1996 AMS-IMS-MAA LIBRARY SURVEY

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This document contains the complete results from a survey of mathematics libraries in Ph.D. granting institutions in the United States and Canada. The survey was conducted by the Library Committee of the American Mathematical Society with the support of the American Mathematical Society and the Canadian Mathematical Society.

A summary report on the survey was published in the *Notices of the American Mathematical Society* **44**, no. 11, (1997), 1469–1472 and the *Canadian Mathematical Society Notes* **29**, no. 8 (1997), 44–47. The full report on the survey and budget figures were made available by means of a URL in the summary report. The summary report, full report, and budget figures are combined here in a single file; the budget data includes only institutions that agreed to make their budget data public. We thank the American Mathematical Society for permission to archive the combined files in this form.

Libraries have evolved since the survey was conducted, and the data here are obviously dated. Nevertheless, the reports provide a rare in-depth view of mathematics research libraries at a key point in time, and they are offered now in this form in the hope that they may be preserved.

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Mathematics Research Libraries at the End of the Twentieth Century

N. D. Anderson, K. Dilcher, and J. Rovnyak

Libraries are special resources in mathematics, and their health is a matter of concern not only to librarians but also to mathematicians. Spiraling journal costs, budget problems, space problems, and the increasing role of electronic media continue to require decisions that affect every aspect of the operation.

In the late 1980s the AMS became interested in collecting data on mathematics research libraries to replace anecdotal information. The overall purpose is to assist librarians and mathematicians to build and maintain the best possible mathematics research libraries in academic institutions. The first AMS survey of mathematics research libraries was conducted in the fall of 1990 (*Notices of the AMS*, December 1991, 1258–1262). As in 1990 the goal of the 1996 survey was to document the state of the system.

The 1996 survey was run in the fall of 1996 and extended into February 1997. As in 1990 the questionnaire was sent to all institutions granting the doctorate in mathematics in the U.S. and Canada. The questionnaire was designed to be filled out by the librarian in charge of the mathematics library, which is defined as the main mathematics collection used by the mathematics faculty and graduate students, whether this collection is housed in a general library or some other structure such as a science library or branch library. In some institutions there is more than one collection that is important to mathematicians, and rather than combine data it was requested that these collections should be reported separately. The focus, however, is on the main collection in each institution.

The questionnaire was sent to 25 institutions in AMS Group I public, 23 in Group I private, 56 in Group II, 72 in Group III, and to 29 Canadian doctoral-granting departments. The U.S. peer groups are determined by "scholarly quality of program faculty," as reported in the 1995 publication *Research-Doctorate Programs in the United States: Continuity and Change*. Group I is composed of 48 departments with scores in the 3.00–5.00 range and is further divided into public and private institutions. Group II is composed of 56 departments with scores in the 2.00–2.99 range. Group III contains the remaining U.S. departments with doctoral programs and includes a number of departments that were not part of the 1995 ranking. The response rates were:

- Group I public: 23 libraries in 22 institutions; 22/25 or 88% of institutions responded (1990, 85% for all of Group I)
- Group I private: 22 libraries in 21 institutions; 21/23 or 91% of institutions responded (1990, 85% for all of Group I)
- Group II: 37 libraries in 35 institutions; 35/56 or 63% of institutions responded (1990, 74%)
- Group III: 48 libraries in 48 institutions; 48/72 or 67% of institutions responded (1990, 66%)
- Canadian: 26 libraries in 25 institutions; 25/29 or 86% of institutions responded (1990, 48%)

In all, this amounts to responses from 156 libraries in 151 institutions, that is, 151/205 or 74% of all

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1996 AMS-IMS-MAA Library Survey

The Canadian Mathematical Society participated in the 1996 survey. The questionnaire was written by the AMS Library Committee. Current (*) and participating retired (†) librarian members are: Nancy D. Anderson*(co-chair), Carol Hutchins*, Dorothy McGarry*, Mary Ann Southern†, Martha Tucker*, John W. Weigel II†. Mathematician members are: George E. Andrews†, Bruce Berndt* (co-chair), Felix Browder†, Lawrence S. Husch*, James Rovnyak†, James J. Tattersall*, Hung-Hsi Wu*. Karl Dilcher served as the Canadian liaison.

A copy of the full report on the 1996 AMS-IMS-MAA library survey may be obtained from the Web site: `http://wsrv.clas.virginia.edu/~jlr5m/survey/survey.html`.

institutions. For comparison, the 1990 overall response rate was 138 libraries in 134 institutions, that is, 134/193 or 69% of all institutions.

Some factors should be kept in mind in interpreting results. As in 1990 the survey assumes a local definition of mathematics: in some cases this includes related subjects such as statistics. Data also include 6 departmental reading rooms (1 in Group I public, 2 in Group II, 2 in Group III, and 1 in Canada). An effort was made to get more responses from reading rooms, but we regret that the numbers are too small to report them as a separate group. Reading rooms nevertheless play a very important role in many departments.

The size of the mathematics literature is also a factor in interpretation of results. Compared to the humanities, the mathematics literature is relatively compact and monolithic. Its size and diversity nevertheless come as a surprise to many people.

- In 1996 *Mathematical Reviews* selected articles from 1,629 journals (in 1990, about 1,400), and of these it indexed cover-to-cover about 600 (in 1990, about 400).
- In 1997 there are about 29 purely electronic journals in mathematics or closely related areas. Of these, 22 are indexed cover-to-cover. About 123 journals are offered in both paper and electronic format, and this number appears to be rising rapidly.

The authors thank B. TePaske-King and P. Shanks of *Mathematical Reviews* for supplying these figures.

Some of the ground covered in the 1990 survey was not duplicated in 1996. In 1990 there were questions probing characteristics that make a good library. These are the same today. The ideal mathematics library has a deep and broad collection including older and historical materials and complete runs of journals. Mathematicians prize ease of access, ability to browse, and a pleasant environment. Professionalism in the staff and good service are also frequently named by mathematicians as important characteristics of a good library.

In the 1996 survey we have been especially interested in comparisons with 1990. Direct comparisons are complicated by the fact that the Group I population has been enlarged from 39 in 1990 to 48 in 1996. Group I is also newly divided into two subgroups, Group I public and Group I private. In some cases Group I public and Group I private were combined for the purpose of comparison with 1990.

These conclusions stand out.

- Significant numbers of journals are being cancelled (Table 1), and some added. Since the questionnaire did not ask the respondents to note if domestic titles were replacing foreign ones or if titles were replaced with those of equal value, we cannot state the extent to which this trend is deleterious. However, a major reshaping of journal collections is under way, from broadly based collections to those which more closely reflect the specific research interests of various departments. Market forces and inflation are driving cancellations. This is shown most strikingly in Group I public universities and Canadian universities: the former with a net change of -22, due to a decrease in state funding, and the latter with a net change of -46, partly due to the decline of the Canadian dollar. Subscriptions of paper journals in 1996 are down about a quarter from 1990. These data are consistent with data published by Chrzastowski and Schmidt (*Library Acquisitions: Practice and Theory*, 1997), which show an overall drop of 18% in domestic science serial holdings in a national aggregate serial collection between 1992 and 1994.
- Serials budgets are up sharply, but they cannot compensate for price increases. The median for Group I rose 58% from 1990 to 1996. Group II rose 32%, Group III rose 20%, and the Canadians rose only 11% in U.S. dollars. Canadian serials budgets increased 30% in Canadian dollars, but a strong decrease in exchange rates for Canadian currency negated much of the budget increase. Spiraling journal costs have hit smaller libraries especially hard, and a growing gap between budgets of large and small libraries may be a byproduct of the journal cost crisis.
- Demand for electronic journals is modest thus far. There is interest in receiving journals in both paper and electronic format. The numbers for purely electronic journals obtained by subscription, or free but cataloged, are very small. At the same time, 60% of all libraries provide access to free electronic preprints, journals, and other mathematical resources such as e-MATH (Table 2, column (H)).
- The Web-based MathSciNet is popular: after only a little more than a year, already 69% of all libraries report that they have subscribed.
- The median for total number of volumes is up 15%. In terms of numbers reporting space problems, this issue seems to take second place to budget shortfalls. The problem is very

serious for those who have it. Space problems affect about 29% of all libraries: 20% have less than a quarter of their books in other locations, 9% a quarter or more. In a subject that has so much emphasis on browsing and the older literature, a badly split collection threatens productivity and quality of scholarship.

- There is an increase in the number of mathematics libraries that are part of a general library or a science and engineering library. The increase appears across all groups. In Group I this is due to at least one change from a departmental library to a science library, but another effect is the change of population by the 25% enlargement of Group I from 1990. We also note erosion of the numbers of mathematics libraries located in the same building as the mathematics faculty. There remains, however, a strong correlation of location in the same building with the top-ranked departments: the figure drops from 73% in Group I to 17% in Group III.
- Oversight by a professional librarian remains strong in 1996 as in 1990. There is an increase from 77% to 91% in Group I. Group III also shows an increase, while Group II is down slightly. The decrease from 75% to 65% in the Canadian group must be read in light of the fact that the 1996 population of the Canadian group is significantly larger than in 1990.

Table 1 shows the net change in number of journals from reported cancellations and additions. The median for the Canadian group is particularly striking when total holdings are taken into account. In Group I about twice as many show a negative net change as positive. Group III stands out in a table not included here for the very small number of additions to replace cancellations; whereas the other groups are reshaping their collections, Group III appears to be mainly reducing.

Table 1

Net change in number of journals:
number added minus number cancelled
(numbers in parentheses show response rates)

	Group I public (20/23)	Group I private (18/22)	Group II (25/37)	Group III (39/48)	Canadian (21/26)	Total (123/156)
80 to 89	1					1
70 to 79						0
60 to 69	1					1
50 to 59						0
40 to 49						0
30 to 39		1				1
20 to 29	1				1	2
10 to 19				1		1
0 to 9	1	8	3	6		18
–1 to –9	2	2	6	10	2	22
–10 to –19	4	4	4	9	1	22
–20 to –29	1	1	3	4	1	10
–30 to –39	1		1	2	5	9
–40 to –49	4		6		1	11
–50 to –59	1			1		2
–60 to –69		1		4	3	8
–70 to –79			1		2	3
–80 to –89	2			1		3
–90 to –99			1		3	4
≤ –100	1	1		1	2	5
Median	–22	0	–18	–10	–46	–16

The next table shows electronic products available in the library:

A. MathSciNet (Web version on the Internet)
B. MathSci online (component of online catalog, through site-load or consortium arrangement)
C. MathSci on CD-ROM
D. Science Citation Index online
E. Science Citation Index CD-ROM
F. CompactMath (online version of *Zentralblatt für Mathematik*)
G. Campus network including some of the above products
H. Access to other electronic sources in mathematics (such as preprints, electronic journals, e-MATH)

Table 2

Electronic products

	A	B	C	D	E	F	G	H
Group I public	19	4	14	5	11	1	5	18
Group I private	20	3	11	4	11	2	4	19
Group II	25	4	14	5	15	3	4	23
Group III	23	3	11	15	14		2	23
Canadian	21	3	8	1	9		3	10
Total	108	17	58	30	60	6	18	93

Over all groups, 69% report use of (A) MathSciNet (Web version) as compared to 37% for (C) the CD-ROM version; 11% have (B) the online version through a site-load or consortium. Only 3% subscribe to (F) CompactMath.

