1011-05-351

Gayla S Domke\* (gdomke@pnc.edu), Purdue University North Central, Mathematics, Statistics & Physics Department, 1401 South US Highway 421, Westville, IN 46391-9542, and George J Davis and Charles R Garner. Ranks of Complements of Graphs.

The rank of a graph is defined to be the rank of the associated adjacency matrix. In this talk we discuss the rank of the complement of some classes of regular graphs, strongly regular graphs, paths, and products of these graphs. We finish with a Nordhaus-Gaddum type result for the rank of a graph and its complement. (Received August 30, 2005)