1003-26-309 **Robert Kantrowitz*** (`rkantrow@hamilton.edu`), Department of Mathematics, Hamilton College, 198 College Hill Road, Clinton, NY 13323, and **Michael M. Neumann** (`neumann@math.msstate.edu`), Department of Mathematics and Statistics, Mississippi State University, Mississippi State, MS 39762. *Products of concave functions.* Preliminary report.

A real-valued concave function f on an interval of the real line has the property that any line segment joining two points on its graph is dominated by the corresponding segment of the graph of f. In this talk, we present a general structure theorem for concave functions and its extension to products of concave functions. We also discuss optimization of products of concave functions and provide an elementary application. (Received September 08, 2004)