(*a*,*d*)-edge-antimagic total labelings of caterpillars

Authors: K. A. Sugeng School of Information Technology and Mathematical Sciences, University of Ballarat, Victoria, Australia

M. Miller School of Information Technology and Mathematical Sciences, University of Ballarat, Victoria, Australia

Slamin FKIP, Universitas Jember, Indonesia

M. Bača Department of Appl. Mathematics, Technical University, Košice, Slovak Republic

2003 Article

Published in:
· Proceeding
IJCCGGT'03 Proceedings of the 2003 Indonesia-Japan joint conference on Combinatorial Geometry and Graph Theory
Pages 169-180
Springer-Verlag Berlin, Heidelberg ©2005
table of contents ISBN:3-540-24401-8 978-3-540-24401-1 doi>10.1007/978-3-540-30540-8_19

For a graph $G = (V,E)$, a bijection g from $V(G) \cup E(G)$ into $\{ 1,2, ..., | V(G) | + | E(G) | \}$ is called (a,d)-edge-antimagic total labeling of G if the edge-weights $w(xy) = g(x) + g(y) + g(xy)$, $xy \in E(G)$, form an arithmetic progression with initial term a and common difference d. An (a,d)-edge-antimagic total labeling g is called super (a,d)-edge-antimagic total if $g(V(G)) = \{ 1,2,..., | V(G) | \}$.

We study super (a,d)-edge-antimagic total properties of stars Sn and caterpillar $Sn1,n2,...,nr$.