Group III and Canadian institutions are most affected by lack of electronic access; an exception is that the larger libraries in Group III are more likely to have products like (D) and (E).

Comparisons with 1990 are not so easy to make, because the electronic scene has been in such a state of change.

- Already in 1990 most libraries had their catalogs online; asking this question in 1996 did not seem worthwhile, as the practice now is essentially universal.
- Availability of electronic media from faculty offices was an issue in 1990. We conjecture that the nonresponse to our questions in this area means that this is not an issue in 1996; that is, access is widely available to faculty who desire it.
- MathSciNet did not exist in 1990. In 1990 only 28% reported some version of MathSci available in-house in the library; 62% had MathSci available via a vendor. Today having some version of MathSci is on its way to becoming universal in Group I and the Canadian institutions, but Groups II and III lag in this area.

The full report on the survey includes many additional tables and should be consulted for detailed information.

Note: A version of this report is also being published in the November 1997 *CMS Notes*.

MATHEMATICS RESEARCH LIBRARIES AT THE END OF THE TWENTIETH CENTURY

N. D. ANDERSON, K. DILCHER, AND J. ROVNYAK

Contents

1. Overview

Libraries are special resources in mathematics, and their health is a matter of concern not only to librarians but also to mathematicians. Spiraling journal costs, budget problems, space problems, and the increasing role of electronic media continue to require decisions that affect every aspect of the operation.

In the late 1980's, the AMS became interested in collecting data on mathematics research libraries to replace anecdotal information. The overall purpose is to assist librarians and mathematicians to build and maintain the best possible mathematics research libraries in academic institutions. The first AMS survey of mathematics research libraries was conducted in the fall of 1990 (*Notices of the AMS*, December 1991, 1258–1262). As in 1990, the goal of the 1996 survey is to document the state of the system.

The 1996 survey was run in the fall of 1996 and extended into February 1997. As in 1990, the questionnaire was sent to all institutions granting the doctorate in mathematics in the US and Canada (see Section 3). The questionnaire was designed to be filled out by the librarian in charge of the Mathematics Library, which is defined as the main mathematics collection used by the mathematics faculty and graduate students, whether this collection is housed in a general library or some other structure such as a science library or branch library. In

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some institutions, there is more than one collection which is important to mathematicians, and rather than combine data it was requested that these collections should be reported separately. The focus, however, is on the main collection in each institution. A copy of the questionnaire appears in Section 4.

The questionnaire was sent to 25 institutions in AMS Group I public, 23 in Group I private, 56 in Group II, 72 in Group III, and to 29 Canadian doctoral-granting departments. The US peer groups are determined by "scholarly quality of program faculty," as reported in the 1995 publication, *Research-Doctorate Programs in the United States: Continuity and Change*. Group I is composed of 48 departments with scores in the 3.00–5.00 range and is further divided into public and private institutions. Group II is composed of 56 departments with scores in the 2.00–2.99 range. Group III contains the remaining US departments with doctoral programs and includes a number of departments that were not part of the 1995 ranking. The response rates are:

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In all, this amounts to responses from 156 libraries in 151 institutions, that is, 151/205 or 74% of all institutions (see Section 3 for a list of the 205 institutions). For comparison, the 1990 overall response rate was 138 libraries in 134 institutions, that is, 134/193 or 69% of all institutions.

Some factors should be kept in mind in interpreting results. As in 1990, the survey assumes a local definition of mathematics: in some cases, this includes related subjects such as statistics. Data also include 6 departmental reading rooms (1 in Group I public, 2 in Group II, 2 in Group III, and 1 in Canada). An effort was made to get more responses from reading rooms, but we regret that the numbers are too small to report them as a separate group. Reading rooms nevertheless play a very important role in many departments.

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Trends and Conclusions

Some of the ground covered in the 1990 survey was not duplicated in 1996. In 1990 there were questions probing characteristics that make a good library. These are the same today. The ideal mathematics library has a deep and broad collection including older and historical materials and complete runs of journals. Mathematicians prize ease of access, ability to browse, and a pleasant environment. Professionalism in the staff and good service are also frequently named by mathematicians as important characteristics of a good library.

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- Serials budgets are up sharply, but they cannot compensate for price increases. The median for Group I rose 58% from 1990 to 1996 (Table 8A). Group II rose 32%, Group III rose 20%, and the Canadians rose only 11% in US dollars. Canadian serials budgets increased 30% in Canadian dollars, but a strong decrease in exchange rates for Canadian currency negated much of the budget increase. Spiraling journal costs have hit smaller libraries especially hard, and a growing gap between budgets of large and small libraries may be a byproduct of the journal cost crisis.
- The median for total number of volumes is up 15%. In terms of numbers reporting space problems, this issue seems to take second place to budget shortfalls. The problem is very serious for those who have it. Space problems affect about 29% of all libraries (Table 14): 20% have less than a quarter of their books in other locations, 9% a quarter or more. In a subject that has so much emphasis on browsing and the older literature, a badly split collection threatens productivity and quality of scholarship.
- The web-based MathSciNet is popular: after only a little more than a year, already 69% of all libraries report that they have subscribed (Table 7).

- Demand for electronic journals is modest thus far (Tables 11B–11D). There is interest in receiving journals in both paper and electronic format. The numbers for purely electronic journals obtained by subscription, or free but cataloged, are very small. At the same time, 60% of all libraries provide access to free electronic preprints, journals, and other mathematical resources such as e-math (Table 7, column (H)).
- There is an increase in the number of mathematics libraries that are part of a general library or a science and engineering library (Table 1B). The increase appears across all groups. In Group I this is due to at least one change from a departmental library to a science library, but another effect is the change of population by the 25% enlargement of Group I from 1990. We also note erosion of the numbers of mathematics libraries located in the same building as the mathematics faculty (Table 2). There remains, however, a strong correlation of location in the same building with the top-ranked departments: the figure drops from 73% in Group I to 17% in Group III.
- Oversight by a professional librarian remains strong in 1996 as in 1990 (Table 6B). There is an increase from 77% to 91% in Group I. Group III also shows an increase, while Group II is down slightly. The decrease from 75% to 65% in the Canadian group must be read in light of the fact that the 1996 Canadian population is significantly larger than in 1990.

Thanks

We express our appreciation to the librarians who took time from busy schedules to provide the information that was requested. It is our impression that respondents took seriously the task to provide accurate data. The task was not easy due to the variety of structures and difficulty in some cases to extract information specific to mathematics. To all respondents, a hearty thank you!

2. Summary of Data

The main results are presented in a series of tables. The numbers (23), (22), (37), (48), (26), (156) shown in parentheses are reminders of the numbers of respondents in the groups. Often questions were left blank; in a few cases (such as Table 1A) we could fill in the blanks from personal knowledge. Where appropriate we add a "Total" row or column, or write $(X/23)$, $(X/22)$, etc., to indicate the number of usable responses. In a small number of cases, we discarded or corrected data where the question was obviously misinterpreted. A few outliers, very high or very low numbers, are questionable but retained: some of them are correct, and the incorrect ones do not affect the overall picture.

Question 1: Structure of the Mathematics Library. Question 1a asks to identify the structure of the library for which data are reported. The options are:

A. Part of a general library of a university library system
B. Part of a science and/or engineering library of a university library system
C. Branch library of a university library system, containing mathematics together with other sciences such as physics or astronomy
D. Branch library of a university library system, containing mathematics together with other mathematical sciences, such as statistics or computer science
E. Branch library of a university library system, containing only mathematics

F. Departmental reading room
G. Other

Table 1A

Structure of the Mathematics Library

	A	B	C	D	E	F	G	Total
Group I public (23)	1	4	6	9	2	1		23
Group I private (22)	4	6	3	5	4			22
Group II (37)	16	8	2	4	4	2	1	37
Group III (48)	34	9	1		2	2		48
Canadian (26)	10	8		4	3	1		26
Total (156)	65	35	12	22	15	6	1	156

Table 1B

Percentage of mathematics libraries that are part of general or science and engineering libraries

	1996	1990
Group I combined	33%	17%
Group II	64%	41%
Group III	90%	74%
Canadian	69%	58%
Total	64%	50%

Question 1b asks if the library is located in the same building as the mathematics faculty. For consistency with 1990 data, when physically separate buildings function as one, they are counted as the "same" building. There is an overall decrease from 1990 figures for the same question.

Table 2

Location in Building with Mathematics Faculty

	1996	1990
Group I public	87%	
Group I private	64%	
Group I combined	73%	83%
Group II	38%	59%
Group III	17%	28%
Canadian	46%	55%

More than half of the respondents said that their libraries include statistics, computer science, or other areas such as actuarial mathematics, applied mathematics, and mathematics education.

Question 2: Policies and Operation of the Mathematics Library. Table 3 shows the number of libraries with:

A. Open stacks for browsing
B. Bound mathematics journals in one area
C. Unbound mathematics journals displayed separately from other subjects
D. Security system
E. Allow bound journals to circulate more than overnight
F. Give keys to selected users

Table 3

Policies

	A	B	C	D	E	F
Group I public (23)	23	18	15	17	15	12
Group I private (22)	22	16	12	16	8	9
Group II (37)	36	20	18	25	16	9
Group III (48)	47	32	18	44	17	5
Canadian (26)	26	21	11	18	16	7
Total (156)	154	107	74	120	72	42

In Table 3, (A), (B), (C) enable browsing, which mathematicians consider important. Open stacks (A) are nearly universal; (B) and (C) are common in Group I and Canadian institutions and less frequent in Groups II and III. Circulation of bound journals (E) is mixed.

Use of a security system in Group I is the same as in 1990 (69% in both surveys); in Group II use is up from 58% in 1990 to 67% in 1996, in Group III up from 75% in 1990 to 91% in 1996, and in Canadian institutions up from 59% in 1990 to 69% in 1996.

The practice to give keys to selected users in Group I is about the same in 1996 as in 1990 (a little less than 50%); it is not so common in the other groups.

