The Mathematical Association of America
(Incorporated)

Henry L. Alder
Secretary

University of California
Davis, California 95616

September 29, 1969

MEETING OF SECTION OFFICERS

Monday, August 25, 1969
University of Oregon

The annual meeting of officers of the Sections of the Mathematical Association of America was held on Monday, August 25, 1969, in Room 101 of the Erb Memorial Union of the University of Oregon, Eugene. Professor L. E. Mehlenbacher, Chairman of the Committee on Sections, presided and called the meeting to order at 7:00 p.m. Fifty-nine persons were present.

1. List of Official Representatives and Others Present. Twenty-six of the twenty-eight Sections were officially represented:

Allegheny Mountain	F. T. Kocher, Jr., Director
Florida	Herman Meyer, Chairman
Illinois	R. L. Shively, Vice-Chairman
Indiana	N. B. Haaser, Chairman
Iowa	Miss Elsie C. Muller, Chairman
Kansas	D. L. Bruyr, Chairman
Kentucky	not represented
Louisiana-Mississippi	J. L. Tilley, Chairman
Maryland-D.C.-Virginia	S. B. Jackson, Chairman
Metropolitan New York	Meyer Jordan, Chairman
Michigan	not represented
Missouri	H. K. Stumpff, Chairman
Nebraska	H. M. Cox, Secretary-Treasurer
New Jersey	Bernard Greenspan, Chairman
North Central	W. J. Thomsen, Secretary-Treasurer
Northeastern	W. S. H. Crawford, Chairman
Northern California	Miss Mary V. Sunseri, Chairman
Ohio	J. L. Smith, Chairman
Oklahoma-Arkansas	E. K. McLachlan, Secretary-Treasurer
Pacific Northwest	Ronald Harrop, Chairman
Philadelphia	W. E. Baxter, Chairman
Rocky Mountain	J. R. Hanna, Chairman
Southeastern	Andrew Sobszyk, Vice-Chairman
Southern California	E. C. Posner, Chairman
Southwestern	R. W. Ball, Secretary-Treasurer
Texas	Mrs. Carmon McFerran, Chairman
Upper New York State	J. M. Perry, Chairman
Wisconsin	M. E. Wick, Chairman

Others present included:

Allegheny Mountain	C. H. Cunkle
	H. L. Krall, Governor
Illinois	F. E. Hohn, Governor
	Arnold Wendt, Committee on Sections
Indiana	W. T. Fishback, Committee on Sections
	Harley Flanders, Editor of MONTHLY
Iowa	D. E. Sanderson, Governor
Kansas	G. B. Price, Finance Committee, MAA
Louisiana-Mississippi	L. Virginia Carlton, Governor
	G. S. Young, President, MAA
Maryland-D.C.-Virginia	A. B. Willcox, Executive Director, MAA
Metropolitan New York	Mary P. Dolciani, Governor
Michigan	L. E. Mehlenbacher, Chairman, Committee on Sections
Nebraska	J. M. Earl, Chairman, Committee on High School Contests
Northeastern	Grace E. Bates, Governor
	V. O. McBrien, Chairman, Committee on Institutes
Northern California	H. L. Alder, Secretary, MAA
	H. M. Bacon, Chairman, Committee on Secondary School Lecturers
	D. W. Blakeslee, Committee on Sections
	G. B. Pedrick, Executive Director, CUPM
Ohio	H. M. MacNeille, Governor
Oklahoma-Arkansas	J. E. Scroggs, Governor
Pacific Northwest	Norman Barton, Second Vice-President
	Joseph Hashisaki, Governor
	S. A. Jennings, Second Vice-President, MAA
	Victor Klee, First Vice-President, MAA
	L. J. Montzingo, Jr., First Vice-Chairman
Southeastern	E. A. Cameron, Treasurer, MAA
Southern California	R. B. Herrera, Governor
	D. H. Potts, Secretary-Treasurer
Texas	D. E. Edmondson, Governor
Upper New York State	Raoul Hailpern, Editorial Director, MAA
	F. D. Parker, Governor

2. Message from the President

President Young noted that this was his first meeting with the Section Officers and that he was very glad to have this opportunity. He reported that he had visited many Sections in the past year and hoped very much to work out better means of aiding the Sections. He felt that many of the problems facing the MAA are best handled at the Section level. The strengthening of the work of the Sections, he felt, will become more and more urgent in the next few years.

3. How Can the MAA Better Assist its Sections, Dr. A. B. Willcox, Executive Director

Dr. Willcox extended an invitation to members of the MAA to visit the Washington office when they are in the city or to write or telephone whenever his office

can be of assistance in providing information on the Washington scene.

He emphasized that, as the person responsible for administrative liaison with the Sections, he has a vital interest in strengthening the ties between the national organization and the 28 Sections. He presented a brief report on several areas in which his office tries to be of assistance to the Sections or hopes to be of assistance in the future:

1. In lieu of the typewritten lists of Section members previously sent to Section Secretaries in advance of each Section meeting, his office is now sending gummed address labels. It is hoped that this will reduce somewhat the labor and expense of running a meeting.

2. By vote of the Board of Governors, the budget allocation for grants-in-aid to Sections will be increased from $500 to $3,000 annually beginning in 1970. Sections which, inspite of all reasonable efforts to support themselves financially, find themselves in a serious financial squeeze will be able to apply for a supplement, not to exceed $300 per Section to the normal annual payment from the national treasury. Details will be released later.

