

1077-05-1937 **Nathaniel Dean*** (nd17@txstate.edu), Department of Mathematics, Texas State University, 601 University Drive, San Marcos, TX 78666. *Some of My Unsolved Problems in Graph Theory*. Preliminary report.

Over many years I've posed several problems in graph theory, and most of them are still unsolved. Several of them are related to cycle modularity, chords in cycles, chromatic number of the plane, crossing numbers, and eulerian digraphs. I'll try to explain why I posed these problems and demonstrate connections to other areas such as topology, statistics, mathematical programming, number theory, nanotechnology, and geometry. (Received September 22, 2011)