1024-05-110   **Jerrold R. Griggs*** (`griggs@math.sc.edu`), Department of Mathematics, University of South Carolina, Columbia, SC 29212, and **Gyula O.H. Katona**, Rényi Institute of Mathematics, Hungarian Academy of Sciences, 13-15 Reáltanoda u., Budapest, 1053, Hungary. *No four subsets forming an N.* Preliminary report.

We are interested in the maximum size of a family $\mathcal{F}$ of subsets of the set $\{1, 2, \ldots, n\}$, subject to the condition that a certain configuration is excluded. We survey results of this kind, and present new bounds on $|\mathcal{F}|$ for the case that $\mathcal{F}$ contains no four distinct subsets A, B, C, D satisfying $A \subset C$, $A \subset D$, $B \subset C$. (Received January 04, 2007)