

Geodetic Ratio, Color Sequences, and Their Relation on Graphs

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For a given graph G , the definitions of a color sequence and a (t, k) -geodetic set are given in several papers. In this study, we give the definition of a geodetic ratio derived from (t, k) -geodetic and show the relationship between the geodetic ratio and the color sequence. There is no known polynomial algorithm to compute the geodetic ratio of a given graph G . We give a polynomial algorithm that gives an upper bound of the geodetic ratio.