A closely related question is how many hours the library is open and staffed. The most prevalent hours are in the 75–99 and 100–124 ranges. These are typical of large libraries. The patterns in the 1996 numbers for hours open are similar to 1990. As in 1990, the number of hours open in the summer session show definite cutbacks; such cutbacks are even greater for hours open between sessions.

Table 4A

Hours open in regular session

	0–49	50–74	75–99	100–124	125–150
Group I public (23/23)	4	6	10	1	2
Group I private (22/22)	4	2	8	8	
Group II (36/37)	5	7	12	11	1
Group III (45/48)		2	27	16	
Canadian (26/26)	7	2	15	2	
Total (152/156)	20	19	72	38	3

Table 4B

Hours open in the summer session

	0–49	50–74	75–99	100–124	125–150
Group I public (23/23)	11	6	4		2
Group I private (22/22)	12	5	3	2	
Group II (35/37)	10	9	13	3	
Group III (46/48)	6	15	23	2	
Canadian (22/26)	7	8	6	1	
Total (148/156)	46	43	49	8	2

Most libraries report a large number of reader spaces. Shortcomings in this area are a problem for some branch libraries.

Table 5

Number of reader spaces

	0–9	10–19	20–29	30–39	40–49	≥ 50
Group I public (22/23)	1	1	4	1		15
Group I private (17/22)		3	3	1	1	9
Group II (23/37)	2	2	4	2	1	12
Group III (26/48)	1	1		1		23
Canadian (14/26)	1	2		1		10
Total (102/156)	5	9	11	6	2	69

A professional librarian is defined as a person having at least an MLS from an ALA accredited school.

Table 6A

Number of professional librarians in the Mathematics Library

	0.10–0.24	0.25–0.49	0.50–0.99	≥ 1.00
Group I public (22/23)	1	1	4	16
Group I private (19/22)		2	1	16
Group II (25/37)		3	1	21
Group III (33/48)	1	2		30
Canadian (17/26)	2		1	14
Total (116/156)	4	8	7	97

For comparison with 1990, we look at percentages for totals. These percentages are lower bounds because a nonresponse converts to zero in the calculation.

Table 6B

Some oversight by professional librarians

	1996	1990
Group I public	96%	
Group I private	86%	
Group I combined	91%	77%
Group II	68%	71%
Group III	69%	61%
Canadian	65%	75%

For all but Group III, the great majority of libraries have 1 or 2 support staff; there are more in large libraries. The distribution is shown in Table 6C.

Table 6C

Number of support staff

	0.1–0.9	1.0–1.9	2.0–2.9	3.0–3.9	4.0–4.9	≥ 5.00
Group I public (22/23)	1	7	8	1		5
Group I private (18/22)	3	5	2	1	2	5
Group II (26/37)	2	10	2	1	3	8
Group III (31/48)	3	5	2	2	2	17
Canadian (19/26)		5	2			12
Total (116/156)	9	32	16	5	7	47

Most libraries also report the use of 1 to 3 student assistants. Again, large libraries have more.

Question 3: Electronic Media. Table 7 shows electronic products available in the library.

A. MathSciNet (Web version on the Internet)
B. MathSci online (component of online catalog, through site-load or consortium arrangement)
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D. Science Citation Index online
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G. Campus network including some of the above products
H. Access to other electronic sources in mathematics (such as preprints, electronic journals, e-math)

The questions A–F had second components asking if the products were available from faculty offices. There was not sufficient response to record results.

Table 7

Electronic products

	A	B	C	D	E	F	G	H
Group I public (23)	19	4	14	5	11	1	5	18
Group I private (22)	20	3	11	4	11	2	4	19
Group II (37)	25	4	14	5	15	3	4	23
Group III (48)	23	3	11	15	14		2	23
Canadian (26)	21	3	8	1	9		3	10
Total (156)	108	17	58	30	60	6	18	93

Over all groups, 69% report use of (A) MathSciNet (Web version) as compared to 37% for (C) the CD ROM version; 11% have (B) the online version through a site-load or consortium. Only 3% subscribe to (F) CompactMath.

Group III and Canadian institutions are most affected by lack of electronic access; an exception is that the larger libraries in Group III are more likely to have products like (D) and (E).

Comparisons with 1990 are not so easy to make because the electronic scene has been in such a state of change.

- Already in 1990 most libraries had their catalog online; it was not felt worth asking this question in 1996 as the practice now is essentially universal.
- Availability of electronic media from faculty offices was an issue in 1990. We conjecture that the nonresponse to our questions in this area mean that this is not an issue in 1996, that is, access is widely available to faculty who desire it.
- MathSciNet did not exist in 1990. In 1990 only 28% reported some version of MathSci available inhouse in the library; 62% had MathSci available via a vendor. Today having some version of MathSci is on its way to becoming universal in Group I and the Canadian institutions, but Groups II and III lag in this area.

Question 4: Expenditures and Income Sources. Question 4a asks to itemize expenditures in various categories for collection development. Tables 8A–8C give breakdowns by category, and Table 9 pulls the separate figures together in a total.

Canadian figures were reported in Canadian currency, but for comparison purposes these were converted to US currency: all figures are in US dollars.

Table 8A

Serials budget

	Group I public (19/23)	Group I private (21/22)	Group I combined (40/45)	Group II (27/37)	Group III (45/48)	Canadian (23/26)
1–19 K				3	6	
20–39 K		1	1		5	3
40–59 K		1	1		6	5
60–79 K	1	1	2		11	2
80–99 K	1	2	3	5	8	3
100–119 K	5	6	11	7	6	2
120–139 K	1	2	3	7	1	7
140–159 K	5	5	10	2	2	1
160–179 K	2		2	1		
180–199 K	1	2	3	1		
200–219 K						
220–239 K	1		1			
240–259 K	2	1	3	1		
260–279 K						
280–299 K						
1996 Median	147 K	119 K	139 K	115 K	66 K	94 K
1990 Median			88 K	87 K	55 K	85 K

In Table 8A, Group I libraries cluster in the 100–160 K range, Group II in the 80–140 K range, and Group III in the 60–120 K range. Canadian libraries appear to be divided into two distinct clusters. The percentage increases of medians in Table 8A are

Group I combined: 58%
Group II: 32%
Group III: 20%
Canadians: 11% in US dollars, 30% in Canadian dollars

The exchange rate between the US and Canadian dollars changed dramatically from 1990 to 1996. While in the fall of 1990 it was approximately $CDN 1.18 per $US, this figure increased to 1.38 by the fall of 1996. So while the median serials budget increased from 100K to 130K in Canadian funds, the equivalent figure in $US (and thus, roughly, the purchasing power) rose from 85K to only 94K. A question arises if the relatively small number (12) of Canadian returns in 1990 skews the picture. The institutions that responded in 1990 were examined separately, and it appears that they are representative. The picture does not change significantly if summaries are done only for this group.

The numbers for additional electronic products are relatively small. They are shown in Table 8B.

Table 8B

Additional electronic products

	Group I public (7/23)	Group I private (13/22)	Group II (10/37)	Group III (14/48)	Canadian (5/26)
1–4 K	5	5	5	6	2
5–9 K	2	6	3	7	2
10–14 K		1	2		
15–19 K				1	1
20–24 K		1			
Median	2 K	6 K	4 K	5 K	6 K

Group I outspends Groups II and III for monographs and other items, as shown in Table 8C.

Table 8C

Other items: monographs, etc.

	Group I public (17/23)	Group I private (22/22)	Group II (26/37)	Group III (45/48)	Canadian (22/26)
1–9 K	3	3	11	22	13
10–19 K	3	7	6	16	6
20–29 K	4	4	6		1
30–39 K	1	3	2	4	1
40–49 K	5	4	1	3	1
50–59 K	1				
≥ 60		1			
Median	22 K	24 K	13 K	10 K	7 K

The totals in Table 9 are the sum of the responses for

(1) Serials (Table 8A)
(2) Electronic products if not included in serials (Table 8B)
(3) Other items: monographs, etc. (Table 8C)

Total expenditures from Table 9 typically run in these ranges:

Group I public, 150–199 K
Group I private, 100–199 K
Group II, 100–200 K
Group III, 1–149 K
Canadians, 50–150 K

Table 9

Total of all reported expenditures: serials, electronic products, other items (monographs, etc.)

	Group I public (19/23)	Group I private (17/22)	Group II (23/37)	Group III (43/48)	Canadian (22/26)
1–49 K		1	3	15	3
50–99 K	1	2	3	14	9
100–149 K	5	5	10	12	8
150–199 K	8	7	6	2	2
200–249 K	2	1			
250–299 K	3		1		
$\geq$ 300 K		1			
Median	164 K	152 K	127 K	69 K	95 K

Table 9 does not tell the full story. Some categories were left blank. Many libraries also receive income from other sources such as from the mathematics department, gifts and endowments, and general funds. These are sometimes significant in Group I and II institutions, but Group III and the Canadians are less endowed in these areas.

Another measure of financial support gauges the share that mathematics receives in the entire library budget, as shown in the next table.

Table 10

Percentage of the total university library materials budget received by mathematics

	Group I public (13/23)	Group I private (17/22)	Group II (19/37)	Group III (40/48)	Canadian (18/26)	Total (107/) 156
0.00–0.99%	1	1		1		3
1.00–1.99%	1	3		1	2	7
2.00–2.99%	4	3	3	4	5	19
3.00–3.99%	6	3	3	8	4	24
4.00–4.99%	1	5	3	7	1	17
5.00–5.99%		2	4	9	4	19
6.00–6.99%			1	6		7
7.00–7.99%			3	2	1	6
8.00–8.99%						
9.00–9.99%			1	1	1	3
$\geq$ 10%			1	1		2
Median	3.0%	3.0%	5.0%	4.55%	3.3%	4.0%

Group III libraries had the highest percentage of the library budget, but from Table 9 it is seen that their budgets are less than in Groups I and II. Spreads are rather large with typical scores in these ranges:

Group I public, 2–4%
Group I private, 1–5%
Group II, 2–8%
Group III, 2–7%
Canadians, 2–6%

Question 5: The Collection in the Mathematics Library. The journal literature is very important in mathematics, and one of the key figures for any library is the number of currently received journals.

By far the greatest number of journals remain in paper format only (Table 11A). Journals received in both paper and electronic format are shown in Table 11B. Tables 11C and 11D show electronic journals obtained by subscription or free but cataloged; the numbers here are small, and in particular there are strikingly few paid subscriptions to journals in electronic format only. Free and uncataloged journals are not reported in any of the tables below; their availability in libraries is reflected in Table 7, column (H).

