens.edu`), Department of Mathematical Sciences, Stevens Institute of Technology, Hoboken, NJ 07030. *The generic word problem.* Preliminary report.

One of the fundamental problems for finitely presented groups is to decide if a given word in the generators represents the identity in the group. There are groups for which this decision problem is recursively unsolvable, but in the known examples the question seems to be easily answered for most words. Is this necessarily the case? We will discuss this possibility and the related problem of how to find difficult words. (Received March 29, 2010)