

Membership and Dues

CLASSES OF MEMBERS

According to the bylaws (VII, 1) there are two kinds of individual members, ordinary and contributing. The contributing member differs from the ordinary member only in voluntarily paying annual dues which are larger by at least 50%. The route to ordinary membership is by application, election, and the payment of dues. In 1938, the election was by the Council. As part of an extensive revision of the bylaws in 1948, an Executive Committee was established and was empowered to elect members. The Council nonetheless continued to exercise the function of election of members, sometimes by mail. It may be the case that the first election by the Executive Committee was at its meeting of March 31, 1962. By 1963, election was being handled by the Executive Committee as business by mail. Since 1983, this duty was further delegated to the secretary and the associate secretaries.

For many years it was required that an application for membership carry the signatures of two members in support. In practice it came about that the signatures were sometimes those of the secretary and of another supplied by the secretary. It appeared that no useful purpose was served by the signatures and in 1973 the practice was abandoned.

Two large classes of ordinary members are nominees and members by reciprocity. Membership by reciprocity allows members of one mathematical organization to become members of a second with reduced (approximately half) dues. Reciprocity had been established with the London Mathematical Society in 1922 and was authorized with other societies in 1930. By 1938, there were reciprocity agreements in place with the *Unione Matematica Italiana*, the *Deutsche Mathematiker-Vereinigung*, and the *Greek Mathematical Society*. The total number of members by reciprocity was small, being 52 in 1937.

Reciprocity was established with the *Société Mathématique Suisse* in 1941 and with the *Sociedad Matemática Mexicana* in 1943. In 1946 the Council passed a resolution favoring reciprocity agreements in principle. From this

point on, many such agreements were completed, until for the year 1988 there were 48 such agreements in effect. The number of members by reciprocity in 1987 was about 2800.

There was one notable instance of difficulty with membership by reciprocity. Such a membership was established with the South African Mathematical Society in 1972 after an investigation of whether there was any color bar to membership in that Society. It was reported that there was none. In 1974 in response to objections to apartheid the agreement was cancelled.

The philosophical basis for reciprocity is this. There are persons who because of geographic distance or national situation might find that they could not avail themselves readily of the full range of privileges of membership. These privileges include most notably meetings but secondarily a variety of services such as the annual survey and the employment register. Reciprocity is an effort to price the membership for these persons commensurate with the benefits available to them, principally publications, so that they will nonetheless choose to belong.

The issue of possible reciprocity in North America was considered as early as 1950 by the Council. The Council approved a report from a committee consisting of G. T. Whyburn, chairman, Nelson Dunford, R. L. Jeffery, C. C. MacDuffee, and D. C. Spencer, that recommended extending reciprocity agreements "outside the American area." The committee noted that the majority of Canadian mathematicians are members of the AMS and that the Society could not afford the loss of revenue that reciprocity in North America would entail.

At the same time, at the insistence of the Council, the committee stated that "it is strongly recommended that, as occasion permits, mathematicians residing in contiguous territory to the United States be extended cordial invitations to become members of the AMS and that these invitations be supplemented by offering a favorable exchange rate where possible." This addendum was intended to ease the plight of mathematicians in Mexico.

There is a special relationship with the Canadian Mathematical Society, less favorable than reciprocity, established in 1988 whereby a member of the latter may join the Society and the Mathematical Association of America at a slightly reduced rate and a member of the AMS or the MAA may join the CMS at a slightly reduced rate. Note in this respect that the CMS represents the interests of both research and teaching while these interests are somewhat separated between the AMS and MAA. Moreover the CMS and the AMS and MAA have observers with status at the meetings of each other's governing bodies.

The class of institutional member was established in 1934 (see the discussion of dues). Institutional members as a privilege of membership may name nominees, who are ordinary members who do not themselves pay dues. All

but a small number (it was usually three) must be graduate students, and may remain nominees for only a short period of time (two years was the established interval). The intent was to interest prospective mathematicians in becoming more permanent members.

There were several other small categories of ordinary membership involving reduced dues for special cases. Of possible interest is the category of life member, in which an individual became a member for life through one payment of a fixed sum. With increasing services offered by the Society and with increased cost of services, partly caused by inflation, it became financially undesirable for the Society to continue this form of membership. The category had been established in 1898, with a payment of \$50. More recently the amount was set on an actuarial basis. Life membership was terminated by an amendment to the bylaws in 1941 in that no new life memberships were accepted. In 1988, the only remaining life members in this cohort were John Arnold, Oliver Collins, and David Widder.

