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EDITORS

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Dr. Wutiphol Sintunavarat
Dr. K. Sujith
Dr. R. Santhi Devi**

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Equitable Dominator Coloring of Middle Graph Certain Graph

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Abstract

In this study, we explore the concepts of Dominator Coloring and Equitable. A dominator coloring is defined as a proper coloring in which every vertex dominates at least one vertex in some color class. An equitable dominator coloring extends this concept by requiring that the color classes differ in cardinality by at most one while preserving the domination condition. The Dominator Chromatic Number and Equitable Dominator Chromatic Number of these middle graphs are determined and analyzed.

Keywords: Dominator coloring, Chromatic number, Dominator chromatic number, Equitable Dominator chromatic number, Middle Graph, Star graph, Ladder Graph, Sun let graph, Comb Graph, Twig graph.

AMS Subject Classification: 05C15, 05C69.