Discussiones Mathematicae
Graph Theory 34 (2014) 811–827
doi:10.7151/dmgt.1770

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THE WELL-COVERED DIMENSION OF PRODUCTS OF GRAPHS

Isaac Birnbaum[1], Megan Kuneli[1]

Robyn McDonald[2], Katherine Urabe[1]

and

Oscar Vega[1]

[1] *Department of Mathematics*
California State University, Fresno
Fresno, CA, USA

[2] *California State University, Stanislaus*
Turlock, CA, USA

e-mail: isaacb1@mail.fresnostate.edu
mrkunelius@mail.fresnostate.edu
rmcdonald@csustan.edu
kturabe@mail.fresnostate.edu
ovega@csufresno.edu

Abstract

We discuss how to find the well-covered dimension of a graph that is the Cartesian product of paths, cycles, complete graphs, and other simple graphs. Also, a bound for the well-covered dimension of $K_n \times G$ is found, provided that G has a largest greedy independent decomposition of length $c < n$.

Formulae to find the well-covered dimension of graphs obtained by vertex blowups on a known graph, and to the lexicographic product of two known graphs are also given.

Keywords: well-covered dimension, maximal independent sets.

2010 Mathematics Subject Classification: 05C50, 15A03.

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Received 13 December 2012
Revised 19 November 2013
Accepted 19 November 2013