1044-05-223 Johannes H Hattingh* (jhhattingh@gsu.edu), Department of Mathematics and Statistics, Georgia State University, Atlanta, GA 30303. An upper bound for the restrained domination number of a graph with minimum degree at least two in terms of order and minimum degree. Preliminary report.

Let G = (V, E) be a graph. A set $S \subseteq V$ is a restrained dominating set if every vertex in V - S is adjacent to a vertex in S and to a vertex in V - S. The restrained domination number of G, denoted $\gamma_r(G)$, is the smallest cardinality of a restrained dominating set of G. We will show that if G is a connected graph of order n and minimum degree δ and not isomorphic to one of nine exceptional graphs, then $\gamma_r(G) \leq \frac{n-\delta+1}{2}$. (Received September 02, 2008)