## 962-05-1320 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, ..., 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 x + y + c = 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)