In 1986 life membership was reinstated under different terms. A member for the past twenty years and of age at least 62 can become a life member by a single payment of five times the higher level of dues. In 1987 this provision was modified to set realistic dues for life membership of long-time members by reciprocity.

There are several small classes of members related to the dues that they pay. At the meeting of 27 April 1951, a report was received from a Committee to Consider Dues of Members Who Are the Wives of Members consisting of C. R. Adams, Chairman, E. R. Lorch, and D. V. Widder. The principle was enunciated that "Members of the Society ought normally to think in terms of their membership and their dues as support for a worthy enterprise in which they have a special interest, with relatively small emphasis on what they receive." There were several considerations in the remainder of the report but the matter was tabled.

In the minutes of the Executive Committee and Board of Trustees of 5-6 June 1965 there is the following item:

The establishment of \$28 as membership dues for a husband-wife joint memberships [sic]. The husband is to be billed at the rate of \$28 for dues and will receive the *Notices* and *Bulletin* as a privilege of membership. The wife will pay no dues but will be allowed a choice of subscriptions at members' rates, and both will be accorded all other privileges of membership.

It should be observed that the ordinary dues at the time were \$20 and the members' rate for the *Notices* and *Bulletin* was \$12, so that the figure of \$28 paid for two memberships at \$20 less one *Notices* and *Bulletin*.

A similar formula in less sexist language has prevailed. The following arrangement is available to a couple choosing to use it. One spouse pays full dues at the lower or higher level based on professional income. The other pays dues based on professional income less \$20 and does not receive the *Notices* and *Bulletin*. The figure \$20 is a vestige of a time when this was the members' rate for the *Notices* and *Bulletin*.

There is a category called student membership. A nominee, who has been paying no dues, may find full dues a hardship and drop membership. The category of student member was established effective in 1972 for discontinued nominees, good for one year whether the individual was in fact a student or not. The dues figure was set at \$10, then half of the regular dues. It has gone up to \$12. This category was extended to full-time students and unemployed (not resigned or retired members) without limit of time effective in 1974. The only verification of status is a statement signed by the member.

Members of at least twenty years who retire because of age or disability may remain active members without payment of dues. This level of membership however does not include the *Bulletin* as a privilege.

The number of members in a given year depends greatly on the day in which the count is made. The most abrupt change takes place in the late spring when persons who did not renew for the current year are dropped from membership. For many years, the count has been based on the Combined Membership List (AMS-MAA-SIAM), which is compiled during the summer and is printed in the fall. The recorded numbers of members in several years are as follows:

Year	Number
1940	2314
1946	3097
1950	4386
1955	4878
1960	6725
1965	10923
1970	14197
1975	15907
1980	19984
1985	22031
1987	22611

The more recent numbers are slightly inflated. They are the numbers of names of Society members in the Combined Membership List. There is a policy that when a person is dropped for nonpayment of dues, say about 1 May, the name still appears in the CML being compiled. This policy insures that names and addresses are not lost to the mathematical public through inadvertent failure to pay dues.

In his report of activity of September to November 1955 Executive Director John Curtiss advanced the idea of selling membership buttons as a morale builder and to increase group consciousness. He stated that such an emblem had been successful in other societies and outside the academic scene. The Council of 28 December 1955 empowered the executive director to explore the idea. Following a survey of a sample of membership the Council authorized the button, which carried the design of the seal, much as it appears on the cover of the Notices and elsewhere, and the Trustees concurred. Later the emblem was authorized for a tie clasp as well.

Some dissatisfaction with the idea of the emblem was expressed and the Council of 24 April 1959 followed a recommendation of the secretary that the emblem no longer be advertised though any orders that materialized could be filled. Some time later sales were stopped completely.

Election to membership has seemed to be almost automatic. For many years, persons proposed (i.e., applying) for membership were listed in the minutes for one meeting and were elected at the next. However there is a case recorded in the minutes of 23 November 1945 of an individual proposed for membership and not elected. There is no indication of reason and no record of the application.

More interesting is the case of Bourbaki, the faceless consortium of mathematicians concerned with definitive exposition. On 12 November 1948, an application for membership was received from Nicolas Bourbaki. According to this, he was born in Cucutemi, Poldavia on 29 February 1885 and received his Ph.D. in 1906 from the Royal Poldavian University. He was currently a fellow of the Rockefeller Foundation, having been a professor at the Royal Poldavian University from 1910 to 1919, scientific adviser to Hermann Publishing Co. since 1934, and member of the Royal Poldavian Academy since 1914. The recommendation for election came from A. A. Albert and L. M. Graves.