Table 11A

Currently received journals: number of titles received in paper only

	Group I public (22/23)	Group I private (22/22)	Group I combined (44/45)	Group II (35/37)	Group III (46/48)	Canadian (25/26)	Total (150/156)
1–39					2		2
40–79		2	2	1	12	3	18
80–119	1	1	2	1	12	5	20
120–159		3	3	4	8	4	19
160–199	4	2	6	9	7	3	25
200–239	2	4	6	6	1	2	15
240–279	2	1	3	5	2	5	15
280–319	4	3	7	4		1	12
320–359	4	1	5	1	1	1	8
360–399	1	1	2	2			4
400–439		1	1			1	2
440–479				1			1
480–519				1			1
520–559	1	3	4		1		5
560–599							0
≥ 600	3		3				3
1996 Median	305*	232*	296*	231*	114*	180*	186*
1990 Median			393*	293*	168*	272*	261*

* Reading rooms in the US are excluded from these medians.

Group III and the Canadians are hardest hit: the drop in medians in Table 11A is 25% for Group I, 21% for Group II, 32% for Group III, 34% for the Canadians, and 29% overall.

Table 11B

Currently received journals: number of titles received in both paper and electronic format

	Group I public (12/23)	Group I private (15/22)	Group II (15/37)	Group III (13/48)	Canadian (8/26)	Total (63/156)
1–4	8	5	9	8	6	36
5–9	3	5	2	3		13
10–14		3	2	1	2	8
15–19	1	2				3
20–24			1	1		2
25–29			1			1
Median	3	6	2	4	2	3

Table 11C

Currently received journals: number of titles received in electronic format only, by subscription

	Group I public (3/23)	Group I private (6/22)	Group II (6/37)	Group III (6/48)	Canadian (2/26)	Total (23/156)
1–4	3	4	4	6	2	19
5–9		1	2			3
10–14						0
15–19		1				1
Median	2	3	2	1	2	2

Table 11D

Currently received journals: number of titles received in electronic format only, free and cataloged

	Group I public (4/23)	Group I private (5/22)	Group II (3/37)	Group III (1/48)	Canadian (1/26)	Total (14/156)
1–4	2	2	1		1	6
5–9		1	1			2
10–14	2	1	1			4
15–19						0
20–24		1		1		2
Median	8	5	5	20	4	5

Few libraries have escaped cancellation projects in recent years.

- One question asked how many paper journals were cancelled because the same journal is now obtained electronically. This simply is not occurring: among the 156 libraries responding, 107/156 answered none and 7/156 answered 1 each.

On the other hand, many journals are being cancelled and some added. The next three tables detail responses in this area.

Table 12A is the net change in number of journals, that is, the difference of the number added and number cancelled. In Group I, about twice as many show a negative net change as positive.

Tables 12B and 12C show the numbers of cancellations and additions separately. The medians for the Canadian group are particularly striking when total holdings (Table 11A) are taken into account.

Table 12A

Net change in number of journals: number gained minus number cancelled

	Group I public (20/23)	Group I private (18/22)	Group II (25/37)	Group III (39/48)	Canadian (21/26)	Total (123/156)
80 to 89	1					1
70 to 79						0
60 to 69	1					1
50 to 59						0
40 to 49						0
30 to 39		1				1
20 to 29	1				1	2
10 to 19				1		1
0 to 9	1	8	3	6		18
−1 to −9	2	2	6	10	2	22
−10 to −19	4	4	4	9	1	22
−20 to −29	1	1	3	4	1	10
−30 to −39	1		1	2	5	9
−40 to −49	4		6		1	11
−50 to −59	1			1		2
−60 to −69		1		4	3	8
−70 to −79			1		2	3
−80 to −89	2			1		3
−90 to −99			1		3	4
≤ −100	1	1		1	2	5
Median	−22	0	−18	−10	−46	−16

Table 12B

Number of journals cancelled since 1990

	Group I public (20/23)	Group I private (20/22)	Group II (27/37)	Group III (42/48)	Canadian (24/26)	Total (133/156)
0–9	2	5	3	11	2	23
10–19	3	5	7	12	1	28
20–29	3	4	3	7	3	20
30–39	1	2	3	4	2	12
40–49	2	1	2		3	8
50–59	3		3	2	1	9
60–69	1	1	2	2	3	9
70–79	1		2	2	4	9
80–89		1		1		2
90–99					1	1
≥ 100	4	1	2	1	4	12
Median	40	20	30	17	60	27

Table 12C

Number of journals added since 1990

	Group I public (20/23)	Group I private (18/22)	Group II (25/37)	Group III (41/48)	Canadian (21/26)	Total (125/156)
0–9	10	5	14	30	11	70
10–19	3	5	8	7	8	31
20–29	2	4	2	4	1	13
30–39	3	3				6
40–49					1	1
50–59		1				1
60–69			1			1
70–79						0
80–89	1					1
90–99						0
≥ 100	1					1
Median	10	19	9	2	9	8

Group III stands out in Table 12C for the very small number of additions to replace cancellations. Whereas the other groups are reshaping their collections, Group III appears to be mainly reducing.

The total number of volumes including bound journals and monographs is given in the next table. As in journals added shown in Table 12C, Group III shows very little growth in the total number of volumes shown in Table 13.

Table 13

Total number of volumes

	Group I public (19/23)	Group I private (15/22)	Group I combined (34/45)	Group II (24/37)	Group III (26/48)	Canadian (13/26)	Total (97/156)
0–9 K	1	1	2	3	8	1	14
10–19 K		1	1	1	5	3	10
20–29 K	4	3	7	9	7	3	26
30–39 K	5	4	9	6	3	3	21
40–49 K	3	4	7	5	1	3	16
50–59 K	3		3				3
60–69 K	1	2	3		1		4
70–79 K							0
80–89 K	2		2		1		3
1996 Median	38.5 K*	36 K*	37 K*	29 K*	21 K*	26 K*	30 K*
1990 Median			34 K*	25 K*	20 K*	28 K*	26 K*

* Reading rooms in the US are excluded from these medians.

As a measure of the space problem, respondents were asked to estimate the total number of mathematics volumes in storage locations because of space shortage, and to give the figure as a percentage of the total number of mathematics volumes owned if all were under one roof.

Table 14

Percentage in storage locations due to space shortage

	Group I public (17/23)	Group I private (15/22)	Group II (21/37)	Group III (24/48)	Canadian (12/26)	Total (89/156)
0%	2	7	11	16	8	44
1–4%	3	3	1	2	2	11
5–9%	3		1	1		5
10–14%	2		4	1		7
15–19%	1	2		1		4
20–24%	1	1	1		1	4
25–29%	2	2	2	1		7
30–34%	2			1	1	4
35–39%						0
40–44%	1					1
45–49%						0
$\geq$ 50%			1	1		2

About 29% of all libraries report some space problem. The problem is quite serious for the 14 libraries (9% of the total) with more than 25% in storage. Overall, however, fewer libraries seem to rate space as a key issue today as opposed to 1990: in 1990, at least 46% of all libraries reported some space problem (the 1990 data do not allow an exact figure for comparison).

3. Peer Groups

The AMS peer groups were reorganized in 1996. The main change is that Group I is enlarged from 39 to 48 departments and divided into Group I public (25 departments) and Group I private (23 departments). For additional information on the groups, see the e-math web page (`http://www.ams.org/committee/profession/groups_des.html`).

Group I Public: 25 total

- CUNY, Graduate School and University Center
- Georgia Institute of Technology
- Indiana University at Bloomington
- Michigan State University
- Ohio State University, Columbus
- Pennsylvania State University, University Park
- Purdue University
- Rutgers University
- SUNY at Stony Brook
- University of California, Berkeley
- University of California, Los Angeles
- University of California, San Diego
- University of California, Santa Barbara
- University of Illinois at Chicago
- University of Illinois at Urbana-Champaign
- University of Maryland, College Park
- University of Michigan
- University of Minnesota, Minneapolis
- University of North Carolina at Chapel Hill
- University of Oregon
- University of Texas at Austin
- University of Utah
- University of Virginia
- University of Washington
- University of Wisconsin, Madison

Group I Private: 23 total

- Boston University
- Brandeis University
- Brown University
- California Institute of Technology
- Carnegie Mellon University
- Columbia University

- Cornell University
- Duke University
- Harvard University
- Johns Hopkins University
- Massachusetts Institute of Technology
- New York University, Courant Institute
- Northwestern University
- Princeton University
- Rensselaer Polytechnic Institute
- Rice University
- Stanford University
- University of Chicago
- University of Notre Dame
- University of Pennsylvania
- University of Southern California
- Washington University
- Yale University

Group II: 56 total

- Arizona State University
- Auburn University
- Case Western Reserve University
- Claremont Graduate School
- Clemson University
- Colorado State University
- Dartmouth College
- Florida State University
- Iowa State University
- Kansas State University
- Kent State University
- Lehigh University
- Louisiana State University, Baton Rouge
- North Carolina State University
- Northeastern University
- Oregon State University
- Polytechnic University
- SUNY at Albany
- SUNY at Binghamton
- SUNY at Buffalo
- Syracuse University
- Temple University
- Texas A & M University
- Texas Tech University
- Tulane University
- University of Arizona
- University of California, Davis
- University of California, Irvine

- University of California, Riverside
- University of California, Santa Cruz
- University of Cincinnati
- University of Colorado, Boulder
- University of Connecticut, Storrs
- University of Delaware
- University of Florida
- University of Georgia
- University of Hawaii
- University of Houston
- University of Iowa
- University of Kentucky
- University of Massachusetts, Amherst
- University of Miami
- University of Missouri, Columbia
- University of Nebraska, Lincoln
- University of North Texas
- University of Oklahoma
- University of Pittsburgh, Pittsburg
- University of Rochester
- University of South Carolina, Columbia
- University of Tennessee
- University of Texas at Arlington
- Vanderbilt University
- Virginia Polytechnic Institute & State University
- Washington State University
- Wayne State University
- Wesleyan University

Group III: 72 total

- Adelphi University
- Air Force Institute of Technology
- American University
- Bowling Green State University
- Brigham Young University
- Bryn Mawr College
- Catholic University of America
- Central Michigan University
- Clark University
- Clarkson University
- College of William and Mary
- Colorado School of Mines
- Drexel University
- Emory University
- Florida Atlantic University
- George Washington University
- Howard University

