

1035-Z1-1778 **Melissa A Desjarlais***, 1900 Chapel Drive, Valparaiso, IN 46383. *Gender Differences in Mathematics Performance-A Pilot Study*. Preliminary report.

During the past few decades there has been significant interest in the mathematics education community about possible gender differences in mathematics performance. Numerous studies have been conducted, and while some have found gender differences, the type and the magnitude of the differences do vary. Each year more than 100,000 students, located throughout the United States and approximately 20 other countries, take the American Mathematics Competition's AMC 8 test. Results from this test create a large data set which can be analyzed to attempt to answer questions related to possible gender differences in mathematics performance. Performance on individual questions and on types of questions, as classified by the NCTM math content standards, is compared. Performance on individual questions can be analyzed using Differential Item Functioning techniques. Results from statistical analyses of this data will be presented and possible interpretations of the data will be given. (Received September 20, 2007)