GROWTH OF FINITELY GENERATED GROUPS

Jeff Preston, Montana Tech at University of Montana, Butte Atish Mitra, Department of Mathematical Sciences, Montana Tech of the University of Montana, Butte

Given a finitely generated group, we study various growth functions and growth series. We calculate growth functions for certain groups of polynomial and exponential growth, and study R. Grigorchuk's example of a group with intermediate growth. We examine relations between algebraic properties of a finitely generated group and the equivalence class of its growth functions.