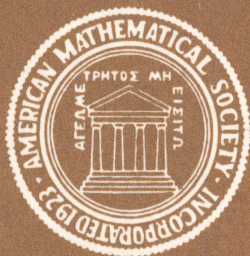


Notices

OF THE
AMERICAN
MATHEMATICAL
SOCIETY



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SPECIAL ISSUE
ASSISTANTSHIPS AND FELLOWSHIPS
IN MATHEMATICS IN 1973-1974

Notices
OF THE
AMERICAN MATHEMATICAL SOCIETY

Everett Pitcher and Gordon L. Walker, Editors
Wendell H. Fleming, Associate Editor

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FOREWORD

The fourteenth Special Issue of the *Notices* contains a listing of assistantships and fellowships available in mathematics and related sciences for the academic year 1973–1974 for graduate study at universities and a listing of stipends available for travel and study. Indexes for abstracts and articles published in the *Notices* during 1972 and a short article on the tax status of grants are also included.

The listing for assistantships and fellowships at universities includes 481 departments of mathematics, applied mathematics, statistics, computer science, and related mathematical disciplines; these represent 345 colleges and universities. Institutions in the United States are listed alphabetically by state, followed by a listing of Canadian institutions.

Because in this year's listing more universities and departments have been included on each page, it was necessary to abbreviate some of the terms.

Abbreviations used in the section on Graduate Study

Under the DEGREES AWARDED column the following terms have been used:

Bachelor's by inst.	Number of bachelor's degrees awarded by the institution
Bachelor's by dept.	Number of degrees awarded by the department
Master's by dept.	Number of master's degrees awarded by the department
Ph.D. (1969–1971 incl.)	Doctoral degrees awarded during last three years (1969–1970, 1970–1971, and 1971–1972)
A&NT	Algebra and Number Theory
G&T	Geometry and Topology
L	Logic
A&FA	Analysis and Functional Analysis
P&S	Probability and Statistics
CS	Computer Science and Numerical Analysis
AM	Applied Mathematics



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ASSISTANTSHIPS AND FELLOWSHIPS IN MATHEMATICS IN 1973-1974

I. FOR GRADUATE STUDY AT UNIVERSITIES

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	
ALABAMA						
Alabama A & M University, Normal 35762						
DEPARTMENT OF PHYSICS AND MATHEMATICS Howard J. Foster, Chairman			Applications due: 3/1/73		Bachelor's by inst. 200 Bachelor's by dept. 60 Master's by dept. 3	
Teaching Assistantship (5)	500-5000	9		15		
Research Assistantship (12)	1500-20,000	9		20		
Scholarship (10)	1000-10,000	9				
Auburn University, Auburn 36830						
DEPARTMENT OF MATHEMATICS L. P. Burton, Head			Applications due: 2/10/73		Bachelor's by inst. 2882 Bachelor's by dept. 74 Master's by dept. 10	
Fellowship (2)	2400-2800	12	150/qtr.			
Teaching Assistantship (35)	2520-4410	9	150/qtr.	5-10	Teaching or equiv- alent	Ph. D. (1969-1971 incl.) A&NT 3, G&T 5, A&FA 3. Total: 11
Samford University, Birmingham 35209						
DEPARTMENT OF MATHEMATICS W. D. Peebles, Jr., Head			Applications due: Open		Bachelor's by inst. 403 Bachelor's by dept. 8 Master's by dept. 4	
Teaching Assistantship (4)	2000	9	49/hr.	6		
Scholarship (1)	1400	9	49/hr.			
University of Alabama in Birmingham 35233						
DEPARTMENT OF MATHEMATICS Richard Crittenden, Chairman			Applications due: Open		Bachelor's by inst. 600 Bachelor's by dept. 20	
Teaching Assistantship (11)	2625	9	180 max./qtr.	5		
University of Alabama in Huntsville 35807						
DEPARTMENT OF MATHEMATICS F. Lee Cook, Chairman			Applications due: 3/1/73		Bachelor's by inst. 180 Bachelor's by dept. 13 Master's by dept. 5	
Teaching Assistantship (5)	3000-3180	9		4 4	Teaching Miscellaneous service	
University of Alabama (Tuscaloosa), University 35486						
STATISTICS AND QUANTITATIVE METHODS PROGRAM Jean Gibbons, Chairman			Applications due: 3/1/73		Bachelor's by dept. 6 Master's by dept. 9	
Research Fellowship (1)	3000-3600	9	510			Ph. D. (1969-1971 incl.) P&S 5, Total: 5
Teaching Assistantship (2)	2425-3250	9	510	6	Teaching	
Research Assistantship (1)	2425-3250	9	510	20	Research	
Scholarship (1)	2400	9	510			
Dean's Scholar (1)	510	9				

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months			

ALASKA

University of Alaska, Fairbanks 99701

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	300
Robert W. Brown, Head					Bachelor's by dept.	5
Teaching Assistantship (5)	3600-4050	9	422	5	Tutorials	Master's by dept. 2

