Abstract

A square difference 3-equitable labeling of a graph $G$ with vertex set $V$ is a bijection $f$ from $V$ to \{1, 2, ..., |V|\} such that if each edge $uv$ is assigned the label -1 if $|f(u)^2 - f(v)^2| = 1(\mod 4)$, the label 0 if $|f(u)^2 - f(v)^2| = 0(\mod 4)$ and the label 1 if $|f(u)^2 - f(v)^2| = 1(\mod 4)$, then the number of edges labeled with $i$ and the number of edges labelled with $j$ differ by at most 1 for $-1 = i, j = 1$. If a graph has a square difference 3-equitable labeling, then it is called square difference 3-equitable graph. In this paper, we investigate the square difference 3-equitable labeling behavior of paths and cycles.

References

3. J. Shiama, Square sum labeling for some middle and total graphs, International Journal of
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**Index Terms**

Computer Science  Applied Mathematics

**Keywords**

Square difference 3-equitable labeling, square difference 3-equitable graphs