3. In order to become better acquainted with Section Officers and members, he plans to visit as many Section meetings as he can each year, hoping to visit all Sections over a period of several years. He hopes that this will enable the MAA office to be more responsive to the special needs of the Sections.

4. Drawing on the discussion which Professor Alder's remarks this evening will stimulate, the MAA hopes to assemble a small brochure containing useful suggestions for new Section officers who are involved with the planning of programs and arrangements for meetings. He also hopes to revise and enlarge the mimeographed materials presently sent to newly-elected Section Officers.

5. The MAA continues its offer to send to any Section meeting any of its national officers as speakers. This is done at no cost to the Sections. Invitations should be sent directly to the officer (President, Past-President or President-Elect, First and Second Vice-Presidents, Secretary, Treasurer, Editor of the MONTHLY, Executive Director) with copy to Secretary Alder. If the program committee has no particular choice of an officer as a speaker, Professor Alder will be happy to make arrangements.

6. The Committee on Secondary School Lecturers is seeking financial support from a foundation for a program of assistance in the development of secondary school visiting lecturer programs. No support has been found as yet, but there is hope.

7. It has come to the attention of the national officers that successful, self-supporting programs of visiting lecturers to secondary schools exist in some Sections. Descriptions of such programs, with enphasis on how they became self-supporting after a period of NSF support, would greatly strengthen the MAA's proposal for a grant to help repeat this experience in other Sections. He earnestly solicited such brief descriptions from the appropriate Sections. They will be most useful if they reach the Washington office in the early fall.

4. How One Can Organize a Good Section Meeting, A Discussion led by Professor H. L. Alder, Secretary of the MAA

Professor Alder reported that Professor H. L. Krall, the Chairman of the Allegheny Mountain Section, had suggested to First Vice-President Klaa that the

various Association officers pool their experiences in drawing up a list of suggestions for the use of Section Officers in planning Section meetings. As a result of this suggestion, a discussion on this matter was put on the agenda of this meeting. All useful suggestions made at this discussion will be assembled in a small brochure and distributed to all present Section Officers and, in the future, to new Section Officers after their election.

Professor Alder opened the discussion by presenting the following 16 suggestions of his own:

a. Charge a committee of at least 4 people with the responsibility for the program at your Section meeting. This could be a Program Committee appointed for the purpose or the Executive Committee of your Section.

b. Begin planning for your Section meeting somewhere between 4 and 6 months prior to the date of your meeting.

c. For a one-day meeting, plan for a program of not more than 5 hours (including the Business Meeting).

d. Plan for as many invited papers as possible. Consider contributed papers only if you cannot fill your entire program with invited papers.

e. The program should be balanced appropriately between topics in mathematics and those on the teaching of mathematics. As a rule of thumb, the program should be balanced about equally between the two.

f. Choose significant topics of definite current interest.

g. Consider the most desirable speakers whom you would like to talk at your Section meeting. Never reject a speaker because of fear that he might turn down the invitation. The chances are that he won't.

h. Consider taking advantage of the "Plan of Visits by National Officers to Section Meetings", under which national officers, including the Executive Director, are available for visits to Section meetings with travel expenses paid by the national office of the Association. Sections desiring to invite a specific officer should write to him directly, with copy to the Secretary of the Association; those having no specific preferences should write to the Secretary, who will then make the arrangements.

i. Consider the Visiting Lecturers of the Association as good candidates for talks at Section meetings. Visits made by the Visiting Lecturers to Section meetings cannot, however, be considered as visits under the Visiting Lectureship Program of the Association sponsored by NSF, that is, these lecturers cannot be compensated from NSF funds for such visits.

j. To find out about possible good lecturers from your Section, contact faculty members in institutions within your Section in whose recommendations you have full confidence.

k. Never reject an outstanding speaker because he has spoken to your Section previously.

l. In a choice between a good topic and a good speaker, rule in favor of the speaker.

m. Be sure that your program contains at least some features of interest to two-year college teachers of mathematics.

n. Never have anyone talk at a Section meeting--including those giving contributed papers--concerning whom you have no positive recommendation available.

o. Whenever possible, include a panel discussion with audience participation in your program; such discussions are always popular. Try to pick a controversial topic of current interest in the teaching of mathematics or in the curriculum. It is essential to have a strong moderator to prevent questions and comments from the audience from degenerating into contributed papers.

p. Make your business meeting informative. Have your Sectional Governor report on actions taken by the Board of Governors and the Chairmen of your Section committees on the major current activities of your Section. Make appropriate awards at the business meeting to the recipients in person, for example, awards to the top scorers in the Putnam Prize Competition.

He then asked for suggestions from the assembled Section Officers.

Dr. E. C. Posner, Chairman of the Southern California Section, reported that in his Section, terms of members of the Program Committee overlap in order to have continuity in the Committee. Most of the Section By-Laws make the Chairman an ex-officio member of the Program Committee; he felt the Chairman could make some contributions if he attends committee meetings. He also felt that attendance at Section meetings depends a great deal on the way the talks are titled. In many Sections, the programs, instead of consisting of expository papers, are more like those at AMS meetings. His Section begins planning for the next meeting right after the preceding meeting. It always includes panel discussions, and this year it is planned to have one on two-year colleges. Expository talks are very valuable, but should not be at the graduate level. His Section does not provide for contributed papers.

