## 1035-05-1066

Michael S. Jacobson<sup>\*</sup> (msj@math.cudenver.edu), Campus Box 170, PO.Box 173364, Department of Mathematical Sciences, University of Colorado at Denver, Denver, CO 80217-3364, and Michael J. Ferrara and Angela Harris. *Cycle Lengths Occurring in Hamiltonian Graphs*.

A simple graph of order n is said to be pancyclic if it contains cycles of all lengths from 3 to n. We consider hamiltonian graphs with two vertices having a "large" degree sum. The degree sum that insures that the graph is pancyclic will be given. We also consider the problem of determining what cycle lengths must be present in the graph when this degree sum condition is reduced. This work generalizes results of Schmeichel and Hakimi. (Received September 18, 2007)