ARIZONA

Arizona State University, Tempe 85281

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst.	3983
Nevin Savage, Chairman					Bachelor's by dept.	59
Fellowship (2)	2400-2800	12				Master's by dept. 16
Teaching Assistantship (50)	2800-3500	9	160	6	Teaching	Ph. D. (1969-1971 incl.)
Scholarship (3)	890	9				A&NT 3, G&T 5, A&FA 4, Other 3. Total: 15

Northern Arizona University, Flagstaff 86001

DEPARTMENT OF MATHEMATICS			Applications due: 4/1/73		Bachelor's by inst.	1150
Richard D. Meyer, Chairman					Bachelor's by dept.	30
Teaching Assistantship (5)	2250	9	152/sem.	13		Master's by dept. 16

University of Arizona, Tucson 85721

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst.	2874
H. Rund, Head					Bachelor's by dept.	51
Teaching Assistantship (35)	3250-3750	9		6	Teaching	Master's by dept. 8
						Ph. D. (1969-1971 incl.)
						A&NT 2, G&T 2, A&FA 5, P&S 3, AM 3. Total: 15

ARKANSAS

Arkansas State University, State University 72467

DIVISION OF MATHEMATICS AND PHYSICS			Applications due: 3/30/73		Bachelor's by inst.	1048
J. L. Linnstaedter, Chairman					Bachelor's by dept.	29
Teaching Assistantship (6)	3075	12	374-580			Master's by dept. 7

State College of Arkansas, Conway 72032

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	410
Frank M. Hudson, Chairman					Bachelor's by dept.	24
Teaching Assistantship (3)	1800	9		6		Master's by dept. 7

University of Arkansas, Fayetteville 72701

DEPARTMENT OF MATHEMATICS AND STATISTICS			Applications due: 2/15/73		Bachelor's by inst.	1690
James E. Scroggs, Chairman					Bachelor's by dept.	25
Teaching Assistantship (32)	1350-3000	9	20/sem. hr.	6 sem. hr.	Teaching	Master's by dept. 29
						Ph. D. (1969-1971 incl.)
						A&NT 1, G&T 1, A&FA 2. Total: 4

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

CALIFORNIA

California Institute of Technology, Pasadena 91109

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73	Bachelor's by inst.	143
W. A. J. Luxemburg, Executive Officer					Bachelor's by dept.	20
Fellowship (3)	2400-3600	12			Master's by dept.	3
Teaching Fellowship (6)	3400-4600	12		4 class hrs.	Ph. D. (1969-1971 incl.)	
Teaching Assistantship (13)	2839-3390	9		4 class hrs.	A&NT 8, A&FA 4, AM 1.	
Research Assistantship (2)	3442-4779	12		15 Academic yr.	Total: 13	
Scholarship	2830			30 Summer		

DEPARTMENT OF APPLIED MATHEMATICS				Applications due: 2/15/73	Bachelor's by inst.	143
G. B. Whitham, Executive Officer					Master's by dept.	3
Fellowship (5)	2400-3600	12	*		Ph. D. (1969-1971 incl.)	
Teaching Assistantship (12)	2950-3550	9	*	5	AM 11. Total: 11	
				15	Teaching or	
					Paper	
					grading	
Research Assistantship (8)	2200-2800	9	*	15	Research	

*Tuition Scholarship usually accompanies these awards.

California State Polytechnic University, Pomona 91768

DEPARTMENT OF MATHEMATICS					Bachelor's by inst.	1660
Sidney Birnbaum, Chairman					Bachelor's by dept.	50
Teaching Assistantship (4)	1800-3600	9	50/qtr.	3-6	Teaching	

California State University, Fullerton 92634

DEPARTMENT OF MATHEMATICS				Applications due: 5/1/73	Bachelor's by inst.	2602
Edsel F. Stiel, Chairman					Bachelor's by dept.	24
Teaching Assistantship (3-4)	1912.80	9	70/sem.	3	Master's by dept.	13

California State University, Hayward 94542

DEPARTMENT OF STATISTICS				Applications due: 7/15/73	Bachelor's by inst.	9643
Bruce E. Trumbo, Chairman					Bachelor's by dept.	25
Teaching Assistantship (10)	1500-2500	9		12-25	Master's by dept.	5
Reader (2)	500-800	9		10		

California State University, Long Beach 90804

DEPARTMENT OF MATHEMATICS				Applications due: 5/1/73	Bachelor's by inst.	4505
Charles W. Austin, Chairman					Bachelor's by dept.	101
Teaching Assistantship (8)	2624-3920	9	*	5-7	Teaching	15

*Fees are \$82 per semester, plus nonresident tuition of \$37 per semester-unit.

California State University, Los Angeles 90032

DEPARTMENT OF MATHEMATICS				Applications due: 5/1/73	Bachelor's by inst.	3475
Charles L. Clark, Chairman					Bachelor's by dept.	75
Teaching Assistantship (10)	2099-3460	9	165*	4-6 units/wk.	Master's by dept.	10

*\$25/unit for nonresidents.