President Young felt that lack of funds is a handicap in getting invited speakers for Section meetings, but it may be less of a handicap than many Sections think. Anyone who lives in a Section is fair game to be asked for a talk in his Section without being paid mileage. For speakers outside the Section, there is an obligation to pay transportation, he felt. If a Section cannot pay an honorarium, the speaker should be so informed and undoubtedly will not turn down the invitation. He observed also that some Sections hold their meetings at or near a university with a strong colloquium program. If the right speaker is chosen, the unversity would undoubtedly like to have him as a colloquium speaker. This eliminates the need for the Section to pay his expenses. He felt that the question of contributed papers is a vexing one: if there are to be contributed papers of a research type, at least two sessions should be scheduled simultaneously following the system used by the AMS. If this is done, perhaps one should have one session of an educational nature and one of a mathematical nature. A third type of Section meeting which President Young saw in the South was for undergraduates. Undergraduates in the area had prepared expository papers which were very interesting. He felt that the MAA should find ways of getting all members of a Section to their Section meeting.

Second Vice-President Jennings thought that one way in which this could be accomplished would be by joint meetings with other mathematical groups, perhaps groups from applied mathematics. In the Pacific Northwest Section, the joint meetings are held with SIAM.

Professor H. L. Krall asked about payment of honoraria to officers, since they had adopted a certain policy in the Allegheny Mountain Section and were wondering whether it was satisfactory. President Young replied that most universities pay $50 to $75, very few pay more than $75. Professor Flanders stated that if the Section had no money, this would be fine; if they can afford $50, it would be appropriate.

Professor H. M. MacNeille stated that several years ago he had arranged to show films at some Sectional meetings. He announced that films are available free of charge from Modern Learning Aids for showing at Sectional meetings. Professor Alder felt this to be a very good suggestion, and reminded the Section Officers that, when ordering these films, they must specify that they are to be shown at a Sectional meeting. From his experience, he observed that the best attendance at film showings is achieved when films are shown which star local mathematicians. Professor M. E. Wick, Chairman of the Wisconsin Section, suggested that in the proposed instructions for Section programs, it be announced that films are available free of charge.

Professor Harley Flanders suggested that notices for Sectional meetings should be sent out at the right time--preliminary announcements should go out five or six weeks prior to the meeting, and the final announcement two or three weeks before the meeting. The announcement should contain very complete and accurate information. There should be someone in charge of arrangements at the host institution who knows his business; one must pay very strict attention to details and avoid badly lit or overheated rooms, poor blackboards, etc. He also suggested that arrangements should be made whereby people can talk to each other informally, a place for tea and coffee to be served where people can get together.

Professor J. L. Smith, Chairman of the Ohio Section, stated that regarding point a of Professor Alder's suggestions, the Ohio Section has a three-man program committee with rotating terms.

Professor F. T. Kocher, a Director from the Allegheny Mountain Section, suggested that the MAA representatives should be the people with primary responsibility for building up attendance at Section meetings.

Professor W. S. H. Crawford, Chairman of the Northeastern Section, stated that it is very difficult to stir things up in a social way at one-day meetings. He asked for ways to accomplish this at two-day meetings.

Professor Arnold Wendt of the Illinois Section stated that their meetings are held Friday afternoon and evening and Saturday morning, and that this serves their purposes.

Professor D. W. Blakeslee of the Northern California Section inquired how many Sections hold meetings over a two-day period and how many people attend. Professor J. L. Tilley, Chairman of the Louisiana-Mississippi Section, replied that, at their last two-day meeting, there were 250 people in attendance. The meeting was held

at a hotel. Professor Joseph Hashisaki, Governor of the Pacific Northwest Section, reported that their meetings are held jointly with AMS and SIAM and are held overnight. Professor Wick reported that their Section had just tried a meeting lasting Friday afternoon and evening and Saturday morning and that the attendance was up 50% over the previous year; accordingly, they have decided to continue 1-1/2 day meetings. Professor D. E. Edmondson, Governor of the Texas Section, stated that their Section had used this pattern for some twenty years, with their business meeting scheduled on Saturday morning.

Professor Mary P. Dolciani asked about the list of MAA representatives; Dr. Willcox replied that, for the past year, his office has sent the Chairman of each Section a list of all the colleges within his Sectional boundary, and requested that the Chairman appoint an MAA representative at each college and university where there is currently none and appoint a new representative where such action is appropriate because the previous representative has left or is leaving the institution or for other reasons. Professor Alder stressed the vital role played by the MAA representatives and the importance of keeping this list up to date. To accomplish this, the help of the Section Officers is needed.

Professor Alder concluded the discussion by inviting those present to send him additional suggestions for organizing good Section meetings by September 15. [Secretary's Note: Since these minutes are being sent out after September 15, the Secretary herewith extends this deadline to October 10, at which time all useful suggestions received will be assembled in the proposed brochure.]

5. Report on the American Mathematical Monthly, Professor Harley Flanders, Editor.

Professor Flanders reported on the current status of his efforts to make the MONTHLY more attractive to its readers. He asked for comments and criticisms from those present. Dr. Posner, Chairman of the Southern California Section, stated his belief that the MONTHLY had vastly improved and would enable the officers of his Section to recruit more members. He added that everyone he had spoken to in his Section was very pleased with the MONTHLY.

