1024-13-142    **Michael C. Axtell** (`axtellm@wabash.edu`), Wabash College, Crawfordsville, IN 47933, and **Joe A. Stickles, Jr.*** (`jstickles@millikin.edu`), Department of Mathematics, 1184 W. Main St., Decatur, IL 62522. *Irreducible Divisor Graphs in Commutative Rings with Zero Divisors.* Preliminary report.

In their paper 'Irreducible Divisor Graphs', Coykendall and Maney introduced the idea of irreducible divisor graphs of elements of a domain. We generalize this concept to commutative rings with zero divisors. In particular, the interplay of unique factoring and connected/complete graphs is explored. The diameter and girth of such graphs are also briefly discussed. (Received January 06, 2007)