1047-20-364   **Eric M Freden*** (`freden@suu.edu`), Dept of Comp Science and Information Systems, Southern Utah University, Cedar City, UT 84720, and **Jared Adams**. *Growth in Baumslag-Solitar groups: Asymptotics.* Preliminary report.

The Cayley 2-complex of the Baumslag-Solitar group $BS(p,q)$ in the standard presentation $\langle b, t \mid tb^p t^{-1} = b^q \rangle$, $1 < p < q$, is homeomorphic to a tree cross line. We show that the exponent of growth for this presentation depends only on the tree (which is the Bass-Serre tree). We consider a formal language-theoretic approach to computing these exponents of growth for various p and q. (Received February 02, 2009)