Professor J. L. Smith, Chairman of the Ohio Section, suggested that more information be published which might encourage two-year college teachers of mathematics to attend meetings.

President Young then announced that the MAA had entered into an agreement with the publishing firm Prindle, Weber & Schmidt (PWS) for support of a publication which they plan to initiate in the spring of 1970 for mathematics teachers in two-year colleges. The publication will have an independent editorial board, of which the MAA will appoint two representatives. The MAA has an option to take over the journal as an MAA enterprise at the end of five years. In return, the MAA has promised not to publish a journal for two-year college teachers within the next three years. This journal will contain mathematical education articles, so that it will not compete with either of the two MAA journals. CUPM has been assisting with the arrangements. The MAA is considering the question whether at some time the two-year college teachers may wish to have the option of receiving the MATHEMATICS MAGAZINE and the proposed PWS journal as a privilege of membership in lieu of the MONTHLY; this question will be studied very carefully before any action is taken.

In answer to a question about subscription rates for the proposed PWS journal, President Young replied that PWS is primarily interested in getting its name before the two-year college teachers and that the rate would be nominal.

In answer to a question as to when the publication would come out, Dr. George Pedrick replied that the target date was February.

6. Report on the MATHEMATICS MAGAZINE, Professor S. A. Jennings, Editor

Professor Jennings reported that most of the articles published in the MAGAZINE so far this year have been carryovers from the previous Editor. He expressed his hope to avoid articles which presume knowledge at the graduate level. His objective was to direct the MAGAZINE to people with a major in mathematics and who have a continuing interest in mathematics.

7. Report of the Committee on Institutes, Professor V. O. McBrien, Chairman

During the year 1968-69 the Committee on Institutes held meetings at San Francisco, Madison, and New Orleans in conjunction with the annual and summer meetings of the Association. The Committee will meet on August 26, 1969, during the summer meeting at the University of Oregon.

As an outgrowth of the meeting held in January, 1968, at San Francisco, an informal dinner meeting was planned for the New Orleans meetings in 1969. Participants (and wives) who were planning to be in New Orleans, lecturers, Directors of the Seminars, representatives from the Committee on the Undergraduate Program in Mathematics and from the Institutes Committee, the Secretary of the MAA, representatives from the National Science Foundation, the Sloan Foundation, and the Research Corporation were invited to the dinner and informal panel discussion on "The Impact of the MAA Summer Seminars".

Thirty-seven persons attended the meeting held at the Jung Hotel on Friday, January 24, 1969. These included 29 participants (a remarkable 50 per cent of those at Bowdoin in 1965 or 1966), several wives, Seminar Directors E. A. Cameron and V. O. McBrien, D. L. Thomsen, Jr., Chairman of the Institutes Committee and Director of the panel discussion, E. R. Mullins of the Institutes Committee and a participant in the Cornell Seminar in 1964, L. H. Farinholt, Vice President of the Sloan Foundation, R. L. Korgen, Director of college teacher programs for the NSF, and H. L. Alder, Secretary of the MAA.

In the informal discussion, both the direct and indirect effects of the Seminars were discussed. A report on the informal reunion was submitted to the officers of the Association and other interested persons on March 1, 1969.

At the Committee meeting in New Orleans on January 25, 1969, the Committee voted to repeat the 1967 request to the mathematical community that mathematicians seek federal support for conducting summer institutes for junior college teachers of mathematics. Through the kindness of Professor Alder and the editors of the MONTHLY, an announcement was inserted in the April, 1969, issue. Concurrently, personal letters were sent to the chairmen of some fifty mathematics departments in large urban universities urging their departments to submit proposals for such institutes. These pleas were followed by requests to their university presidents

asking them to support proposals for such institutes. The Chairman of this Committee received many letters of support from both mathematicians and university officials. It seems evident that many more proposals for junior college institutes will be forthcoming from the urban universities, and it is hoped that the necessary financial support will be provided for these institutes proposed for 1970 and 1971. In conjunction with the problem of furthering the mathematical education of junior college teachers, this Committee has sent copies of the major announcements and letters to the CUPM and the Committee on Assistance to Developing Colleges, as well as to R. L. Korgen, Director of College Teacher Programs for the NSF.

The other major matter confronting this Committee is the renewal of the MAA Summer Seminars, hopefully in the summer of 1971. During the past several years, there has been considerable discussion by Committee members and participants about the possibility of conducting several simultaneous shorter seminars at diverse geographical locations. These views were presented in writing to the March, 1969 meeting of the Executive and Finance Committees, but there was considerable doubt about the wisdom of this venture. This Committee is therefore making tentative plans for a single 1971 Seminar patterned after the previous Seminars held from 1964-1966. These plans will be finalized at the August 26 meeting and submitted to the Board of Governors for approval so that the Committee can meet the June, 1970 deadline for submission of proposals to the NSF.

According to the report of the Treasurer, the Committee had $2,690 left in its account on December 31, 1968. The Washington office reports that the only available Seminar lecture notes for sale are copies of the Loomis lectures of 1965.

In answer to a question whether NSF would give any hint on how they might act on proposals for summer institutes for college teachers submitted to them, Professor McBrien replied that more proposals have been submitted to NSF than can be supported. He had heard that NSF was planning to write to some of those having submitted proposals, requesting that they resubmit them under NSF's new program for junior college teachers. NSF had received 40 proposals for summer institutes for college teachers, which is the largest number ever.

