

1135-E1-802

**Joe Stickle\*** (jstickles@millikin.edu). *Graphs and Zero-Divisors*.

There has been an explosion of research in graphical structures associated with algebraic objects, by professional mathematicians and undergraduates. The objective is to use these graphs to elucidate algebraic information. One particularly appealing graph is the zero-divisor graph of a commutative ring. This topic is approachable by anyone with one or two semesters of abstract algebra. We give the basic definitions, sample results proven by undergraduates, and provide a list of possible projects that an interested undergraduate can investigate. (Received September 14, 2017)