

# Domination Parameters in Complementary Prisms

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## Abstract

The complementary product of two graphs is a new graph operation, which generalizes the concept of the cartesian product. We consider a subfamily of complementary products, called complementary prisms. In particular, the complementary prism  $G\overline{G}$  of a graph  $G$  is the graph formed from the disjoint union of  $G$  and its complement  $\overline{G}$  by adding the edges of a perfect matching between the corresponding vertices of  $G$  and  $\overline{G}$ . For example, if  $G$  is a 5-cycle, then  $G\overline{G}$  is the Petersen graph. In this talk, we present bounds on domination parameters of the complementary prisms  $G\overline{G}$ , usually in terms of parameters of  $G$  and  $\overline{G}$ .