On 8 January 1950 another application was received from Nicolas Bourbaki. This time he was born in Cucutemi in the province of Moldavia in Rumania on 12 December 1886. His degree was Doctor in Mathematics from Kharkov University in 1910. He held the position of Directeur libre de Recherches a l'University [*sic*] de Nancy with a street address in Nancy. He had been Privat Dozent at the Dorpet University in 1913–1916 and professor at Zorngale College in 1926–1929. He was a member of the Royal Academy of Poldavia since 1917 and of the French Mathematical Society since 1949. This application was supported by R. M. Thrall and T. H. Hildebrandt. There is a pencil notation “à remplir et à retourner à FOURÈS.” Subsequent correspondence indicates that Thrall had received the application from Professor Fourès. (L. Fourès handled the applications for membership by reciprocity for the Société Mathématique de France and Thrall received them for the AMS.)

The secretary, J. R. Kline, had rejected the first application, saying to Albert in part that "The Society has two types of membership, individual and institutional contributing memberships. Bourbaki comes under neither classification." No more was heard from this application.

With respect to the second application, Kline wrote to Hildebrandt, a recent past president with whom he had worked, explaining the facts and giving a detailed comparison of the two applications. He further stated "I realize, of course, that you signed this application without having the background. I do not like this type of transactions [*sic*]. In fact, I rather resent membership in the Society being made a matter of jest. I think all of us who are devoted to and have worked for the Society believe that its dignity is such that one should not consider membership in it so lightly." He inquired how to write to Thrall. Hildebrandt replied that "I played the role of the innocent bystander or shall we call it dupe." He further stated that Thrall brought him the application, saying that it was from a real person and that he had checked the places mentioned and they seemed genuine. He suggested a letter to Thrall similar to the one he had received, which Kline then wrote. The tone of Thrall's reply suggests that indeed he did not know the background. On the other hand, he noted that "since N. Bourbaki is a member of record of the French Mathematics Society the matter of our rejecting his application carries implications which may be a source of international complications." He further suggested that the matter be considered by the Council. Although he represented the Société Mathématique de France for the AMS in matters of reciprocity, he was unwilling to pursue the matter.

Kline wrote a long letter of explanation to past president Einar Hille suggesting a mail vote of the Executive Committee. Another consideration appears in the letter, namely the potential of boycott of the incipient International Congress of 1950 in the United States were feathers to be ruffled. He then wrote to Saunders Mac Lane, W. T. Martin, and J. L. Walsh, all members of the Executive Committee and the last the president, seeking advice. He also wrote to Warren Weaver asking whether Nicolas Bourbaki was a Fellow of the Rockefeller Foundation on October 27, 1948.

Walsh noted that any decision was likely to be wrong, that the decision must be made by the Council, and that this is conventionally a slow process, which should not be hurried in this instance.

Hille replied in part that "I am afraid that I belong to the people who will never grow up, but it seems to me that you are running the risk of making a mountain out of molehill. . . . It may be a joke, but may also be for serious reasons to get the benefit of membership. In either case I would advice[*sic*] against a formalistic attitude." Further on, he wrote "I think a good case can be made out for granting membership. After all, a good fictitious character lives more intensely and a good deal longer than the humdrum reality. We know much more about Ulysses, who probably never existed, than about

Thales who did. There is no question in my mind, but that N. Bourbaki has made a stronger impression on present day mathematics and his fame will last longer than that of most present members of our Society....”

Martin recommended rejection, thought it was improper that the application had been filed, and recommended the formal vote of the Executive Committee, with the possibility of taking it to the Council.

Mac Lane remarked that “The whole matter has a definitely *humorous* side — why can’t it be stalled along and brought to the attention of the Council for their amusement?”

Weaver stated that “The Rockefeller Foundation has never given a fellowship or any other grant to an individual mathematician whose name was or is Nicholas [*sic*] Bourbaki. We did make a grant in aid to assist the activities of the Bourbaki group. Our grant was made to the University of Nancy, and our action refers to the ‘Bourbaki group.’ ” He went on to say “I would not myself be inclined to be peeved about the matter, but would rather write to some responsible member of the group, such as André Weil, and draw to his attention the regulations of the Society which provide for either individual or institutional membership only. If the Bourbaki Group wish to present their corporate entity, call it what they will, for membership, this obviously should be done in a serious and responsible way.”

The issue did come before the Council of 28 December 1950, where a motion was passed that “the proper persons be notified that (1) Bourbaki cannot be elected to individual membership in the Society under the reciprocity agreement between the French Mathematical Society and the American Mathematical Society, (2) Bourbaki may be elected to institutional membership at the rate of \$25, per year, and (3) any of the constituents of Bourbaki may become an individual member of the American Mathematical Society.”

