

1009-20-62

**Jennifer Taback\*** (jtaback@bowdoin.edu), Department of Mathematics, 8600 College Station, Bowdoin College, Brunswick, ME 04011, and **Peter Wong**. *Reidemeister number as a quasi-isometry invariant for the solvable Baumslag-Solitar groups.*

If any automorphism of a group has infinite Reidemeister number, i.e. an infinite number of twisted conjugacy classes, we say that the group has property  $R_\infty$ . Fel'shtyn and Goncalves proved that the solvable Baumslag-Solitar group  $BS(1,n)$  has this property. We prove that any group quasi-isometric to  $BS(1,n)$  also has this property, and extend these results to certain generalizations of the Baumslag-Solitar groups. This provides a nice example of a quasi-isometry preserving a purely algebraic property. We also give an example of when this property is not preserved under quasi-isometry, and pose some questions about the extent of its invariance. (Received August 02, 2005)