California State University, Sacramento 95819

DEPARTMENT OF MATHEMATICS AND STATISTICS					Bachelor's by inst.	2471
M. Richard Porter, Chairman					Bachelor's by dept.	42
Teaching Assistantship (6)	3638-4008	9		6	Teaching	
Graduate Assistantship (2)	2400	9		20		

California State University, San Diego 92115

DEPARTMENT OF MATHEMATICS				Applications due: 3/15/73	Bachelor's by inst.	2226
Peter W. Shaw, Chairman					Bachelor's by dept.	106
Teaching Assistantship (20)	7872-8652	9	80/sem.	6	Teaching	37

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

California State University, San Francisco 94132

DEPARTMENT OF MATHEMATICS Newman Fisher, Chairman			Applications due: Open		Bachelor's by inst.	2500
					Bachelor's by dept.	50
Assistants (5)	200-400	9	200/yr.	5	Work as Tutor	Master's by dept. 7

California State University, San Jose 95114

DEPARTMENT OF MATHEMATICS Gerald C. Preston, Chairman			Applications due: 4/15/73		Bachelor's by inst.	3700
					Bachelor's by dept.	100
					Master's by dept.	25
Teaching Fellowship (13)	1800-3600	9		3-6	Teaching	
Teaching Intern (7)	2000-3000	12		10	Teaching high school	

Claremont Graduate School, Claremont 91711

DEPARTMENT OF MATHEMATICS William J. LeVeque, Chairman			Applications due: 2/15/73			
Fellowship (16)	2400-2800	12				

Loyola University of Los Angeles, Los Angeles 90045

DEPARTMENT OF MATHEMATICS C. J. Wallen, Chairman					Bachelor's by inst.	475
					Bachelor's by dept.	15
					Master's by dept.	3
Fellowship (1)	500	9				

Naval Postgraduate School, Monterey 93940

DEPARTMENT OF MATHEMATICS W. Max Woods, Chairman					Bachelor's by inst.	285
					Bachelor's by dept.	6
					Master's by dept.	27
Immediate Graduate Education Program (IGEP) open to newly commissioned officers.						

THE CLAREMONT COLLEGES

The doctoral program in mathematics at the Claremont Graduate School was started in 1968, with the help of an NSF Departmental Development Grant. It is expected that a number of fellowships will be available for 1973-74. The Graduate School offers the Ph.D. in 14 fields and the M.A. in 23 fields. Claremont Men's College, Harvey Mudd College, Pitzer College, Pomona College, and Scripps College have long been known for the quality of their faculties and graduates. The following members of the Graduate Faculty in Mathematics (C.G.S. mathematicians and most of those at the other Claremont Colleges) are grouped by major fields of interest, with the institution of their Ph.D. indicated.

Algebra: B. Beechler (Iowa), G. Bradley (Caltech), M. Henriksen (Wisconsin), J. Lucke (Duke), A. Pixley (Berkeley). *Analysis:* S. Busenberg (Ill. Inst. Tech.), J. Ferling (U.S.C.), H. Hamilton (Brown), L. Hoffmann (Wisconsin), E. Tolsted (Brown), A. White (Stanford), *Functional Analysis:* S. Grabner (Harvard), R. Ives (U. Wash.), R. C. James (Caltech), H. Mullikin (Wisconsin), G. Orland (Berkeley). *Applied Mathematics:* J. Spanier (U. Chicago). *Differential Equations:* R. Borrelli (Berkeley), C. Coleman (Princeton), K. Cooke (Stanford). *Geometry and Topology:* J. Greever (Virginia), R. Williamson (Berkeley), P. Yale (Harvard). *Graph Theory:* R. S. Hales (Harvard). *Number Theory:* W. J. LeVeque (Cornell). *Numerical Analysis:* S. McCormick (U.S.C.). *Probability and Statistics:* D. Bentley (Stanford), H. Krieger (Brown), J. Myhre (Stockholm). *Computer Science:* W. Brainerd (Purdue). *Philosophy of Mathematics:* G. Henry (C.G.S.). *Visiting Research Associate for 1973-74:* R. Beck (U. Penn).

For application blanks and a booklet of information, write to:

