1067-05-1316 **Elliot J Krop*** (ElliotKrop@clayton.edu), Department of Mathematics, Clayton State University, 2000 Clayton State Blvd., Morrow, GA 30260, and **Irina Krop** (irina.krop@gmail.com), DePaul University, DePaul Center, 1E. Jackson, room 7122, Chicago, IL 60604. *Almost-rainbow edge-colorings of some small subgraphs.*

Let $f(n,p,q)$ be the minimum number of colors necessary to color the edges of K_n so that every K_p is at least q-colored. We improve current bounds on these nearly "anti-Ramsey" numbers, first studied by Erdős and Gyárfás. We show that $f(n,5,9) \geq \frac{7}{4}n - 3$, slightly improving the bound of Axenovich. We make small improvements on bounds of Erdős and Gyárfás by showing $\frac{5}{6}n + 1 \leq f(n,4,5)$ and for all even $n \not\equiv 1 \pmod 3$, $f(n,4,5) \leq n - 1$. For a complete bipartite graph $G = K_{n,n}$, we show an n-color construction to color the edges of G so that every $C_4 \subseteq G$ is colored by at least three colors. This improves the best known upper bound of M. Axenovich, Z. Füredi, and D. Mubayi. Keywords: Ramsey theory, generalized Ramsey theory, rainbow-coloring, edge-coloring, Erdős problem

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