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Erik A Metz* (emetz@umd.edu), 10248 Bristol Channel, Ellicott City, MD 21042. *Upper and Lower Bounds on Zero-Sum Generalized Schur Numbers.*

Let $S_3(k, r)$ be the least positive integer such that for any r -coloring $\chi : \{1, 2, \dots, S_3(k, r)\} \rightarrow \{1, 2, \dots, r\}$, there is a sequence x_1, x_2, \dots, x_k such that $\sum_{i=1}^{k-1} x_i = x_k$, and $\sum_{i=1}^k \chi(x_i) \equiv 0 \pmod{r}$. We show that when k is greater than r , $kr - r - 1 \leq S_3(k, r) \leq kr - 1$, and when r is also an odd prime, $S_3(k, r)$ is in fact equal to $kr - r$. (Received September 22, 2018)