Professor William LeVeque
CLAREMONT GRADUATE SCHOOL
Claremont, California 91711

TYPE <small>of financial assistance (with number anticipated 1973-1974)</small>	STIPEND <small>amount in dollars</small>	9 or 12 months	TUITION <small>if not included in stipend (dollars)</small>	SERVICE REQUIRED		DEGREES AWARDED <small>Academic year 1971-1972</small>
				hours per week	type of service	
Stanford University, Stanford 94305						
DEPARTMENT OF MATHEMATICS Ralph Phillips, Chairman			Applications due: 1/15/73		Bachelor's by inst. 1640 Bachelor's by dept. 31 Master's by dept. 17	
Graduate Assistantship (40)*	2400-2690	9**		***		Ph. D. (1969-1971 incl.) G&T 8, L 7, A&FA 6, P&S 5, CS 1, AM 6, Other 1. Total: 34
*Graduate Assistants serve for one quarter as Teaching Fellows, for one quarter as Course Assistants and for one quarter as Research Assistants.						
**In some cases additional stipends of \$533 are available for study in the summer quarter.						
***3 hrs. per week teaching or assisting for two quarters; one quarter research with no formal duties.						
DEPARTMENT OF COMPUTER SCIENCE John G. Herriot, Acting Chairman			Applications due: 1/15/73		Bachelor's by inst. 1640 Master's by dept. 30	
Fellowship (1)	3000	12				Ph. D. (1969-1971 incl.)
Teaching Fellowship (1)	3150	9		20		CS 27. Total: 27
Teaching Assistantship (8)	2835-3060	9		20		
Research Assistantship (40)	2835-3195	9		20		
DEPARTMENT OF OPERATIONS RESEARCH Gerald J. Lieberman, Chairman			Applications due: 3/1/73		Bachelor's by inst. 1640 Master's by dept. 55	
Fellowship (10)	1800*	9				Ph. D. (1969-1971 incl.)
Research Assistantship (20)	2400	9		20	Research	Other 37. Total: 37
*If student desires, he can grade papers and earn an additional \$750.						
DEPARTMENT OF STATISTICS Herman Chernoff, Chairman			Applications due: 1/15/73		Bachelor's by inst. 1640 Bachelor's by dept. 3 Master's by dept. 24	
Fellowship (3)	2520	9				Ph. D. (1969-1971 incl.)
Research Assistantship (11)	2520	9				P&S 29. Total: 29
Traineeship (8)	2520	9				
University of California, Berkeley 94720						
DEPARTMENT OF MATHEMATICS P. E. Thomas, Chairman			Applications due: *		Bachelor's by inst. 5526 Bachelor's by dept. 183 Master's by dept. 35	
Fellowship (75)	2000-2700**	9	338-2198***			Ph. D. (1969-1971 incl.)
Teaching Assistantship (85)	3789-3894	9	#	16		A&NT 14, G&T 27, L 14, A&FA 33, AM 4. Total: 92
Research Assistantship (24)	3015	9	#			
*December 1, 1972 for Fellowships; February 1, 1973 for Assistantships.						
**Some fellowships carry additional dependency allowances.						
***Some fellowships pay only part of fees; total fees paid by most.						
#Some nonresident Assistants may receive waivers for 1 or 2 quarters of the nonresident part of tuition, \$500 per quarter.						
DEPARTMENT OF BIostatISTICS Chin Long Chiang, Chairman			Applications due: 3/1/73		Master's by dept. 6 Ph. D. (1969-1971 incl.) Other 6. Total: 6	
Fellowship (1)	2400-2800	12		10	Teaching, Research	
Teaching Assistantship (2)	3789	9		20	Teaching	
Research Assistantship (4)	4020	11		20	Research	
Reader (2)	2.99/hr.	9		15		
DEPARTMENT OF COMPUTER SCIENCE Martin Graham, Chairman			Applications due: *		Bachelor's by inst. 5526 Bachelor's by dept. 70 Master's by dept. 8	
Teaching Assistantship (8)	3789	9	720	20	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (20)	4020	12	720	20	Research	CS 3. Total: 3
*December 1, 1972 for fellowships.						
GROUP IN LOGIC AND METHODOLOGY OF SCIENCE Jack Silver, Chairman			Applications due: *		Ph. D. (1969-1971 incl.) L 3. Total: 3	
Teaching Assistantship (4)						
Research Assistantship (1)						
*December 1, 1972 with the Graduate Division. Applications for teaching assistantships must be filed by February 1, 1973 with the Department of Mathematics.						

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	
DEPARTMENT OF STATISTICS			Applications due: *			Bachelor's by inst. 5526
E. L. Scott, Chairman						Bachelor's by dept. 9
Fellowship (10)	2400-3600	9-12				Master's by dept. 12
Combined Appointment (36):						Ph. D. (1969-1971 incl.)
Teaching Fellowship	3402	9		10	Teaching, Office Hours	P&S 37, Other 6. Total: 43
Teaching Assistantship	3402	9		10	Research	
Summer Research (25)	1675	2, 5				

*December 1, 1972 for fellowships; January 15, 1973 for assistantships.

University of California, Davis 95616

DEPARTMENT OF MATHEMATICS			Applications due: 1/15/73			Bachelor's by inst. 1675
David G. Mead, Acting Chairman						Bachelor's by dept. 44
NDEA Fellowship (4)	2600-2800	12				Master's by dept. 5
Teaching Assistantship (23)	3789	9	223.50	16	Teaching	Ph. D. (1969-1971 incl.)
Regents Intern (1)	2200	9				A&NT 8, G&T 1, P&S 2.
Associate in Mathematics (3)	3894	9	223.50	16	Teaching	Total: 11

University of California, Irvine 92664

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73			Bachelor's by inst. 1081
Howard G. Tucker, Acting Chairman						Bachelor's by dept. 53
Fellowship (5)*	3800	9	**	Varies	Research	Master's by dept. 3
Teaching Fellowship (2)	3800	9	**	Varies	Research, Teaching	Ph. D. (1969-1971 incl.)
Teaching Assistantship (22)	3800	9	**	Varies	Research, Teaching	L 1, A&FA 8, P&S 2.
Research Assistantship (2)	5025	12	**	Varies	Research	Total: 11

*NDEA and NSF.

