

Domination in Permutation Graphs

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Abstract

If i, j belongs to a permutation on n symbols $\{1, 2, \dots, p\}$ and i is less than j then there is an edge between i and j in the permutation graph if i appears after j . (i. e) inverse of i is greater than the inverse of j . So the line of i crosses the line of j in the permutation. So there is a one to one correspondence between crossing of lines in the permutation and the edges of the corresponding permutation graph. In this paper we found the conditions for a permutation to realize paths and cycles and also derived the domination number of permutation graph through the permutation. AMS Subject Classification (2010): 05C35, 05C69, 20B30.
