

1145-05-741

Kim A.S. Factor and **Larry J Langley***, Department of Mathematics, 3601 Pacific Ave, Stockton, CA 95211, and **Sarah K Merz**. *A Tight Lower Bound for the Split Domination Number of a Regular Tournament.*

A set of vertices, S , in a strongly connected digraph D , is split dominating provided it is: 1) dominating and 2) $D - S$ is trivial or not strongly connected. The split domination number of a strongly connected digraph is the minimum cardinality of a split dominating set for that digraph. We show that for any k -regular tournament, the split domination number is at least $\lceil \frac{2k+3}{3} \rceil$ and this bound is tight. (Received September 13, 2018)