**Variance of fees waived.

University of California, Los Angeles 90024

DEPARTMENT OF MATHEMATICS			Applications due: 12/30/72			Bachelor's by inst. 4527
Philip C. Curtis, Jr., Chairman						Bachelor's by dept. 153
Fellowship (10)	2400	9-12	500/qtr. *			Master's by dept. 39
Teaching Fellowship (4)	2400-4527		500/qtr. *			Ph. D. (1969-1971 incl.)
Teaching Assistantship (43)	3789-4527	9	500/qtr. *			A&NT 10, G&T 8, L 7, A&FA 10, P&S 8, CS 6, AM 7, Other 13. Total: 93

*Nonresident fees.

DEPARTMENT OF PUBLIC HEALTH BIostatistics DIVISION			Applications due: 4/15/73			Master's by dept. 13
Virginia Clark, Head						Ph. D. (1969-1971 incl.)
Trainee (NIH) (16)	2400-2800	12	681			P&S 16. Total: 16

University of California, Riverside 92502

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73			Bachelor's by inst. 1082
Bruce L. Chalmers, Acting Chairman						Bachelor's by dept. 41
Fellowship (6)	1950-3600	both	220/qtr.			Master's by dept. 12
Teaching Fellowship (5)	3789	9	220/qtr.	5	Teaching	Ph. D. (1969-1971 incl.)
Teaching Assistantship (14)	3789	9	220/qtr.	5-6	Teaching	A&NT 4, G&T 2, A&FA 6, P&S 1, Other 2. Total: 15

DEPARTMENT OF STATISTICS			Applications due: 3/73			
F. N. David, Chairman						
Teaching Assistantship (4)	3789	9	*	20		
Research Assistantship (2)	4020	11	*	20		

*In-state tuition \$675; out-of-state tuition \$2,175.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

University of California, San Diego, La Jolla 92037

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73	Bachelor's by inst.	702
Jacob Korevaar, Chairman				Bachelor's by dept.	32
Fellowship (3)	1800-3000	9-12		Master's by dept.	9
Teaching Assistantship (40)	3789	9	*	Ph. D. (1969-1971 incl.)	
Research Assistantship (5)	4020	11	*	A&NT 1, G&T 1, A&FA 11,	
Scholarship (10)	Partial fees and/or Tuition			P&S 3, CS 1, AM 1,	
				Other 1. Total: 19	

*In 1972-73 all graduate students (resident and nonresident) pay per quarter: \$226 (Registration Fee \$100; Educational Fee \$120; Student Center Fee \$6). Nonresident graduate students pay per quarter: \$500 Tuition in addition to the above \$226.

**A number of the appointments are 1/4 time.

University of California, Santa Barbara 93106

DEPARTMENT OF MATHEMATICS			Applications due: 1/15/73	Bachelor's by inst.	2368
David A. Sprecher, Chairman				Bachelor's by dept.	52
Fellowship (3)	2200-2500	9	*	Ph. D. (1969-1971 incl.)	
Teaching Assistantship (17)	3789	9	*	A&NT 12, A&FA 11, CS 1.	
Research Assistantship	4020	11	*	Total: 24	
Community Teaching					
Fellowship (4)	3789	9		6	Teaching

*\$1,500 for out-of-state students.

University of California, Santa Cruz 95060

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73	Bachelor's by inst.	766
Gerhard Ringel, Chairman				Bachelor's by dept.	20
Fellowship (4)	2200	9		40	
Teaching Assistantship (10)	3636	9		40	
Tuition Waivers (6)	1500	9			

University of Southern California, Los Angeles 90007

DEPARTMENT OF MATHEMATICS			Applications due: 6/73	Bachelor's by inst.	2152
H. A. Antosiewicz, Chairman				Bachelor's by dept.	34
Fellowship (4)	2400-2800	12		Master's by dept.	8
Teaching Assistantship (32)	3000-3400	9	6 Units	Teaching	Ph. D. (1969-1971 incl.)
Teaching/Research (10)	3000-3400	9	4 Units	Teaching, Research	A&NT 4, G&T 5, L 1, A&FA 5, P&S 4, CS 3, AM 4. Total: 26

COLORADO

Colorado State University, Fort Collins 80521

MATHEMATICS SECTION			Applications due: 3/15/73	Bachelor's by inst.	2555
E. R. Deal, Chairman				Bachelor's by dept.	66
Fellowship (1)	2400-3600	12		Master's by dept.	17
Teaching Assistantship (30)	2400-3600	9	15	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (2)	2400-4200	9-12	20	Research	A&NT 4, G&T 1, A&FA 5.
Scholarship (4)	Tuition waiver			Total: 10	

COLORADO STATE UNIVERSITY GRADUATE STUDY IN MATHEMATICS

LOCATION: Ft. Collins, 65 mi. N. of Denver near beautiful Rocky Mountain recreation areas.