8. Report of the Committee on Secondary School Lecturers, Professor H.M. Bacon, Chairman

The Committee, presently consisting of H. M. Bacon, Chairman, Grace E. Bates, J. N. Eastham, R. L. Finney, Joseph Hashisaki, N. D. Kazarinoff, and J. H. Wahab, met formally on August 25, 1968, at Madison, Wisconsin, and again last night, August 24, at Eugene, Oregon.

During the year the principal effort of the Committee has been to develop a proposal for support for a Secondary School Lecturer Program to be conducted on a modest scale, nationally, by the Association. It should be noted that some Sections are at present conducting such programs. Briefly, the proposal suggests that such a national program might provide funds during its first year of operation for lecturers in each of eight Sections of the Association. Hopefully, the scope of the program might be enlarged in subsequent years. The proposal suggests, further, that contributions from some of the schools visited would serve to augment any subvention from foundations or other sources. Experience in some Sections already indicates that such contributions have been not inconsiderable, and that they may

well increase in the future. The Committee hopes that this aspect of the situation will encourage foundations, government, or other support of a program that may ultimately be less and less dependent upon a subvention.

The Executive Director is now engaged in investigating sources of possible financial support for the program outlined in the Committee's proposal.

The Committee particularly wishes to commend the efforts of those Sections now carrying on Secondary School Lecturer Programs. It is hopeful that ultimately these and additional programs may be again supported on a national scale.

In reference to Professor Bacon's urging that Sections carrying out secondary lectureship programs inform him of such programs, Professor L. J. Montzingo, Jr., First Vice-Chairman of the Pacific Northwest Section, inquired whether such information could also be passed on to other Sections to assist them in setting up similar programs. Dr. Willcox replied that he would assemble all information on sectional secondary school lectureship programs and that his office would pass it along to all Section Officers.

Professor J. R. Hanna, Chairman of the Rocky Mountain Section, reported that his Section had conducted a program at various high schools; about $1500 was allocated for this but he doubted that all of it was used. There are four states in the Rocky Mountain Section: Colorado, Utah, Wyoming and about half of South Dakota, and the funds were divided up according to population. He participated in the lecture program himself and felt that it had been very well received. They went out in teams with other scientists; mathematicians went out with chemists and spent a day or two at a high school. They talked to mathematics classes and also to assemblies, science clubs, etc. He felt that the program was very much worthwhile.

Dr. Willcox reported that there was at least one Section making a small profit from the High School Mathematics Contest and they had strong feelings that this money should be spent for the benefit of secondary schools, and thus made it available to the Secondary School Lectureship Program. If we could mention that something like this exists in a number of Sections, it might add strength to the proposal to be submitted to foundations.

9. Articulation Between Junior Colleges and Senior Colleges, Professor Arnold Wendt

The Illinois Section at its 1968 meeting established the Junior College Committee. During 1968-69 this Committee, consisting of junior college teachers, initiated two state-wide meetings dealing with the problem of coordinating the mathematics programs in Illinois colleges and universities. As a consequence of these meetings, the Section established the Articulation Committee, which has as its primary responsibility the writing of a handbook incorporating the consensus voiced on various problems at the aforementioned articulation conferences. The Articulation Committee will also consider the problem of testing and placement, especially tests for placement in pre-college algebra courses.

Professor Wendt noted that the Section had requested $150 from the Committee on Sections to support the Articulation Committee, in particular, the two-year college representatives for their travel expenses. He indicated that the two-year

college teachers have been quite impressed at the two meetings held so far and have made favorable comments. All of the Section Officers support these meetings, including the Sectional Governor, Professor F. E. Hohn. The latter added his feeling that assistance to two-year college teachers of mathematics should be a nation-wide concern of the MAA.

10. The Place of the Two-Year Colleges in the MAA Program, Professor Ronald Harrop and Mr. Norman Barton.

Professor Harrop reported that, in view of the deliberate long-term attempt within the Section to increase MAA activity in the two-year colleges, as well as in the four-year colleges and universities, and with the hope of extending cooperation and mutual understanding between the varying colleges and universities, the Section requested that within the Eugene MAA Summer Meetings there be sessions of particular interest to junior college and community college personnel. It welcomed the support this request received at a National office level and within the Program Committee.

A survey has recently been completed among the universities and colleges of the Section to assess whether or not there would be support for the Section becoming involved in coordinating a high school lecture program. Many enthusiastic letters of support for the project were received, several of them naming persons who would be prepared to give lectures or help in the administration of the program. The business meeting of the Section today has authorized its new Executive to pursue the matter further, making enquiries to assess the support for the project within the schools and implementing the program in such manner as seems appropriate. The meeting also authorized its Executive, in view of preliminary correspondence which took place this last year, to make enquiries, and act if it appears appropriate, in the matter of Section sponsorship within the Northwest Mathematics Conference of some part of the Conference which is concerned with junior college work. Enquiries are to be made regarding the suitability of corresponding sponsorship of similar activities within geographical areas of the Section not covered by the Northwest Mathematics Conference.

Mr. Barton began his presentation by noting that, when preparing his report, he had not realized that the MAA had such an interest in the two-year college teachers of mathematics. In view of what he had heard at the meeting this evening, he wanted to make the following points:

1. Two-year college teachers of mathematics will be very appreciative of the efforts made in their behalf.

2. Representation at the meetings arranged for the two-year college teachers may be very thin, partly because of financial difficulties in securing travel expenses and partly because of a lack of communication.

