Robert Malo (p314i@hotmail.com), 517 Medary Ave., Apt 3, Brookings, SD 57006, and Daniel Schaal* (daniel_schaal@sdstate.edu), 1816 Olwien St., Brookings, SD 57006. On 4-color Rado Numbers and Stubborn Colorings. Preliminary report.
If $L$ is a system of linear equations or inequalities and $t$ is an integer greater than or equal to 2 , then the t -color Rado Number for the system $L$ is the least integer $n$, provided that it exists, such that for every coloring of the set $1,2, \ldots, n$ with t colors there exists a monochromatic solution to the system L. If such an integer does not exists, then the t -color Rado number for the system is infinite. In this talk we will present the 4 -color Rado numbers for the equation $\mathrm{x}+\mathrm{y}+$ $\mathrm{c}=\mathrm{z}$ for some particular values of the constant c . We will also make a conjecture as to the values of the 4-color Rado numbers for the above equation and all positive integer values of the constant c. We will also introduce a coloring pattern that we have called a stubborn coloring. (Received October 03, 2000)