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Mathematics Section

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Fort Collins, Colorado 80521

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TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

University of Colorado, Boulder 80302

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	3768
Wolfgang J. Thron, Chairman					Bachelor's by dept.	49
Fellowship (11)	680-3180	12			Master's by dept.	27
Teaching Assistantship (60)	2800	9	6-9	Teaching	Ph. D. (1969-1971 incl.)	
Research Assistantship (2)					A&NT 3, G&T 4, A&FA 6,	
Scholarship (1)	879	9			P&S 1, AM 1. Total: 15	

DEPARTMENT OF COMPUTER SCIENCE

Lloyd D. Fosdick, Chairman			Applications due: 2/1/73			
Fellowship (3)	2500	9	220			
Teaching Assistantship (12)	2800	9	180	20	Teaching,	Grading
Research Assistantship (9)	3200	9				

University of Colorado, Denver Center, Denver 80203

DIVISION OF NATURAL SCIENCES

Collin Hightower, Discipline Representative

Teaching Assistantship (7)	2800	9		6	Teaching	
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University of Denver, Denver 80210

DEPARTMENT OF MATHEMATICS

H. Greenberg, Chairman

Applications due: 3/1/73					Bachelor's by inst.	1336
Teaching Assistantship (12)			2500-2900	9	2-5	Teaching
Research Assistantship (3)			3800-4400	12		
Scholarship (3)			1250-2500	2500		
					Ph. D. (1969-1971 incl.)	
					A&NT 1, CS 1, AM 1.	
					Total: 3	

DIVISION OF ACCOUNTING AND QUANTITATIVE METHODS

Clayton R. Grimstad, Head

Applications due: 3/15/73					Bachelor's by inst.	1336
Teaching Assistantship (2)			2500	9	30/hr. waiver	4
					Teaching	
					Bachelor's by dept.	2
					Master's by dept.	2

Western State College, Gunnison 81230

DIVISION OF NATURAL SCIENCE & MATHEMATICS

William E. Dorgan, Chairman

Applications due: 3/15/73					Bachelor's by inst.	452
Teaching Assistantship (1)			900	9	154/qtr. *	7 1/2
					Bachelor's by dept.	15
					Master's by dept.	3

*Out-of-state \$457 per quarter.

CONNECTICUT

Central Connecticut State College, New Britain 06050

DIVISION OF MATHEMATICS

Richard L. Mentzer, Director

Applications due: 6/1/73					Bachelor's by inst.	766
Teaching Assistantship (2)			2000	9	242	6
					Bachelor's by dept.	84
					Master's by dept.	27

University of Bridgeport, Bridgeport 06602

DEPARTMENT OF MATHEMATICS

H. Margaret Elliott, Chairman

Applications due: 4/1/73					Bachelor's by inst.	935
Teaching Assistantship (1)			2000	12	6	Teaching or equivalent
					Bachelor's by dept.	22
					Master's by dept.	2

Resident Assistant *

*Tuition, room and board, and small stipend.

University of Connecticut, Storrs 06268

DEPARTMENT OF MATHEMATICS

E. S. Wolk, Head

Applications due: 4/1/73					Bachelor's by inst.	2954
Fellowship (4)			2400-3000	9	640*	
Teaching Fellowship (10)			3180-4050**	9	640*	3
Teaching Assistantship (14)			3180-4050**	9	640*	4-6
					Teaching	
					Teaching	
					Ph. D. (1969-1971 incl.)	
					A&NT 1, G&T 1, A&FA 1.	
					Total: 3	

*Includes general university fee; \$1140 including fee for out-of-state students.

**An increase in this stipend is expected in 1973-74.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972
DEPARTMENT OF STATISTICS Gottfried E. Noether, Head			Applications due: 3/15/73		Bachelor's by inst.	2954
Fellowship (3)	2000-2500	9	640*			Master's by dept. 6
Teaching Fellowship (4)	2840-3275	9	640*	6	Discussion	Ph. D. (1969-1971 incl.)
Teaching Assistantship (3)	3180-4050	9	640*	12	Discussion	P&S 12. Total: 12
Research Assistantship (1)	3180-4050	9	640*		Research	

*Includes general university fee; \$1140 for out-of-state students.

University of Hartford, West Hartford 06117

DEPARTMENT OF MATHEMATICS Cecilia Welna, Chairman			Applications due: 5/15/73		Bachelor's by inst.	4000
Teaching Fellowship (1)	3480	9		6		Master's by dept. 15
						Master's by dept. 2

Wesleyan University, Middletown 06457

DEPARTMENT OF MATHEMATICS James D. Reid, Chairman			Applications due: 3/15/73		Bachelor's by inst.	323
Teaching Assistantship (14)	2450-2800*	9		10	Quiz section and/or Paper grading	Bachelor's by dept. 5
						Master's by dept. 2
						Ph. D. (1969-1971 incl.)
						A&NT 1, Other 5. Total: 6

*Dependency allowances and summer stipends are frequently available upon request.