- Idaho State University
- Illinois Institute of Technology (discontinued graduate program)
- Illinois State University
- Indiana University-Purdue University, Indianapolis
- Marquette University
- Mississippi State University
- Montana State University, Bozeman
- Naval Postgraduate School
- New Jersey Institute of Technology
- New Mexico State University
- North Dakota State University
- Northern Illinois University
- Ohio University
- Oklahoma State University
- Old Dominion University
- Portland State University
- Rockefeller University
- Southern Illinois University at Carbondale
- Southern Methodist University
- St. Louis University
- Stevens Institute of Technology
- Tufts University
- University of Alabama at Birmingham
- University of Alabama, Huntsville
- University of Alabama, Tuscaloosa
- University of Alaska, Fairbanks
- University of Arkansas at Fayetteville
- University of Central Florida
- University of Colorado, Denver
- University of Denver
- University of Idaho
- University of Kansas (in Group II based on the 1983 NRC rankings)
- University of Maryland Baltimore County
- University of Memphis
- University of Mississippi
- University of Missouri, Kansas City
- University of Missouri, Rolla
- University of Montana
- University of New Hampshire
- University of New Mexico (in Group II based on the 1983 NRC rankings)
- University of North Carolina at Charlotte
- University of Northern Colorado
- University of Rhode Island
- University of South Florida
- University of Southwestern Louisiana
- University of Texas at Dallas
- University of Toledo

- University of Vermont
- University of Wisconsin, Milwaukee
- University of Wyoming
- Utah State University
- West Virginia University
- Western Michigan University
- Wichita State University
- Worcester Polytechnic Institute

Canadian Institutions: 29 total

- Carleton University
- Concordia University
- Dalhousie University
- McGill University
- McMaster University
- Memorial University of Newfoundland
- Queen's University
- Simon Fraser University
- Technical University of Nova Scotia
- Université Laval
- Université de Montréal
- Université de Sherbrooke
- Université du Québec à Montréal
- Université du Québec à Chicoutimi
- University of Alberta
- University of British Columbia
- University of Calgary
- University of Guelph
- University of Manitoba
- University of New Brunswick
- University of Ottawa
- University of Regina
- University of Saskatchewan
- University of Toronto
- University of Victoria
- University of Waterloo
- University of Western Ontario
- University of Windsor
- York University

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American Mathematical Society
P.O. Box 6248, Providence, Rhode Island 02940-6248
Tel: 800-321-4267

October 1, 1996

Dear Colleague:

We seek your cooperation in a collaborative project between librarians and mathematicians to collect data to update the data which were collected in the 1990 Mathematics Library Survey, the report of which appears in the December 1991 issue of *Notices*, pages 1258-1262. One goal of the project is to understand better the mechanisms by which mathematicians access and use information. Another is to establish a better liaison between mathematicians and libraries.

The attached questionnaire entitled *Mathematics Library Survey* was written by the AMS Library Committee, which consists of four librarians and four mathematicians. The survey is being conducted with the assistance of the AMS-IMS-MAA Data Committee.

Please give this questionnaire to the librarian in charge of the Mathematics Library, who is asked to complete and return the form by November 8, 1996, to the AMS in the envelope provided.

Questions on responses to the survey may be directed to Jack Weigel, Science Library, University of Michigan, 3175 Shapiro Library, Ann Arbor, MI 48109-1185; tel: 313-936-2336; fax: 313-763-9813; email: jweigel@umich.edu.

For the purpose of the survey, MATHEMATICS LIBRARY means the main mathematics collection which is used by the mathematics faculty and graduate students. In some institutions there may be more than one library or reading room which is important to the research of mathematics faculty and graduate students. In such cases, institutions should submit more than one form; in NO case should data reflect composite information for more than one library. If additional forms are needed, please photocopy this questionnaire as necessary or call Kinda Remick at the AMS at 401-455-4113.

The results of the survey will be announced in a report by the AMS Library Committee. In addition, special provision is being made to allow respondents to see more detailed data from the survey. Many librarians have asked to share their data and receive a special edition of the results in which names of institutions are identified. If you wish to be listed in this special edition and to receive a copy, you must respond YES in the appropriate boxes on the questionnaire. Otherwise, your data will be released in summary form only, and your institution will not be identified.

Please respond to as many questions as you can with the time that you have.

Thank you for your assistance.

Sincerely,

James L. Rovnyak

James L. Rovnyak, Co-chair
AMS Library Committee

Nancy D. Anderson

Nancy D. Anderson, Co-chair
AMS Library Committee

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MATHEMATICS LIBRARY SURVEY

Return to: American Mathematical Society, Survey Department, PO Box 6248, Providence, RI 02940-6248
Tel: 800-321-4267 • Fax: 401-331-3842 • Email: survey@ams.org

Please give this questionnaire to the librarian in charge of the Mathematics Library, who is asked to complete and return the form by November 8, 1996, to the AMS in the envelope provided.

PLEASE PRINT OR TYPE.

Institution: _____

Name of library: _____

Address: _____

_____
City State Zip

My data are public information, and the name of my institution may be identified: ☐ Yes ☐ No

If "yes," do you wish to receive a special summary of institution-specific data from all such respondents? ☐ Yes ☐ No

"Mathematics Library" means the main mathematics collection used by the mathematics faculty and graduate students. Do NOT include mathematics holdings in other libraries on campus.

If the Mathematics Library is part of a larger unit, the DATA SOUGHT REFER ONLY TO MATHEMATICS and should not include other collections (physics, astronomy, etc.). Where data for mathematics cannot be extracted or reliably estimated, leave the question blank.

For the purpose of this survey, "journals" are to be considered as regularly published periodicals and do not include monographic series, annual directories, etc.

"Serials" include journals, standing-order numbered lecture notes, standing-order numbered monographic series, etc.

"Professional Librarian" means someone with at least an MLS from an ALA accredited library school.

SECTION 1 STRUCTURE OF THE MATHEMATICS LIBRARY

1. a. Which of these structures best describes the Mathematics Library for which data are being reported? Check one.

☐ Part of a general library of a university library system
☐ Part of a science and/or engineering library of a university library system
☐ Branch library of a university library system, containing mathematics together with other sciences such as physics or astronomy
☐ Branch library of a university library system, containing mathematics together with other mathematical sciences, such as statistics or computer science
☐ Branch library of a university library system, containing only mathematics
☐ Departmental reading room
☐ Other (please describe) _____

b. Is the library located in the same building as the mathematics faculty? ☐ Yes ☐ No

c. Some mathematics libraries may have additional holdings in areas such as theory and applications connected with statistics, computer science, biology, medicine, economics, etc., which are generally not of interest to the mathematics faculty but primarily serve some other clientele. Please exclude such additional holdings, but, if this is not possible, indicate if the data you report include significant additional holdings in the areas of:
☐ statistics ☐ computer science ☐ other (identify) _____

SECTION 2 POLICIES AND OPERATION OF THE MATHEMATICS LIBRARY

2. a. Does the Mathematics Library have: open stacks for browsing? ☐ Yes ☐ No

bound mathematics journals together in one area? ☐ Yes ☐ No

current unbound mathematics journals displayed separately from other subjects? ☐ Yes ☐ No

a security system? ☐ Yes ☐ No

b. Number of reader spaces in the Mathematics Library _____

c. Do bound journals circulate for periods of more than a few hours or overnight? ☐ Yes ☐ No

SECTION 2 (cont.) POLICIES AND OPERATION OF THE MATHEMATICS LIBRARY

2. d. How many hours is the library open and staffed in a typical week, such as:

When classes are in session (such as a week in the fall semester with no holidays) _____

In the summer session _____

Between sessions (not holidays) _____

e. Do selected users have access to the library with the use of personal keys during the hours when the library is closed? ☐ Yes ☐ No

f. Number of full-time-equivalent (FTE) staff in the Mathematics Library:

professional librarians _____ support staff _____ student assistants _____

SECTION 3 ELECTRONIC MEDIA

3. a. Check the electronic products available in the Mathemathics Library

- ☐ MathSciNet on the Internet (Web version)
- ☐ MathSci online, e.g. as a component of your local online catalog, through tapes loaded at your institution, or accessible through a consortium arrangement with another univeristy which had the tapes loaded
  - ☐ accessible also from faculty offices
- ☐ MathSci on CD ROM
  - ☐ accessible also from faculty offices
- ☐ Science Citation Index online
  - ☐ accessible also from faculty offices
- ☐ Science Citation Index on CD ROM
  - ☐ accessible also from faculty offices
- ☐ CompactMath
  - ☐ accessible also from faculty offices

If any of the above is not available through the library network, is it available through a campus network? ☐ Yes ☐ No

b. Does the library provide access to electronic sources in mathematics other than those listed in 3a (e.g. preprints, electronic journals, e-math)? ☐ Yes ☐ No

SECTION 4 EXPENDITURES AND INCOME SOURCES

4. a. Itemize total expenditures for collection development (mathematics materials) in the Mathematics Library for the fiscal year 1995-1996.

Serials $ _____

Electronic products, if not included above $ _____

Other items (monographs, etc.) $ _____

What percent of the total university library materials budget does mathematics have? _____%

b. How much money did the mathematics collection receive from a general fund administered by the university library that was not allocated in advance to the mathematics collection and was not included in 4a above?

$ _____

c. What assistance does the mathematics department provide?

Contribution of money for collection development in fiscal year 1995-96, (This may include subscriptions to journals given to the library or journals received on institutional memberships given to the library.)

$ _____

Number of journals included above _____

Other forms of assistance, such as purchase of electronic products, computers, copy machine, other equipment, student help, etc. (please describe):

_____

_____

d. Total received from gifts, endowment funds, and other sources $ _____

e. Does your library have organized, systematic campaigns or appeals for funds? ☐ Yes ☐ No

If "yes," how do you go about raising money? _____

_____

f. Total value of items received through exchange agreements $ _____

SECTION 5 THE COLLECTION IN THE MATHEMATICS LIBRARY

5. a. What is the number of currently received mathematics journal titles received in:

paper format only in the Mathematics Library? _____

both the paper and the electronic version? _____

electronic form only which are received on subscription? _____

electronic form only which are received free but which the library catalogs? _____

b. What is the total number of mathematics volumes in the Mathematics Library? _____
(do NOT include materials in remote storage or in other libraries on campus)

Break down the previous figure into number of bound journal volumes _____ and everything else _____

c. Number of mathematics journal titles cancelled since January 1991? _____ added since January 1991? _____

Number of mathematics journal paper subscriptions cancelled because your are now subscribing to the electronic version? _____

d. Estimate the total number of mathemtics volumes in storage locations because of space shortage. Give the estimate as a percentage of the total number of mathematics volumes owned by the library if all volumes were under one roof today _____%

e. Has your library attempted to measure how well a collection meets demand? ☐ Yes ☐ No

If "yes," please describe: _____

_____

f. Institutional memberships in professional associations (check any that apply, and indicate if the membership is purchased by the mathematics library, the mathematics department, or other)

