

1077-15-1048

Minerva Catral* (catralm@xavier.edu), Department of Mathematics & Computer Science, Xavier University, 3800 Victory Parkway, Cincinnati, OH 45207, and **Dale Olesky** and **Pauline van den Driessche**. *Drazin and Group Inverses of Matrices with Bipartite Digraphs*.

We consider block matrices whose digraphs are bipartite and present a simple block formula for their Drazin inverse. This form is used to derive a graph-theoretic description of the entries of the group inverse of some examples of such matrices. An open question about group inverses of matrices having more general bipartite digraphs is posed and a summary of cases for which its answer is known is given. (Received September 15, 2011)