1080-05-153 Ronald J. Gould\* (rg@mathcs.emory.edu), Department of Math and CS, Emory University, Atlanta, GA 30322. On Chorded Cycles. Preliminary report.

A chord in a cycle is an edge between nonconsecutive vertices of the cycle. There are many results about the existence of cycles, collections of cycles, or 2-factors. But there are far fewer results about the existence of chorded cycles or collections of chorded cycles. We survey what is known about chorded cycles and present a new degree sum result about the existence of a collection of k doubly chorded cycles. (Received January 23, 2012)