Andras Gyarfas (gyarfas@sztaki.hu), P. O. Box 63, 1518, Budapest, Hungary, Jeno Lehel* (jlehel@memphis.edu), Department of Mathematical Sciences, The University of Memphis, Memphis, TN 38152, and Richard H. Schelp (schelpr@msci.memphis.edu), Department of Mathematical Sciences, The University of Memphis, Memphis, TN 38152. Finding a monochromatic subgraph or a rainbow path.

Let $f(G, H)$ denote the least integer $n$ such that every coloring of the edges of a clique $K_n$ contains either a monochromatic copy of the graph $G$ or a rainbow colored copy of the graph $H$. Here we investigate how $f$ relates to the usual Ramsey and the local Ramsey numbers for particular cases of $G$ or $H$. We show that for the paths $P_k$, $k = 4, 5$, $f(G, P_k)$ equals the $(k - 2)$–color diagonal Ramsey number of $G$. (Received August 23, 2004)