Paid by:	Mathematics Library	Mathematics Department	Other	(please specify)
☐ American Mathematical Society	☐	☐	☐	_____
☐ Mathematical Association of America	☐	☐	☐	_____
☐ Society for Industrial and Applied Mathematics	☐	☐	☐	_____
☐ Institute of Mathematical Statistics	☐	☐	☐	_____
☐ American Statistical Association	☐	☐	☐	_____
☐ Association for Symbolic Logic	☐	☐	☐	_____
☐ Other (please specify) _____	☐	☐	☐	_____

SECTION 6 COMMENTS

6. Please elaborate or clarify any of your answers or add any comments. If necessary, continue on separate page.

_____

_____

_____

_____

_____

SECTION 7

Name and title of person completing this questionnaire: _____

_____ Date: _____

Mailing address (if different from that on page 1): _____

_____

Tel: _____ Fax: _____ Email: _____

Mathematics Library, University of Illinois, 1409 West Green Street, Urbana, IL 61801,

E-mail address: ndanders@uiuc.edu

Department of Mathematics, Statistics and Computing Science, Dalhousie University, Halifax, N.S. B3H 3J5, Canada

E-mail address: dilcher@cs.dal.ca

Department of Mathematics, University of Virginia, Charlottesville, Virginia 22903–3199

E-mail address: rovnyak@Virginia.EDU

1996 AMS-IMS-MAA Annual Mathematics Library Survey
Group I Libraries--Public Institutions

Questions 4a-4f: The budget data listed below was gathered from responses to items in the questionaire's Section 4, Expenditures and Income Sources:

4a. Itemize total expenditures for collection development (mathematics materials) in the Mathematics Library for the fiscal year 1995-1996.
**Serials $**_____ {$xxx; or no response}
Electronic products, if not included above $_____ {$xxx; or no response}
Other items (monographs, etc.) $_____ {$xxx; or no response}
Total math library budget $_____
What **% of the total university library materials budget** does mathematics have?_____% {xx%; or no response}

4b. How much money did the mathematics collection receive from **general funds** administered by the university library that was not allocated in advance to the mathematics collection and was not included in 4a above?
$_____ {$xxx; or no response}

4c. What assistance does the mathematics department provide?
Contribution of Math Dept. money for collection development in fiscal year 1995-96, (This may include subscriptions to journals given to the library or journals received on institutional memberships given to the library.)
$_____ {$xxx; or no response}
Number of journals included above _____ {#; n/a, not applicable, or no response}
Please **specify other forms of assistance**, such as purchase of electronic products, computers, copy machine, other equipment, student help, etc.

4d. **Total received from gifts, endowment funds, and other sources** $_____ {$xxx; or no response}

4e. Does your library have organized, systematic **fund drive**? {yes, no, or no response}
If yes, **specify** how you do your **fund drive**?

4f. **Total value** of items received through **exchange** agreements $_____ {$xxx; or no response}

		4a	4a	4a		4a	4b	4c	4c	4c	4d	4e	4e	4f
Institution	**Library**	**Serials**	**Electronic products**	**Other**	**Total Math Lib. Budget**	**% Total Library Budget**	**General Funds**	**Math Dept. $**	**# Jrnls**	**Specify Assistance**	**Total Gifts**	**Fund Drive?**	**Fund Drive Comments**	**Value of Exchange Agreements**
Georgia Institute of Technology	Library & Information Center				$0				n/a			no		
Indiana University, Bloomington	Swain Hall Library	$118,400		$27,000	$145,400	2.80%		$100	2		$500	no		$15,000
Michigan State University	Mathematics Library	$167,567	$1,775	$20,432	$189,774	3.50%	$0	$600		MSNet	$375	yes	Special math library fund	$4,571
Ohio State University, Columbus	Science & Engineering Library	$184,148		$16,636	$200,784							no		
Penn State University, University Park	Mathematics Library	$173,000	$5,000	$42,000	$220,000	3.30%	$0	$1,250	9	Copy machine	$12,750	yes	Development Office	$5,000
Rutgers University, New Brunswick	Mathematical Science Library	$243,949		$7,137	$251,086	4.00%	$0		n/a	None	$3,626	yes	Phonathon	
SUNY, Stony Brook	Mathematics/Physics Library	$110,000		$20,000	$130,000			$1,000			$1,500	no		$500
University of California, Berkeley	Astr-Math-Stat Library	$225,497		$40,312	$265,809						$8,409	no		
University of California, Los Angeles	Graduate Reading Room	$66,500	$563	$50	$67,113	0.00%	$0	$70,000	86	see note	$2,500	no		

1996 AMS-IMS-MAA Annual Mathematics Library Survey
Group I Libraries--Public Institutions

Questions 4a-4f: The budget data listed below was gathered from responses to items in the questionaire's Section 4, Expenditures and Income Sources:
4a. Itemize total expenditures for collection development (mathematics materials) in the Mathematics Library for the fiscal year 1995-1996.
**Serials $**_____ {$xxx; or no response}
Electronic products, if not included above $_____ {$xxx; or no response}
Other items (monographs, etc.) $_____ {$xxx; or no response}
Total math library budget $_____
What **% of the total university library materials budget** does mathematics have?_____% {xx%; or no response}
4b. How much money did the mathematics collection receive from **general funds** administered by the university library that was not allocated in advance to the mathematics collection and was not included in 4a above?
$_____ {$xxx; or no response}
4c. What assistance does the mathematics department provide?
Contribution of Math Dept. money for collection development in fiscal year 1995-96, (This may include subscriptions to journals given to the library or journals received on institutional memberships given to the library.)
$_____ {$xxx; or no response}
Number of journals included above _____ {#; n/a, not applicable, or no response}
Please **specify other forms of assistance**, such as purchase of electronic products, computers, copy machine, other equipment, student help, etc.
4d. **Total received from gifts, endowment funds, and other sources** $_____ {$xxx; or no response}
4e. Does your library have organized, systematic **fund drive**? {yes, no, or no response}
If yes, **specify** how you do your **fund drive**?
4f. **Total value** of items received through **exchange** agreements $_____ {$xxx; or no response}

		4a	4a	4a		4a	4b	4c	4c	4c	4d	4e	4e	4f
Institution	**Library**	**Serials**	**Electronic products**	**Other**	**Total Math Lib. Budget**	**% Total Library Budget**	**General Funds**	**Math Dept. $**	**# Jrnls**	**Specify Assistance**	**Total Gifts**	**Fund Drive?**	**Fund Drive Comments**	**Value of Exchange Agreements**
University of California, Los Angeles	Science & Engineering Library	$96,874		$47,087	$143,961		$0		n/a			no response		
University of Illinois, Chicago	Mathematics Library				$0				n/a	None		no		
University of Illinois, Urbana-Champaign	Mathematics Library	$150,423	$1,881	$40,608	$192,912	1.90%	$7,466	$6,330	52	MSNet	$46,618	yes	Faculty/staff payroll deductions, univ fundraising	
University of Maryland, College Park	Engineering & Physical Sciences Library	$140,000	$1,775	$24,600	$166,375	3.60%	$0	$684	2			yes	Donor appeals	
University of Michigan	Science Library	$247,380		$48,395	$295,775	3.00%	$0	$2,445	10		$522	no		$10,440
University of Minnesota, Minneapolis	Mathematics Library	$149,696		$16,967	$166,663	2.00%	$0	$1,500	3	Computers		no		
University of North Carolina, Chapel Hill	Alfred Brauer Library	$147,552	$3,339	$8,827	$159,718			$5,520	20	stdnt asst, office supplies & oper exp, photocopies, etc.	$6,341	no		
University of Oregon	Mathematics Library	$146,539		$5,000	$151,539	3.00%				MSNet		yes	UO Foundation	
University of Virginia	Mathematics Library	$107,816		$19,151	$126,967	3.00%	$0	$295	2	Computer & laser printer	$4,000	yes	Univ Development Office	
University of Washington	Mathematics Research Library	$116,039	$0	$37,849	$153,888	2.40%	$300	$3,600		Travel money, lbrn AMS membership, equipment		yes	Annual book sale, etc.	$4,000
University of Wisconsin, Madison	Mathematics Library	$112,500		$52,300	$164,800	2.90%	$0	$6,576	18	Postage, photocopies, office supplies	$6,576	no		$4,163

1996 AMS-IMS-MAA Annual Mathematics Library Survey
Group I Libraries--Private Institutions

Questions 4a-4f: The budget data listed below was gathered from responses to items in the questionaire's Section 4, Expenditures and Income Sources:
4a. Itemize total expenditures for collection development (mathematics materials) in the Mathematics Library for the fiscal year 1995-1996.
**Serials $**_____ {$xxx; or no response}
Electronic products, if not included above $_____ {$xxx; or no response}
Other items (monographs, etc.) $_____ {$xxx; or no response}
Total math library budget $_____
What **% of the total university library materials budget** does mathematics have?_____% {xx%; or no response}
4b. How much money did the mathematics collection receive from **general funds** administered by the university library that was not allocated in advance to the mathematics collection and was not included in 4a above? $_____ {$xxx; or no response}
4c. What assistance does the mathematics department provide?
Contribution of Math Dept. money for collection development in fiscal year 1995-96, (This may include subscriptions to journals given to the library or journals received on institutional memberships given to the library.) $_____ {$xxx; or no response}
Number of journals included above _____ {#; n/a, not applicable, or no response}
Please **specify other forms of assistance**, such as purchase of electronic products, computers, copy machine, other equipment, student help, etc.
4d. **Total received from gifts, endowment funds, and other sources** $_____ {$xxx; or no response}
4e. Does your library have organized, systematic **fund drive**? {yes, no, or no response}
If yes, **specify** how you do your **fund drive**?
4f. **Total value** of items received through **exchange** agreements $_____ {$xxx; or no response}

