THE APRIL MEETING OF THE IOWA SECTION 1968

The 55th regular meeting of the Iowa Section of the Mathematical Association of America was held at Wartburg College, Waverly, Iowa, on April 19, 1968. Chairman Charles M. Lindsay presided. Total attendance was 78, including 46 members of the Association. A partial cause of the somewhat below normal attendance was the concurrence of the American Mathematical Society meeting in Chicago. Routine business was considered at the afternoon session.

The auditing committee reported the treasurer's books to be in good order, with a balance of $165.62 indicated.

The following officers were elected:

Chairman, Rev. John L. Friedell, Loras College, Dubuque

Vice-Chairman, Steve Armentrout, State University of Iowa, Iowa City

Secretary-Treasurer, Basil E. Gillam, Drake University, Des Moines

Morning Session 9:00-10:50 A.M.

To open the session, a film, produced by the Calculus Film Project of the Mathematical Association of America, The Theorem of the Mean, was shown.

Scientific and technical Communication, by william J. Jamison, Collins Radio co., Cedar Rapids. (By invitation)

Currently a great deal of effort is going into the study of ways to improve scientific and technical communication. Among the areas being studied are informal communication, primary and secondary information services, research libraries, and review literature. Three specific topics in scientific communication are discussed in the paper: selective dissemination of information (SDI) systems, the Mathematical Offprint Service (MOS) of the American Mathematical Society, and the need for current and comprehensive survey papers.

QUALIfications for a college faculty in mathematics, by Robert McDowell, Washington University, St. Louis, Missouri.

Mr. McDowell represented CUPM and gave a summary of the latest report of that committee.

Afternoon session 2:00-4:00 P.M.

In addition to the business meeting the following papers were presented:

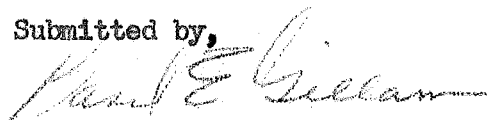Magic Squares:a note on notation, by Edward S. Allen, Wartburg College, Waverly, Iowa.

Magic squares whose elements are n^2 consecutive integers are considered. It is recommended the the integers from 0 to $(n^2 - 1)$ be used, and these be written to the base n. Several illustrations showed this clarifies the structure and construction of these magic squares.

The mathematics of bowing a violin, and other nonlinear phenomena, by Warren S. Loud, University of Minnesota, Minneapolis, Minnesota. (By invitation.)

Linear models are not suitable for many physical phenomena, since there are qualatative features of such phenomena which can not occur in the solutions of linear differential equations. Several typically nonlinear phenomena, including limit cycles, jump phenomenan, entrainement, and nonsymmetrical solutions, were discussed. A simple model of bowing a violin, which has a stable limit cycle, was studied in detail.

The meeting was concluded by the showing of the film, Infinite Acres, produced by the Calculus Film Project of the Mathematical Association of America.

Submitted by,

Basil E. Gillam
Sec. -Treas., Iowa Sec.