Saad I El-Zanati* (saad@ilstu.edu), Campus Box 4520, Mathematics Department, Illinois State University, Normal, IL 61790-4520. On digraph labelings and cyclic digraph decompositions.

It is known that an ordered \( \rho \)-labeling of a bipartite graph \( G \) with \( n \) edges yields a cyclic \( G \)-decomposition of \( K_{2nx+1} \) for every positive integer \( x \). We extend the concept of an ordered \( \rho \)-labeling to bipartite digraphs and show that an ordered directed \( \rho \)-labeling of a bipartite digraph \( D \) with \( n \) arcs yields a cyclic \( D \)-decomposition of \( K_{n^*x+1} \) for every positive integer \( x \). We also find several classes of bipartite digraphs that admit an ordered directed \( \rho \)-labeling. (Received July 29, 2014)