		4a	4a	4a	4a	4a	4b	4c	4c	4c	4d	4e	4e	4e
Institution	**Library**	**Serials**	**Electronic products**	**Other**	**Total Math Lib. Budget**	**% Total Library Budget**	**General Funds**	**Math Dept. $**	**# Jrnls**	**Specify Assistance**	**Total Gifts**	**Fund Drive?**	**Fund Drive Comments**	**Value of Exchange Agreements**
California Institute of Technology	Millikan Library	$105,000		$24,500	$129,500	5.60%	$0	$0	n/a	None		no		$1,100
Columbia University	Math/Science Library	$109,387		$42,279	$151,666	2.70%	$0	$0	n/a		$83,186	no		
Cornell University	Mathematics Library	$143,768	$1,451	$34,660	$179,879	2.00%	$0	$1,500	8	Facility improvements, equipment, etc	$16,324	yes	Math dept and library campaigns	$1,000
Duke University	Mathematics-Physics Library	$141,333	$6,801	$18,149	$166,283	3.00%	$3,557	$739	5	see note		no		$33,133
Massachusetts Institute of Technology	Science Library	$118,722	$2,822	$11,708	$133,252				0		$6,572	no		
New York University, Courant Institute	Courant Institute of Mathematical Sciences Library	$192,002	$7,780	$42,972	$242,754	0.00%	$0	$242,754				no		$5,500
Northwestern University	Ralph Boas Mathematics Library			$13,400	$13,400	n/a	n/a	$3,300	11		$20,000	no		
Princeton University	Fine Hall Library	$142,304	$3,265	$45,844	$191,413	1.70%			0	see note	$0	no		
Rice University	Fondren Library	$105,183	$8,000	$41,002	$154,185		$10,000				$0	no		$0
University of Notre Dame	Mathematics Library	$135,001		$2,170	$137,171	4.20%	$10,500	$0	n/a	Space	$800	no		$5,000
University of Pennsylvania	Mathematics Physics Astronomy Library	$100,014		$25,128	$125,142	1.50%	$0	$0	n/a		$2,500	yes	Library Dev. Office	$0
University of Southern California	Seaver Science Library, 102	$190,000	$6,000	$35,000	$231,000	4.90%	$0	$1,500	5	MSCD	$2,500	yes	Central Lib Development Office	$0
Washington University	Mathematics Library	$130,000		$16,000	$146,000	3.80%				Student assistants	$1,128	no		
Yale University	Mathematics Library	$118,000		$12,000	$130,000	1.20%		$9,300	11	Office supplies & photocopies	$0	no		$1,500

Data Converted by R.Carkeek.
Last Updated 2/11/98.
M.Tucker, mtucker@uw.edu

1996 AMS-IMS-MAA Annual Mathematics Library Survey
Group II Libraries

Questions 4a-4f: The budget data listed below was gathered from responses to items in the questionaire's Section 4, Expenditures and Income Sources:

4a. Itemize total expenditures for collection development (mathematics materials) in the Mathematics Library for the fiscal year 1995-1996.
**Serials $**_____ {$xxx; or no response}
Electronic products, if not included above $_____ {$xxx; or no response}
Other items (monographs, etc.) $_____ {$xxx; or no response}
Total math library budget $_____
What **% of the total university library materials budget** does mathematics have?_____% {xx%; or no response}

4b. How much money did the mathematics collection receive from **general funds** administered by the university library that was not allocated in advance to the mathematics collection and was not included in 4a above?
$_____ {$xxx; or no response}

4c. What assistance does the mathematics department provide?
Contribution of Math Dept. money for collection development in fiscal year 1995-96, (This may include subscriptions to journals given to the library or journals received on institutional memberships given to the library.)
$_____ {$xxx; or no response}
Number of journals included above _____ {#; n/a, not applicable, or no response}
Please **specify other forms of assistance**, such as purchase of electronic products, computers, copy machine, other equipment, student help, etc.

4d. **Total received from gifts, endowment funds, and other sources** $_____ {$xxx; or no response}

4e. Does your library have organized, systematic **fund drive**? {yes, no, or no response}
If yes, **specify** how you do your **fund drive**?

4f. **Total value** of items received through **exchange** agreements $_____ {$xxx; or no response}

		4a	4a	4a		4a	4b	4c	4c	4c	4d	4e	4e	4f
Institution	**Library**	**Serials**	**Electronic products**	**Other**	**Total Math Lib. Budget**	**% Total Library Budget**	**General Funds**	**Math Dept. $**	**# Jrnls**	**Specify Assistance**	**Total Gifts**	**Fund Drive?**	**Fund Drive Comments**	**Value of Exchange Agreements**
Clemson University	University Libraries				$0									
Colorado State University	Morgan Library			$10,000	$10,000		$0					yes	Univ Development office	
Iowa State University	Parks Library	$125,710	$11,396	$42,842	$179,948			$4,048	13	MSNet joint assistance		yes	Development Office	
Kent State University, Kent	Mathematics/Computers Science Library	$167,057		$16,158	$183,215	7.0%						yes	University Development Office	
Lehigh University	Fairchild-Martindale Library				$0									
Louisiana State University, Baton Rouge	Troy H. Middleton Library				$0					None		yes	Library development officer	
North Carolina State University	John W. Cell Library				$0			$0	n/a		$3,000	no		$0
North Carolina State University	NCSU Libraries				$0			$0	n/a		$3,000	yes	Development officer	$0
Polytechnic University	Bern Dioner Library of Science & Technology	$10,526		$1,225	$11,751							no		

1996 AMS-IMS-MAA Annual Mathematics Library Survey
Group II Libraries

Questions 4a-4f: The budget data listed below was gathered from responses to items in the questionaire's Section 4, Expenditures and Income Sources:
4a. Itemize total expenditures for collection development (mathematics materials) in the Mathematics Library for the fiscal year 1995-1996.
**Serials $**_____ {$xxx; or no response}
Electronic products, if not included above $_____ {$xxx; or no response}
Other items (monographs, etc.) $_____ {$xxx; or no response}
Total math library budget $_____
What **% of the total university library materials budget** does mathematics have?_____% {xx%; or no response}
4b. How much money did the mathematics collection receive from **general funds** administered by the university library that was not allocated in advance to the mathematics collection and was not included in 4a above?
$_____ {$xxx; or no response}
4c. What assistance does the mathematics department provide?
Contribution of Math Dept. money for collection development in fiscal year 1995-96, (This may include subscriptions to journals given to the library or journals received on institutional memberships given to the library.)
$_____ {$xxx; or no response}
Number of journals included above _____ {#; n/a, not applicable, or no response}
Please **specify other forms of assistance**, such as purchase of electronic products, computers, copy machine, other equipment, student help, etc.
4d. **Total received from gifts, endowment funds, and other sources** $_____ {$xxx; or no response}
4e. Does your library have organized, systematic **fund drive**? {yes, no, or no response}
If yes, **specify** how you do your **fund drive**?
4f. **Total value** of items received through **exchange** agreements $_____ {$xxx; or no response}

		4a	4a	4a		4a	4b	4c	4c	4c	4d	4e	4e	4f
Institution	**Library**	**Serials**	**Electronic products**	**Other**	**Total Math Lib. Budget**	**% Total Library Budget**	**General Funds**	**Math Dept. $**	**# Jrnls**	**Specify Assistance**	**Total Gifts**	**Fund Drive?**	**Fund Drive Comments**	**Value of Exchange Agreements**
Texas A & M University	Sterling C. Evans Library	$80,000		$15,000	$95,000	2.5%						yes	Development Staff	$9
Texas Tech University	University Libraries	$252,000	$2,000	$23,000	$277,000	9.2%		$0	n/a			yes	Grant writing	$0
Tulane University	Alfred Clifford Mathematics Research Library	$93,000		$14,000	$107,000	4.0%	$3,500	$2,000	1	Copy machine		no		
University of California, Davis	Shields Library	$106,000			$106,000		$0				$0	no		
University of California, Riverside	Mathematics Department Library				$0			$3,300						
University of Cincinnati	Mathematics Library	$131,765		$34,439	$166,204	4.0%	$1,000	$0	n/a		$8,582	no		$0
University of Connecticut	Homer Babbidge Library	$96,000	$4,000	$12,000	$112,000	7.0%	$0			None	$0	yes	Friends of Library	$0
University of Connecticut	Mathematics Reading Room				$0							no		
University of Delaware	Morris Library				$0									
University of Georgia	Science Library	$199,000			$199,000			$0	n/a					
University of Hawaii	Thomas H. Hamilton Research Library	$115,000		$1,500	$116,500		$0	$0	n/a	MSNet	$0	yes	Sold Mother's Day cards	$300
University of Kentucky	Mathematical Sciences Library, Room OB-9	$13,229		$7,684	$20,913							no		
University of Massachusetts, Amherst	Physical Sciences & Engineering Library	$122,168		$21,037	$143,205	350.0%		$0	0		$180,000	yes	Friends of Library, Development Office	
University of Missouri, Columbia	Mathematical Sciences Library	$130,301	$0	$20,853	$151,154	3.0%	$0	$2,200	9	None	$0	no		$0
University of North Texas	Science & Technology Library	$105,000		$25,000	$130,000	5.0%	$0	$300	1	None	$0	no		$0

1996 AMS-IMS-MAA Annual Mathematics Library Survey
Group II Libraries

Questions 4a-4f: The budget data listed below was gathered from responses to items in the questionaire's Section 4, Expenditures and Income Sources:

4a. Itemize total expenditures for collection development (mathematics materials) in the Mathematics Library for the fiscal year 1995-1996.
**Serials $**_____ {$xxx; or no response}
Electronic products, if not included above $_____ {$xxx; or no response}
Other items (monographs, etc.) $_____ {$xxx; or no response}
Total math library budget $_____
What **% of the total university library materials budget** does mathematics have?_____% {xx%; or no response}

4b. How much money did the mathematics collection receive from **general funds** administered by the university library that was not allocated in advance to the mathematics collection and was not included in 4a above?
$_____ {$xxx; or no response}

4c. What assistance does the mathematics department provide?
Contribution of Math Dept. money for collection development in fiscal year 1995-96, (This may include subscriptions to journals given to the library or journals received on institutional memberships given to the library.)
$_____ {$xxx; or no response}
Number of journals included above _____ {#; n/a, not applicable, or no response}
Please **specify other forms of assistance**, such as purchase of electronic products, computers, copy machine, other equipment, student help, etc.

4d. **Total received from gifts, endowment funds, and other sources** $_____ {$xxx; or no response}

4e. Does your library have organized, systematic **fund drive**? {yes, no, or no response}
If yes, **specify** how you do your **fund drive**?