3. He suggested that in future programsperhaps a certain percentage of the program be devoted to the interests of the two-year college teachers of mathematics and run concurrently with another session of interest primarily to the rest of the mathematical community.

4. The two-year college teachers of mathematics appreciate the opportunity to work on these programs.

5. He thanked the group for the assistance given so far and expressed the hope that it will be continued and expanded in the future.

He then presented his prepared report:

"As the representative of two-year colleges on the executive of the Pacific Northwest Section of MAA, I have requested time to present a plea for continued and increased cooperation with the instructors of mathematics at the two-year colleges.

As you know, the mathematics instructor at the two-year college level, in most cases, must have at least a master's degree. This puts his interests at a level higher than those of the average high school teacher, but lower than those of the university professor who may be involved in research or graduate instruction. He is, therefore, searching for the proper fish bowl in which to swim.

Discussions with instructors of mathematics at two-year colleges in the Northwest indicate that there is a need for a common meeting ground, a forum for the exchange of ideas, and a source of incentive, encouragement and perhaps direction. The thought that these might be filled by the creation of an organization at the college level does not seem to consider the desirability of maintaining a close relationship between university and college instructors, tends to rob the colleges of participation in highly professional groups, and certainly reduces direct contact with recent advances and research currently in progress. Of course, individual membership in MAA, AMS, and SIAM is a possibility and should be encouraged.

An analysis of the programs of the annual and regional meetings of these organizations indicates that while some presentations may be of interest to the college instructor, a great many are at such a high or specialized level that the value to the college instructor is, at most, very small. The meetings of NCTM, whose prime interest is the elementary and high school areas, do little to stimulate the college instructor, or to improve his knowledge of mathematics, although they are valuable in providing some of the required liaison between high school and college instructors. He needs an affiliation which will enable him, simultaneously, to hear those more advanced presentations in which he may have a personal interest, to participate in a program designed particularly for him, and to have personal contact with other mathematicians.

I am pleased to report that the MAA in this area does provide this type of affiliation. The executive of this Section has shown a strong interest in the college instructor. Without diluting its own program, it has for the past few years provided the colleges with facilities to meet, sometime in joint session and sometimes at sessions specifically organized for them. We, in the colleges, wish to thank the executive and the Section for these opportunities, and for the encouragement thus provided. We are hopeful that these provisions will continue to be made, and perhaps expanded in the Northwest.

We are particularly pleased about the opportunity provided at this Summer Meeting. We hope that it is but a forerunner of what may be offered at future summer meetings. We sincerely hope that the MAA will agree that the relationship is a valuable one, and that it will recommend the inclusion of specific college sessions at future annual and regional meetings. To accomplish this, may we suggest that the executive have no concern about scheduling college sessions coincident with research presentations, and that if the program committees included a representative from the colleges he could be responsible for the special sessions.

"It is evident that the instructors at the two-year colleges need the incentives, encouragement, and support which can be provided by the MAA. May I, on behalf of those whom I represent, thank the MAA for its support and express a sincere hope that it will look with favor on a continuing and expanding association with the college instructors."

Professor Alder reported that he always includes in his letter to the Program Committees for national meetings a suggestion that a session be devoted to the interests of the two-year college teachers of mathematics. He indicated that some Program Committees have been reluctant to schedule such sessions concurrently with others, since they consider it important that the rest of the mathematical community has an opportunity to familiarize itself with the problems facing the two-year college teachers of mathematics.

It was suggested by several Section Officers that Sections should also include in their programs some parts of special interest to two-year college teachers of mathematics and that administrations of two-year colleges be asked to support travel expenses for their teachers to attend these regional meetings.

President Young reminded the Section Officers that the MAA holds a joint meeting with NCTM every other year. At these meetings, high school teachers from nearby schools attend in large numbers. Similarly, it could be expected that, if all national meetings contain at least some parts of special interest to two-year college teachers of mathematics, those from nearby two-year colleges would come to these meetings in considerable numbers. Professor Jennings agreed that, for this reason, it is very important that at all national meetings some part of the program be devoted to the interests of the two-year college teachers of mathematics if we are to encourage them to be part of the mathematical community. He urged that this aspect should not be overlooked.

11. Report of the Committee on the Undergraduate Program in Mathematics, Dr. G. B. Pedrick, Executive Director

At the time of CUPM's report in January 1969, the expenditure limitation imposed by NSF had just been raised and activities were being resumed. From February through June, meetings and conferences were held as rapidly as was feasible with only two Directors in the Central Office; the Committee is grateful to Dr. Pedrick, Dr. Leibowitz, Mrs. Magann, and the rest of the Central Office staff for being willing to work at such a dizzying rate that much of what the Committee had planned for the year was accomplished in five months. Between February 1 and the end of August there were 19 meetings of panels and other working groups, and 8 conferences.

The Board requested in August 1968, a report from CUPM by August 1969 on the accreditation problem. This problem is being studied by our panel on College Teacher Preparation, but because no work could be done until February, the report is not yet ready; we expect to present it to the Board in January 1970.

General Committee Activities. (1) An ad hoc group was formed by I. N. Herstein to examine the problem of encouraging more members of minority groups to become mathematicians. One meeting was held and more are planned.