Yale University, New Haven 06520

DEPARTMENT OF MATHEMATICS G. D. Mostow, Chairman			Applications due: 1/20/73		Bachelor's by inst.	962
Full or partial support available for most students.					Bachelor's by dept.	29
					Master's by dept.	4
						Ph. D. (1969-1971 incl.)
						A&NT 13, G&T 6, L 5, A&FA 6. Total: 30

DEPARTMENT OF COMPUTER SCIENCE Martin H. Schultz, Chairman			Applications due: 1/20/73			
Fellowship (15)	600-4800	9	3200			
Teaching Fellowship (10)	300	sem.	3200	4	Teaching	
Research Assistantship (10)	600-4800		3200	4	Research	

DEPARTMENT OF ENGINEERING AND APPLIED SCIENCE R. G. Wheeler, Chairman			Applications due: 1/20/73		Bachelor's by inst.	962
Fellowship (31)	675-2100	9)	1200-3200		Bachelor's by dept.	27
	3000	12)			Master's by dept.	20*
Teaching Fellowship (8)	300-600	6				
Research Assistantship (35)	2100	9)	1200-3200			
	2800**	12)				
Scholarship (4)	1200-3200					
No Support (3)						

*Master of Philosophy.

**Plus allowance for dependents.

DEPARTMENT OF STATISTICS Francis J. Anscombe, Chairman			Applications due: 1/20/73		Bachelor's by inst.	962
Fellowship (20)	2400*	12	3500		Master's by dept.	8
						Ph. D. (1969-1971 incl.)
						P&S 6. Total: 6

*This figure does not include the tuition, but the fellowship does.

DELAWARE

University of Delaware, Newark 19711

DEPARTMENT OF MATHEMATICS Willard E. Baxter, Chairman			Applications due: 7/30/73		Bachelor's by inst.	1856
Fellowship (4)	2900	12			Bachelor's by dept.	25
Teaching Assistantship (26)	2650-3150	9		20	Master's by dept.	17
Research Assistantship (4)	2659	12	1500			Ph. D. (1969-1971 incl.)
						A&NT 2, G&T 1, A&FA 4, AM 4. Total: 11

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	hours per week	type of service	Academic year 1971-1972	

DISTRICT OF COLUMBIA

American University, Washington 20016

DEPARTMENT OF MATHEMATICS AND STATISTICS				Applications due: 3/1/73	Bachelor's by inst.	794
Walter W. Jacobs, Chairman					Bachelor's by dept.	15
Fellowship (3)	3000	9			Master's by dept.	7
Teaching Assistantship (9)	3000	9		15-20 Teaching	Ph. D. (1969-1971 incl.)	
Scholarship (1)	3000	9			P&S 3. Total: 3	

Catholic University of America, Washington 20017

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73	Bachelor's by inst.	490
Gustav B. Hensel, Chairman					Bachelor's by dept.	10
Teaching Assistantship (5)	2400	9		10 Teaching	Master's by dept.	20
Scholarship (5)		9	1150		Ph. D. (1969-1971 incl.)	
					A&NT 1, A&FA 9, P&S 7,	
					CS 1. Total: 18	

Georgetown University, Washington 20007

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73	Bachelor's by inst.	383
John Lagnese, Chairman					Bachelor's by dept.	10
Teaching Fellowship (6)	2600-3000	9	2300	3 Teaching	Master's by dept.	6
					Ph. D. (1969-1971 incl.)	
					A&FA 5. Total: 5	

ACADEMIC COMPUTATION CENTER*

Herbert Maisel, Director						
Fellowship (3)	2350-2600	9		12 Assistant in Research		

*Fellowships in the Computation Center are awarded to candidates for the Ph. D. in other departments. For example, during the current year the holders of the three fellowships are candidates for a degree in history, government, and linguistics. Fellowships are awarded by the graduate school.

George Washington University, Washington 20006

DEPARTMENT OF MATHEMATICS				Applications due: 3/15/73	Bachelor's by inst.	876
T. P. G. Liverman, Chairman					Bachelor's by dept.	8
Teaching Fellowship (6)	2800	9	*	6	Master's by dept.	20
Scholarship (1)					Ph. D. (1969-1971 incl.)	
					A&NT 1, G&T 1, A&FA 1,	
					Other 1. Total: 4	

*\$80 per semester hour plus \$3.50 student activities fee. Tuition of approximately \$1,503 is available for Graduate Teaching Fellows.

Howard University, Washington 20001

DEPARTMENT OF MATHEMATICS				Applications due: 4/1/73	Bachelor's by dept.	12
James A. Donaldson, Chairman					Master's by dept.	7
Graduate Assistantship (9)	4043	9	521.50/sem.	15 Tutoring, grading		

FLORIDA

Florida Atlantic University, Boca Raton 33432

DEPARTMENT OF MATHEMATICS				Applications due: 4/1/73*	Bachelor's by inst.	1771
John M. Freeman, Chairman					Bachelor's by dept.	19
Fellowship (1)	2000-2500	9	175/qr.		Master's by dept.	2
Teaching Assistantship (5)	2000-3000	9	175/qr.	12 Teaching & Grading		

*Late applications will be accepted.

