

On Cartesian products with small crossing numbers

MARIÁN KLEŠČ and JANA PETRILLOVÁ

ABSTRACT.

Kulli at al. started to characterize line graphs with crossing number one. In this paper, the similar problems were solved for the Cartesian products of two graphs. The necessary and sufficient conditions are given for all pairs of graphs G_1 and G_2 for which the crossing number of their Cartesian product $G_1 \times G_2$ is one or two.

DEPARTMENT OF MATHEMATICS AND THEORETICAL INFORMATICS
TECHNICAL UNIVERSITY OF KOŠICE
KOŠICE, SLOVAKIA

E-mail address: marian.klesc@tuke.sk

E-mail address: jana.petrillova@tuke.sk