(2) Inspired by a memorandum from E. Spanier (quoted section I(d) of the proposal), CUPM held a conference on April 26 at which representatives from 16 large universities discussed problems of the quality of college teaching. The general conclusion was that attention to these problems is badly needed; CUPM will form an ad hoc group to consider means of meeting Spanier's criticisms. Suggestions from the Board of Governors will be welcome.

(3) Revision of the report, A General Curriculum in Mathematics for Colleges, is badly needed and work will be started in the fall.

Teacher Training. After its conference on new directions in school mathematics in June 1968, the Panel and its subpanels have held several meetings; revised recommendations and coure guides should be completed by June 1970.

College Teacher Preparation. The Panel has concentrated on its study of accreditation and certification. It has also sponsored 2 conferences on the Graduate Task Force Report (to appear soon) and the Qualifications report. Further plans include the preparation of resource papers and work on the problem of sustaining the mathematical vitality of young mathematicians at colleges where research is not emphasized.

Two-Year Colleges. The Panel has sponsored 5 conferences on its suggested transfer curriculum. Although the problem dealt with in this report was not regarded by our Two-Year College Panel members and consultants as the most urgent, it was the most accessible and therefore was attacked first. As it turned out, the mere holding of conferences has enabled CUPM to begin to establish communication between MAA and the two-year college community, between two-year and four-year colleges, and among two-year colleges themselves. Several states are now organizing their own continuing efforts for communication. Conferences will continue until the whole country has been covered.

The Panel has begun to work on the vexing problem of "general education" mathematics courses in two-year colleges; panel members are visiting selected two-year colleges to gather information.

CUPM's report on Qualifications for a Two-Year College Faculty in Mathematics is due to be published soon. Steps will be taken to present it to teachers in two-year colleges, prospective teachers, university mathematics departments that train the teachers, and administrators.

Advisory Group on Communications. This group serves are CUPM's editorial board. A newsletter about the use of computers in teaching calculus is due to appear soon. Further newsletters are in preparation.

Revision of the Basic Library List, which is now almost 5 years old, is about to begin; work has been started on the very difficult problem of a Basic Library List for Two-Year colleges.

Applied Mathematics. (1) Statistics. The Panel is preparing recommendations for undergraduate mathematics preparation for graduate work in statistics, and will next prepare recommendations for an elementary statistics course of the kind that is frequently the responsibility of a college mathematics department.

(2) Computing. This Panel is especially concerned with the use of computers for improving instruction in undergraduate mathematics courses, and with developing an undergraduate mathematics major leading toward careers in computing.

(3) Life Sciences. The Panel has formulated recommendations and will soon hold preliminary conferences; a final report is expected soon.

(4) Panel on Applied Mathematics. This new Panel will attempt to do something about undergraduate courses in applied mathematics and the introduction of applications into mathematics courses in general; it will also undertake a revision of the old recommendations on mathematics for students of physics and engineering.

Consultants Bureau. 41 visits were made during the academic year.

Professor D. E. Edmondson, Governor of the Texas Section, asked about the status of the study of liberal arts courses. Dr. Pedrick replied that the new proposal being submitted to NSF contains a provision for this study, and it is hoped to initiate this study soon. CUPM will start the project by commissioning someone to compile an annotated list of books for these courses.

12. The First Mathematics Fair in Greater New York, Professor Meyer Jordan, Chairman, Metropolitan New York Section.

The First Mathematics Fair sponsored by the Metropolitan New York Section of the MAA was held in the spring of 1969.

In late spring 1968, a preliminary announcement of the Fair was sent to all public, parochial and private high schools in New York City, and in Westchester and Rockland Counties. Eligible to participate were all high school students who were enrolled in, or had completed 11th year mathematics or the equivalent.

Complete instructions and applications were sent to the schools in early fall 1968. 138 students from 31 schools submitted entry applications, and 135 of these students submitted papers. The students were divided into 3 groups:

Level I:	Enrolled in 11th year mathematics	44
II:	Enrolled in 12th year mathematics	60
III:	Enrolled in Advanced Placement Math.....	31
	Total	135

At the first round of The Mathematics Fair, held at Pace College on April 20, 1969, 94 of the students who submitted papers read them to panels of 3 or 4 mathematics professors and high school teachers, and answered probing questions. (The papers had, of course, been read by the panelists in advance.) 35 of the 91 students were judged winners of the first round, and were invited to participate in the final round held at Pace College on April 27, 1969.

First Round Winners:	Level I	14
	II	10
	III	11
Total		35

Thirty-four first round winners participated in the final round; 5 of these won first place gold medals; 9 won second place silver medals.

	First Place Gold Medalists	Second Place Silver Medalists
Level	I . . . 2	I . . . 4
	II . . . 1	II . . . 3
	III . . . 2	III . . . 2

The 21 first round winners who did not win a first place gold medal or a second place silver medal, were awarded third place bronze medals.

A small registration fee was charged to the participant's high school. These registrations covered about 25% of the costs of theFair. The MAA contributed $150, and the Association of Teachers of Mathematics of New York City contributed $35. Our efforts to get other contributions were unsuccessful. The balance of the expenses of the Fair, about $500, came from the treasury of the Metropolitan New York Section. We hope to have more income from registrations in the future, and perhaps more contributions. The expenses of running the Fair (printing, postage, supplies and medals) cannot be reduced, and the treasury of the Metropolitan New York Chapter is limited.

