Adam Berliner, Nate Dean, Jonelle Hook, Alison Marr, aBa Mbirika*

(mbirika@uwec.edu) and Cayla McBee. Coprime and prime labelings of ladder graphs and complete bipartite graphs.

A coprime labeling of a simple graph of order n is a labeling in which adjacent vertices are given relatively prime labels, and a graph is prime if the labels used can be taken to be the first n positive integers. In this talk, we consider when ladder graphs are prime and when the corresponding labeling may be done in a cyclic manner around the vertices of the ladder. Furthermore, we discuss coprime labelings for complete bipartite graphs. This is joint work begun at REUF 4 in 2012 with collaborators Adam Berliner, Nate Dean, Jonelle Hook, Alison Marr, and Cayla McBee. (Received September 10, 2016)