The \( k \) – \textit{colored} Domination Number of a Graph

Teresa Haynes, East Tennessee State University
Debra Knisley*, East Tennessee State University

Abstract

The \( k \) – \textit{colored} domination number of a graph \( G \) is the minimum cardinality among all dominating sets \( S \) where the subgraph induced by \( S \) has chromatic number at most \( k \). We investigate the \( k \) – \textit{colored} domination number and its relation to other domination parameters.