

ODD GRACEFUL LABELINGS OF PYRAMID GRAPH AND $P_n \times P_m$ **GRAPH**

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Abstract

Gnanajothi introduced odd graph in 1991 [R. B. Gnanajothi, Topics in graph theory, Ph.D. Thesis, Madurai Kamaraj University, 1991]. Lee and Wang defined pyramid graph in 1988 [S. M. Lee and G. Wang, All pyramids, lotuses and diamonds are *k*-graceful, Bull. Math. Soc. Sci. Math. R. S. Roumanie (N. S.) 32(80) (2) (1988), 145-150]. In this paper, pyramid graph is proved to be odd graceful and $P_n \times P_m$ is proved to be odd graceful by the concept of graph decomposition and odd gracefulness of pyramid graph.

Keywords and phrases: odd graceful graph, pyramid graph, $P_n \times P_m$ graph.



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