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Carl D. Mueller* (cmueller@canes.gsw.edu), 800 GSW State University Drive, Americus, GA 31709, and **Daniel Schaal**. *Disjunctive Rado Numbers for some Linear Equations*.

In 1916, I. Schur proved the following theorem. For every integer t greater than or equal to 2, there exists a least integer $n = S(t)$ such that for every coloring of the set $\{1, 2, \dots, n\}$ with t colors there exists a monochromatic solution to $x + y = z$. The integers $S(t)$ are called Schur numbers. Some years later, R. Rado, a student of Schur, studied a similar concept known as Rado numbers. More recently, the concept of disjunctive Rado numbers has been defined. If L_1 and L_2 are linear equations, then the disjunctive Rado number of the set $\{L_1, L_2\}$ is the least integer n , provided that it exists, such that for every 2-coloring of the set $\{1, 2, \dots, n\}$ there exists a monochromatic solution to either L_1 or L_2 . If such an integer n does not exist, then the disjunctive Rado number is infinite. In this talk we consider the following problem. For the pair of positive integers (a, b) , let $r(a, b)$ be the least integer so that every 2-coloring of the set $\{1, 2, \dots, n\}$ has a monochromatic solution to either $ax+y=z$ or $bx+y=z$. We find values of $r(a, b)$ for all (a, b) . (Received September 25, 2006)