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**Ryan R. Martin\*** (rymartin@iastate.edu), 396 Carver Hall, Department of Mathematics, Iowa State University, Ames, IA 50011, and **Jason J. Smith.** *Induced saturation number.* Preliminary report.

A graph  $G$  is  $H$ -saturated if  $G$  fails to have  $H$  as a subgraph, but the addition of any edge to  $G$  creates at least one copy of  $H$  as a subgraph.

The saturation number  $\text{sat}(n; H)$  is the minimum size of an  $H$ -saturated graph on  $n$  vertices. In this talk, we define a version of saturation number suitable for induced subgraphs. This version is closely related to the notion of satisfiability of Boolean formulas.

We will provide bounds for this induced saturation number as well as establish the induced saturation number of some specific graphs. (Received July 22, 2011)