It fell to E. G. Begle, successor to Kline as secretary, to write to Fourès on 29 February 1951 explaining the Council action. The reply came from J. Dieudonné. The second paragraph says “If the French Mathematical Society took itself as seriously as seems to be the case with the A.M.S., this letter, and the breach of the reciprocity agreement implied therein, could seriously jeopardize the good relations between the two Societies. Professor Nicolas Bourbaki was admitted by the Société Mathématique de France as an individual member in 1949, and has applied in this capacity for membership in the A.M.S.; it is the clear meaning of the first paragraph of the reciprocity agreement that such an application was in order, and that the A.M.S. had no right to scrutinize it any further.” He continued in a lighter vein about having referred the matter of Prof. Bourbaki. In particular he writes “I should like to point out that it often happens in the career of a famous mathematician that he gradually loses his individual character and becomes an institution. ... Prof. Bourbaki would of course raise no objection against sharing the

fate of some of his distinguished American Colleagues. Pending such a step, I need not tell you that his agreeing to that status is entirely out of the question. As to the group of his friends and collaborators, it is of an entirely informal nature, and is not to be institutionalized in any way." The file ends at this point.

DUES

The dues of the Society have generally been set at a level to cover cost of the services offered. In periods during which there were few increases in service and little inflation it was possible to keep the dues fixed for long periods of time. When it became necessary to raise dues, the percent raise was substantial in order to allow the new rate again to remain constant.

The annual dues, set at \$5.00 in 1891, were raised to \$6.00 effective in 1921 and to \$8.00 in 1931.

World War II caused substantial disruption in the affairs of the Society. With respect to dues, enlisted men in the armed forces of the United States and Canada who were members in good standing were granted nominal dues of \$1.00. The number of persons availing themselves of this privilege by April 1942 was only 10. The number granted the privilege in 1945 was 35.

The dues were raised to \$10.00 effective in 1948 and to \$14.00 effective in 1951. It should be noted that even with the dues of \$8.00 there was a reduced figure of \$6.00 during the first two years of membership and similar arrangements were made with the dues levels of \$10.00 and \$14.00.

Up to 1965, the dues had been established in the bylaws and raised by amendment. In 1965, two changes were made. The dues were raised to \$20.00 effective in 1966. Then the bylaws were amended to lodge the setting of the figures for dues with the Council, with the approval of the Trustees. In practice, subsequent suggestions of dues increases, even including informal advance approval, came from the Trustees.

With the next increase in dues, a new principle was introduced. Dues were set for 1974 at \$32.00(\$24.00) with the understanding that persons with annual professional income under a cutoff of \$15,000 should pay the lower figure stated in parentheses. The figure was raised to \$48.00(\$36.00) effective in 1979. At the same time the cutoff was raised to \$20,000.

A simplified procedure for handling dues increases was established by the Council in January 1982. The effect is to have small annual increases rather than large increases at longer intervals. It was agreed that the Council establish a formula by which dues are increased each year a whole dollar amount equal to the percentage increase in the average salary for institutions reporting data to the American Association of University Professors for the last decade, that the cutoff be at a round thousand dollar amount placing about

60% of the membership at the lower dues level, and that the Executive Committee be empowered to carry out these steps for the Council.

The AAUP figure was used rather than the Consumer Price Index because of widespread criticism of the way the latter incorporates the cost of purchase of housing into the index and because the AAUP index was thought better to suit the circumstances of a majority of the members. The procedure was introduced as less cumbersome than ad hoc setting of dues in the Council and as more adaptable to making changes effective in a reasonable span of time. The setting of dues can take place at a single joint meeting of the Executive Committee and Board of Trustees in May to be effective the following January.

When the Society ran a substantial deficit in 1983 it was recognized that although the scheduled annual increase was reasonable the base from which it began was too low. Dues were raised sharply for 1985 and 1986 to increase the base. The formula was then put in place again for 1987 and beyond.

The Executive Committee and Board of Trustees of November 1987 concluded that the increase of 1985 and 1986 may have been too large. They recommended to the Council that the dues not be increased for 1989 though the formula continue to be applied thereafter. The Council concurred for 1989 and left the formula in place for 1990 without foreclosing action for 1990.

