1089-05-32 **Ralph J Faudree*** (rfaudree@memphis.edu), 235 Winfield Dunn Building, University of Memphis, Memphis, TN, Memphis, TN 38152. *Saturation Numbers.*

A graph G is an H-saturated graph if G does not contain H as a subgraph, but $G \cup \{e\}$ contains a copy of H for any edge e not in G. The *saturation number* of H, denoted by $sat(H, n)$, is the minimum number of edges in an H-saturated graph G of order n. A survey of some of the classical results on saturation numbers will be presented, also with a comparison of the saturation number $sat(n, H)$ with the Turán extremal number $ex(n, H)$. Also, the concept of *weak saturation*, denoted by $wsat(n, H)$, will be introduced and comparisons of the extremal numbers $ex(n, H)$, $sat(n, H)$ and $wsat(n, H)$ will be made. However, the focus will be on some recent results on weak saturation numbers, and some open problems. (Received January 15, 2013)