1030-05-126 **József Balogh** and **Ryan Martin*** (rymartin@iastate.edu), Department of Mathematics, 396 Carver Hall, Iowa State University, Ames, IA. *On the edit distance in graphs.*

A hereditary property of graphs is one that is closed under induced subgraphs. For example, the absence of an **induced** copy of a 4-cycle is a hereditary property. The editing distance of a graph G from a hereditary property is the fewest number of edge-deletions or edge-insertions required to transform G into a graph G' that satisfies the hereditary property.

For a fixed hereditary property $\mathcal{H}$, we study the maximum editing distance from $\mathcal{H}$ over all n-vertex graphs. We summarize known results for this invariant and provide a new technique for finding the asymptotic value of this quantity which has produced new results. (Received August 06, 2007)