With this system in place, dues have proceeded as follows:

Year	Dues	Cutoff
1983	\$52.00(40.00)	\$21,000
1984	56.00(44.00)	21,000
1985	66.00(50.00)	23,000
1986	78.00(59.00)	24,000
1987	84.00(64.00)	26,000
1988	88.00(66.00)	30,000
1989	88.00(66.00)	38,000

Some trivial comments should be made. The lower dues were intended to be three-quarters of the higher dues. The figure 40 rather than 39 occurs in 1983 because it is convenient that the number be even in that half of it occurs elsewhere in the dues schedule. Note however that 59 occurs in 1986. The number 44 in 1984 is the result of a programming error. The program computed 40 from 52 in 1983 by subtracting 12 rather than by multiplying

by .75. The same step was performed in 1984. It has been observed in retrospect that the cutoff has tended to be too low.

DUES OF INSTITUTIONAL MEMBERS

Institutional membership, already mentioned in connection with nominees, is a plan by which an accredited educational institution in North America can become a member of the Society for a fee whose size depends on the amount of research activity at the institution. As early as 1933–1934, a plan for institutional contributing members was put in place. The initial effort, involving visits by Professor Mark H. Ingraham, associate secretary for Financial Affairs, to 85 institutions to explain the plan, is described in [A].

In December 1940, Ingraham reported on the first six years of the plan. In 1940 there were 49 institutions paying \$25 in dues and 34 paying somewhat more, for a total income of \$6,205.00. (Because of a change in accounting there may be a few institutions that paid twice during the reporting period, so that the total number of institutions is less than 83.)

Initially the bylaws made provision for institutional contributing members and set minimum dues of \$25.00. Dues were actually set according to the amount of research published by the faculty in the *Bulletin*, *Transactions*, *American Journal*, and the *Annals*. The bylaws were substantially revised in the interval 1948–1950 and two versions of institutional membership appear there. In 1949 the dues and privileges are enumerated. However in 1950 the current form of the bylaw appeared as follows:

The minimum dues of an institutional member shall depend on the amount of published material credited to that member in certain journals during a specific period. The formula for computing these dues shall be established from time to time by the Council, subject to approval by the Board of Trustees. Institutions may pay larger dues than the computed minimum.

A principal part of the process was a formula that consisted in counting pages published in an ever increasing list of research journals over a three year period and multiplying by a dollar-per-page factor. By the 1980s, the list of journals had grown to 63. The price per page fluctuated at \$1.00 to \$1.50 per page. Also the dues of the previous year were multiplied by an inflation factor. The larger of the two numbers thus obtained, rounded to a multiple of \$25.00, was the dues figure. Note the effect that under this formula dues never decrease.

Institutional membership allowed a substantial discount on publications, included several “free” publications such as *Bulletin*, *Notices*, *Combined Membership List*, and *Professional Directory* (formerly *Administrative Directory*),

and as already noted allowed the naming of nominees, who received free membership. The number of the latter was set at three for minimum dues and increased with larger dues. Except for three, the nominees were to be graduate students.

The membership is a great bargain for an institution at minimum dues that wishes publications, particularly *Mathematical Reviews*. The difference between list price and institutional members' price of the last alone exceeds minimum dues. Of course the membership encourages the purchase of some items that might otherwise go unsold. The membership is a modest bargain for larger and more active institutions with the exception of a handful in that they at least break even with the price of publications and have the advantage of being able to offer membership to their graduate students. The latter is a great advantage to the Society in securing members in that some nominees continue as paying members.

For a handful of institutions, the page count produced a figure large enough to be uneconomic. Almost all such institutions continued to pay but there was grumbling and threat of defection so that the dues at the highest level were reduced. In 1987 a Trustees' Committee on Institutional Membership, consisting of Frederick W. Gehring, chairman, Ramesh Gangolli, William A. Veech, James A. Voytuk, ex officio, and Carol-Ann Blackwood, consultant, proposed that the base of calculation of institutional dues be changed from "the amount of published material credited to that member" to the amount of scholarly activity, measured in terms of published research, size of faculty, and number of graduate students. The Council of 5 January 1988 approved the principle and as this is written a suitable formula is being devised.

The "sunshine laws" of Florida (and potentially of other states) cause a problem with respect to institutional membership. According to some versions of a sunshine law the state requires a statement from an organization that all its records are open to inspection as a condition for paying membership dues of one of its subdivisions or arms to the organization. On the other hand, it is clear that the Society cannot supply such a statement inasmuch as its records involve reports of referees. Compliance with the statement would open these reports to fishing expeditions by disgruntled authors. The absence of the statement prevents state universities in such states from holding institutional membership. To obviate this difficulty, the Society tailors and prices a package of journals to meet the needs of an institution that would be eligible for institutional membership were it not for the legal barrier. This arrangement goes under the name "temporary unified subscription."