11231. Proposed by Christopher Hillar, Texas A&M University, College Station, TX. Find a non-Abelian group $G$ with the following property: for each $n$, every word $W$ on the alphabet of $n+1$ letters $A_1, \ldots, A_n$, and $X$, all lists $a_1, \ldots, a_n$ of elements of $G$, and every $b$ in $G$ there exists a unique $x$ in $G$ such that $W(a_1, \ldots, a_n, x) = b$. (Thus, in particular, $ax^2ax = b$ must have a unique solution $x$.)