4f. **Total value** of items received through **exchange** agreements $_____ {$xxx; or no response}

		4a	4a	4a		4a	4b	4c	4c	4c	4d	4e	4e	4f
Institution	**Library**	**Serials**	**Electronic products**	**Other**	**Total Math Lib. Budget**	**% Total Library Budget**	**General Funds**	**Math Dept. $**	**# Jrnls**	**Specify Assistance**	**Total Gifts**	**Fund Drive?**	**Fund Drive Comments**	**Value of Exchange Agreements**
University of Oklahoma	Chemistry/Mathematics Library				$0		$1,000					no		
University of Rochester	Carlson Library	$112,600	$7,500	$7,000	$127,100	5.0%	$7,500	$0	n/a		$0	no		
University of South Carolina, Columbia	Mathematics Library				$0									
University of Texas, Arlington	Science & Engineering Library	$83,823		$9,220	$93,043	6.2%	$0	$0	n/a		$0	no		$300
Vanderbilt University	Science & Engineering Library	$146,506	$3,431	$21,634	$171,571	3.2%	$2,477	$0	n/a		$0	no		$0

1996 AMS-IMS-MAA Annual Mathematics Library Survey
Group III Libraries

Questions 4a-4f: The budget data listed below was gathered from responses to items in the questionaire's Section 4, Expenditures and Income Sources:
4a. Itemize total expenditures for collection development (mathematics materials) in the Mathematics Library for the fiscal year 1995-1996.
**Serials $**_____ {$xxx; or no response}
Electronic products, if not included above $_____ {$xxx; or no response}
Other items (monographs, etc.) $_____ {$xxx; or no response}
Total math library budget $_____
What **% of the total university library materials budget** does mathematics have?_____% {xx%; or no response}
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		4a	4a	4a		4a	4b	4c	4c	4c	4d	4e	4e	4f
Institution	**Library**	**Serials**	**Electronic products**	**Other**	**Total Math Lib. Budget**	**% Total Library Budget**	**General Funds**	**Math Dept. $**	**# Jrnls**	**Specify Assistance**	**Total Gifts**	**Fund Drive?**	**Fund Drive Comments**	**Value of Exchange Agreements**
Bowling Green State University	Frank C. Ogg Science Library		$5,935	$36,400	$42,335	35.0%						yes	Friends of Library	
Brigham Young University	Harold B. Lee Library	$100,914	$5,141	$34,183	$140,238	3.3%	$0	$0	n/a		$0	no		
Bryn Mawr College	Collier Science Library	$36,576	$2,557	$4,326	$43,459	3.0%	$0	$0	n/a	None	$650	no		$0
Catholic University of America	Engineering/Architecture & Mathematics Library	$22,422	$0	$5,777	$28,199	2.5%	$0	$0	n/a	Dept requests for new books	$0	no		$0
Central Michigan University	Park Library	$43,600		$2,140	$45,740	2.4%	$0	$0	n/a		$0	no		$0
Clark University	Goddard Library	$40,629		$4,648	$45,277	6.0%						no		
College of William & Mary	Earl Gregg Swem Library	$87,914		$17,168	$105,082	5.0%	$0							
Colorado School of Mines	Arthur Lakes Library	$13,009	$0	$6,000	$19,009	4.0%	$0	$0	n/a		$0	no		$500
Drexel University	Hagerty Library	$8,404	$2,000	$2,865	$13,269	2.0%	$0	$0	n/a		$0	no		
Florida Atlantic University	S.E. Wimberly Library	$22,247		$4,259	$26,506	1.5%		$1,080	0			yes	Book sales, donor recept/dinners, Friends of Library dues	

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Group III Libraries

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Other items (monographs, etc.) $_____ {$xxx; or no response}
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		4a	4a	4a		4a	4b	4c	4c	4c	4d	4e	4e	4f
Institution	**Library**	**Serials**	**Electronic products**	**Other**	**Total Math Lib. Budget**	**% Total Library Budget**	**General Funds**	**Math Dept. $**	**# Jrnls**	**Specify Assistance**	**Total Gifts**	**Fund Drive?**	**Fund Drive Comments**	**Value of Exchange Agreements**
George Washington University	Gelman Library	$73,755	$5,735	$18,285	$97,775	3.9%	$0	$0	n/a	None	$2,000	no		$0
Illinois State University	Department of Mathematics	$46,612	$0	$10,310	$56,922	260.0%	$1,724	$1,850			$2,000	yes	Friends of Library	
Marquette University	Science Library	$99,873		$40,860	$140,733	5.1%	$0	$0	n/a		$0	no		
New Mexico State University, Las Cruces	Branson and New Library	$104,578	$5,197	$8,155	$117,930	6.2%		$3,058	19	MSNet		yes	Development officer	$950
North Dakota State University, Fargo	Main Library	$60,050	$0	$2,484	$62,534	5.8%	$0	$0	n/a	None	$0	no		$0
Northern Illinois University	Founders Memorial Library	$106,493	$6,000	$10,450	$122,943	0.5%	$0	$4,000	10	MSNet	$1,000	yes	Development officer	
Oklahoma State University, Stillwater	Edmon Low Library	$151,271		$31,968	$183,239	5.9%	$0	$0	n/a		$0	yes	Fund raiser in Found Office	
Southern Illinois University, Carbondale	Morris Library-Math Section	$102,000		$8,000	$110,000	3.0%	$0	$0	n/a	None	$0	yes	999	
Stevens Institute of Technology	S.C. Williams Library	$500	$6,000		$6,500	.	$5,000	$0	n/a		$0	yes	Letters	$0
Tufts University	Tisch Library	$86,876	$1,975	$17,452	$106,303	6.9%				AMS Data Access fee		yes	Friends of Library	
University of Alabama, Huntsville	Salmon Library	$69,511		$10,528	$80,039	.	$0	$0	n/a	None	$0	no		$0
University of Alabama, Tuscaloosa	Science & Engineering Library	$105,000		$14,000	$119,000	5.0%	$0		0	None	$0	no		
University of Central Florida	Library	$55,747	$3,500	$35,777	$95,024	4.5%						yes	University foundations office & Friends of Library	
University of Colorado, Denver	Avraria Library	$33,051	$0	$15,309	$48,360	3.7%	$0	$0	n/a		$500	yes	Friends of Library	$0

Data Converted by R.Carkeek.
Last Updated 2/11/98.
M.Tucker, mtucker@uw.edu

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University of Denver	Penrose Library			$40,000	$40,000	.						yes	Development Officer	
University of Idaho	Library	$62,278		$3,407	$65,685	4.0%	$0	$275	0		$0	no		
University of Maryland, Baltimore County	Albin Kuhn Library	$93,810		$7,384	$101,194	6.0%						no		
University of Memphis	University Libraries	$151,393		$3,018	$154,411	7.0%	$0	$0	n/a		$0	yes	Univ Development Office & Friends of Library	$0
University of Mississippi	D.D. Williams Library	$82,532		$6,000	$88,532	4.0%		$0	n/a			no		
University of Missouri, Rolla	Curtis Laws Wilson Library	$25,000		$9,000	$34,000	3.6%						no		
University of Montana	Mansfield Library	$66,458	$6,000	$10,672	$83,130	5.5%	$0	$0	n/a	None	$0	yes	.	$0
University of New Mexico	Centennial Science & Engineering Library	$107,000		$15,000	$122,000	5.0%		$0	n/a			yes		
University of North Carolina, Charlotte	Atkins Library	$128,493		$14,027	$142,520	7.7%	$0	$0	n/a		$0	no	Univ Dev Office	$0
University of Northern Colorado	James Michener Library	$11,800		$10,000	$21,800	2.0%	$0	$0	n/a	None		no		$0
University of Rhode Island	University Library	$59,000	$17,000	$11,000	$87,000	5.1%	$0	$0	n/a	None	$7,000	no		$0
University of South Florida	Library	$80,169	$1,881	$40,957	$123,007	3.9%						yes	Campaigns & Adopt-a Journal	
University of Southwestern Louisiana	Edith Garland Dupre Library	$81,386		$10,698	$92,084	6.3%				None	$0	no		$0
University of Toledo	Carlson Library	$70,872	$4,310	$15,000	$90,182	4.5%	$0	$0	n/a		$0	no		$0
University of Wyoming	Science Library	$72,000	$0	$8,500	$80,500	3.7%	$0	$2,400	2	AMS Membership	$0	no		
West Virginia University	Mathematics Library	$80,000	$2,000	$5,000	$87,000	5.0%	$0	$0	n/a	None	$0	no		
Wichita State University	Ablah Library	$70,500		$16,200	$86,700	6.0%						yes	Campaign for library	

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Concordia University	Webster Library	CDN $68,000	CDN $875	CDN $17,000	$0		CDN $30	$0	n/a		CDN $30	yes		
Dalhousie University	Anne Baxter Reading Room	$129,900		$6,600	$136,500	7.0%	$950	$278	3	Copy machine, student help	$500	yes	Pledges	$1,000
McGill University	Edward Rosenthal Library of Mathematics and Statistics				$0									
McMaster University	H.G. Thode Library of Science & Engineering	CDN $168,000	CDN $ 5,658	CDN $8,500	$0	5.0%	$0	$0	n/a		CDN $1,300	no		CDN $1,800
Memorial University	Queen Elizabeth II Library	$180,000			$180,000	5.0%	$0	$0	n/a		$0	no		
Queen's University	Mathematics & Statistics Library	$186,264	$0	$15,598	$201,862	3.6%		$0	n/a		$270	no		
Simon Fraser University	W.A.C. Bennett Library	$190,739	$22,700	$45,339	$258,778	5.4%	$0	$0	n/a		$0	yes		$0
Universite Laval	Bibliotheque Scientifique	$172,106		$236,654	$408,760	3.3%						no		
University of Alberta	Mathematics Branch Library	CDN $ 190,702		CDN $6,652	$0	2.8%	$0	CDN $ 500	2	None	$0	no		$3,000
University of British Columbia	Mathematics Library	$156,007	$7,770		$163,777				0	Web work station		no		

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University of Guelph	McLaughlin Library	$95,979	$0	$9,337	$105,316	3.3%	$10,000	$0	n/a	None	$7,000	no		$0
University of Manitoba	Science Library	CDN $77,911		CDN $8,279	$0	2.5%	$0	CDN $4,928	7			no		CDN $3,989
University of Montreal	Bibliotheque De Mathematiques	$187,255		$5,358	$192,613	3.4%						no		
University of New Brunswick	Harriet Irving Library	CDN $31,000		$5,830	$5,830	2.4%		CDN $400	2			yes	Univ Development Office	
University of Ottawa	Vanier Library	$100,000		$5,000	$105,000	9.4%	$0	$1,000	3	None	$6,000	no		$5,000
University of Regina	Library	$82,050		$9,100	$91,150	5.2%	$0	$0	n/a		$0	no		$0
University of Saskatchewan	Murray Memorial Library	CDN $70,172		CDN $14,644	$0	1.7%	CDN $678				CDN $11,045	no		
University of Sherbrooke	Bibliotheque das Sciences	$45,928		$16,318	$62,246	2.0%						no		
University of Toronto	Mathematics & Statistics Library			$25,000	$25,000			$25,000		Computers, copy machine, ect.	$1,500	no		
University of Victoria	McPherson Library				$0							yes	Univ Development Office	
University of Victoria	Mathematics Reading Room	$137,000	$5,000	$8,000	$150,000		$0	$2,000	8		$1,000	no		$0
University of Windsor	Leddy Library	$43,546	$8,929	$1,067	$53,542	2.1%			0			no		
York University	Steacie Science Library	CDN $163,600		CDN $ 36,500	$0	4.0%	$0	$0	n/a	None	$0	no		$0