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Edward C Turner* (ted@math.albany.edu), Department of Mathematics, SUNY Albany, Albany, NY 12222. *Test elements on the boundary of a group*. Preliminary report.

A *test element* g in a group G is an element with the property that any endomorphism fixing g must be an automorphism. Under the right conditions, sense can be made of this notion for points on the boundary of a group. I will show that ‘most’ points on the boundary of a torsion free hyperbolic group are boundary test elements. The simplest example is $[a, b]^\infty$, the infinite power of the basic commutator $[a, b] = aba^{-1}b^{-1}$ in the free group $F(a, b)$. (Received September 28, 2000)