

## PAIR $L(2, 1)$ -LABELINGS OF INFINITE GRAPHS

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### Abstract

An  $L(2, 1)$ -labeling of a graph  $G = (V, E)$  is an assignment of non-negative integers to  $V$  such that two adjacent vertices must receive numbers (labels) at least two apart and further, if two vertices are in distance 2 then they receive distinct labels. This article studies a generalization of the  $L(2, 1)$ -labeling. We assign sets with at least one element to vertices of  $G$  under some conditions.

**Keywords:**  $L(2, 1)$ -labeling.

**2010 Mathematics Subject Classification:** 05C15, 05C78, 05C63.

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Received 14 November 2016

Revised 24 July 2017

Accepted 24 July 2017