Many of the papers submitted by the high school students showed a surprisingly high level of mathematical sophistication.

13. Report on the Annual High School Mathematics Contest, Professor J. M. Earl, Chairman of the Committee on High School Contests

Students and Schools. The 20th Annual High School Mathematics Examination was held on March 11, 1969 in more than 7,000 high schools with about 335,000 participating students. Coordinates abroad administered the test in twelve countries on Europe, Africa, and the Middle East; 20,000 copies of the test were used in England and translations into several foreign languages were made.

The Examination. For the second year, a 35 question 150-point multiple 5-choice test was used; it consisted of ten each of Very Easy (3-point), East (4-point), Medium (5-point), and five Hard (6-point) questions. The team and individual median, and upper and lower quartile scores were each about 10 per cent lower than in 1968, but scores were substantially lower at the top levels. There were only 16 teams on the School Honor Roll as compared to 50 in 1968. Individual scores of 120, 100, and 80 or above were made by only 7, 81, and 358 students as compared to 42, 209, and 701 respectively in 1968. About five per cent fewer schools reported results this year then last. A similarly structured 35 question test is planned for 1970.

Awards. The Silver Cup award for the highest team of three score was won by Bronx High School of Science, New York, with a score of 334.50 out of a possible 450 points. The Small Plaque for the highest individual score was won by Quan K. Lam of Sacramento Senior High School, California, with a score of 145 out of 150 points. There were 641 awards to schools for high team scores; 564 of these were Certificates of Merit for scores in the upper decile regionally. Among 1,664 awards to students were 50 each of individual slide rules and MATHEMATICS MAGAZINE subscriptions,

358 Honor Roll Pins, and an assortment of 864 medals and certificates to two and three time winners in their own schools. In addition to all of the above awards, the top student in each of about 5,630 schools turning in results on 3 or more students, won the MAA Pin award.

1968 Item Analysis. The 1969 Summary of Results contains an item analysis of the 1968 test questions based on a ten per cent sampling of the high scorers in the participating high schools. It is in the form of a bargraph which shows directly, for example, that question 18 was attempted by only 15 per cent of the sample with 11 per cent answering correctly. On the other extreme, question 10 has percentages of 98 attempting it with 95 correct. Other things such as average scores for single or groups of questions may be calculated for the sample.

NASSP Approval. At its meeting on May 4-6, the Committee on National Contests and Activities of the National Association of Secondary School Principals voted to place the Annual High School Mathematics Contest on the Approved List for 1969-70 and requests that the following statement be attached to any announcements sent to schools or the public: "The National Association of Secondary School Principals has placed this program on the Approved List of National Contests and Activities for 1969-70."

Contest Status. As we move into the twenty-first year of the Contest, we continue to attempt to reflect current curricular content and practice while we stimulate secondary students to continued study of mathematics by presenting for solution meaningful problems some of which furnish a challenge to even the most capable of them.

In answer to a question, Professor Wendt reported that the Illinois Section makes a profit of about $300 annually on its administration of the Contest because the registration fee exceeds their expenses. The Section returns this to the high schools through the visiting lectureship programs. He noted that the $300 profit is realized after a donation of from $150 to $200 to the national Committee on High School Contests.

In answer to a question whether this was a legal use of the profit, Professor Alder indicated that this was an appropriate use of the profit, but he cautioned Sections against any use of these funds which are not of direct benefit to the high schools. He felt, for example, that use of these funds to pay travel expenses or honoraria to speakers at Sectional meetings would not be appropriate.

Professor D. W. Blakeslee suggested that the way to make a profit on the administration of the Contest is to have participation by a large number of schools and to find a Contest Chairman who is able to run the Contest with free secretarial help.

14. Report on a Project of the Louisiana-Mississippi Section, Professor J. L. Tilley, Chairman

The Louisiana-Mississippi Section has 67 institutions of higher learning of which 26 four-year colleges are located in Louisiana and 16 four-year colleges are in Mississippi. The remaining 25 are all junior colleges located in the state of

Mississippi. According to the Combined Membership List for 1968-69, only 5 of the junior colleges have one member of the Association, with the remainder having no members. Of the 16 four-year colleges in Mississippi, 4 have no members and 2 have, at most, two members. In Louisiana, the situation is considerably better, with only one institution having only one member of the Association, and the rest having three or more.

During the fall semester, the Louisiana Vice-Chairman plans to visit the new branches of Louisiana State University as well as several other small colleges in his area of the state to encourage membership in the Association and participation in our Section meetings.

In Mississippi, the state has been divided up in such a way that Dr. Noel Childress of Ole Miss, as well as the Mississippi Vice-Chairman and the Section Chairman will visit almost every junior college in the state and several of the four-year colleges. Each visit will include an hour's lecture to faculty and/or students as well as a personal appeal to each staff member to join the Association and participate in the Section activities. Due to the size of the state, the Section Chairman has reserved for himself six over-night trips to include visits to 3 to 5 colleges on each trip.

The Section received from the Committee on Sections $200 to help cover the costs of these visits. It is planned to pay the over-night accommodations and use the remaining monies to pay mileage on a pro-rata basis. The money has been deposited in a savings account and hopefully disbursement can wait until after the first of the year so as to include the interest earned.

The meeting adjourned at 10:00 p.m.