Florida Institute of Technology, Melbourne 32901

DEPARTMENT OF MATHEMATICAL SCIENCES				Applications due: 3/15/73	Bachelor's by inst.	290
D. R. Clutterham, Head					Bachelor's by dept.	41
Teaching Assistantship (10)	2400	9		6-7 Teaching	Master's by dept.	12

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

Florida State University, Tallahassee 32306

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	2999
O. G. Harrold, Chairman					Bachelor's by dept.	54
					Master's by dept.	12
Fellowship (5)	2400-3900	9-12			Ph. D. (1969-1971 incl.)	
Teaching Assistantship (28)	3150-3300	9	240/qtr. *	20	Teaching	
Research Assistantship (12)	3150-3300	9-12	240/qtr. *	20	Research	
						A&NT 4, G&T 1, A&FA 5.
						Total: 10

*Plus \$350 nonresident tuition unless waived.

DEPARTMENT OF STATISTICS			Applications due: 2/1/73		Bachelor's by inst.	2999
Ralph A. Bradley, Head					Bachelor's by dept.	3
					Master's by dept.	7
Fellowship (8)	2400-2800*	12			Ph. D. (1969-1971 incl.)	
Teaching Assistantship (10)	3600	12	240/qtr.	20	Teaching	
Research Assistantship (11)	3600	12	240/qtr.	20	Research	
Consulting and Computing (3)	3600-4200	12	240/qtr.	20	Consulting	
						P&S 15. Total: 15

*Plus allowance for dependents.

University of Florida, Gainesville 32601

DEPARTMENT OF STATISTICS			Applications due: 3/15/73		Bachelor's by dept.	6
William Mendenhall, III, Chairman					Ph. D. (1969-1971 incl.)	
					P&S 5. Total: 5	
Fellowship (2)	2800-3500	9				
Teaching Assistantship (10)	2800-3500	9				
Research Assistantship (5)	2800-3500	9				

University of Miami, Coral Gables 33124

DEPARTMENT OF MATHEMATICS			Applications due: 4/1/73		Bachelor's by inst.	2387
David Hertzog, Chairman					Bachelor's by dept.	39
					Master's by dept.	8
Fellowship (5)	200/mo. - 270/mo.	9-12			Ph. D. (1969-1971 incl.)	
Teaching Assistantship (28)	2600-3100	9		6	A&FA 1. Total: 1	

DEPARTMENT OF MANAGEMENT SCIENCE			Applications due: 3/15/73		Bachelor's by dept.	20
Malcolm Golden, Chairman						
Teaching Assistantship (4)						
Research Assistantship (2)						

University of South Florida, Tampa 33620

DEPARTMENT OF MATHEMATICS			Applications due: 4/30/73		Bachelor's by inst.	3255
Fredric Zerla, Acting Chairman					Bachelor's by dept.	35
					Master's by dept.	7
Teaching Assistantship (26)	3200-3600	9	240	6	Teaching	
Research Award (1)						

University of West Florida, Pensacola 32504

DEPARTMENT OF MATHEMATICS AND STATISTICS					Bachelor's by inst.	1300
R. E. Lee, Acting Chairman					Bachelor's by dept.	27
Fellowship (4)	240	9				

GEORGIA

Emory University, Atlanta 30322

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73		Bachelor's by inst.	494
Henry Sharp, Jr., Chairman					Bachelor's by dept.	29
					Master's by dept.	4
Fellowship (2)	2000-2500	9-12			Ph. D. (1969-1971 incl.)	
Teaching Assistantship (11)	2400	9		10	Teaching	
Part-time Teaching Assistantship (4)	1500	9		6	A&NT 2, G&T 3, A&FA 4.	
						Total: 9

Georgia Institute of Technology, Atlanta 30332

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	1355
John D. Neff, Director					Bachelor's by dept.	32
					Master's by dept.	8
Teaching Assistantship (35)	2700-4950	9	534	5-10	Teaching	
						Ph. D. (1969-1971 incl.)
						G&T 2, A&FA 4, AM 3,
						Other 2. Total: 11

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	
DEPARTMENT OF INFORMATION AND COMPUTER SCIENCE						
Vladimir Slamecka, Director						Applications due: 3/15/73 Bachelor's by inst. 1355 Master's by dept. 67
Teaching Assistantship (8)	2800-3666	12	178/qtr.	13	Teaching	Ph. D. (1969-1971 incl.) CS 7. Total: 7
Research Assistantship (10)	2800-3666	12	178/qtr.	13	Research	
Traineeship in Biomedical Information and Computer Science (10)	2400-2600	12				
Georgia Southern College, Statesboro 30458						
DEPARTMENT OF MATHEMATICS						
D. Earl Lavender, Head						Applications due: 4/73 Bachelor's by inst. 756 Bachelor's by dept. 11 Master's by dept. 2
Teaching Assistantship (5)	2100	9	125/qtr.	5		
Georgia State University, Atlanta 30303						
DEPARTMENT OF MATHEMATICS						
Jan List Boal, Chairman						Applications due: 4/15/73 Bachelor's by inst. 1265 Bachelor's by dept. 45 Master's by dept. 13
Graduate Assistantship (3)	1800	9	9.75/qtr. hr.	15	Tutorials, grading	
DEPARTMENT OF INFORMATION SYSTEMS						
William W. Cotterman, Chairman						Master's by dept. 10
Teaching Assistantship (2)	2400	9		5 hr. course	Teaching	
Research Assistantship (3)	2100	9		15	Research	
University of Georgia, Athens 30601						
DEPARTMENT OF MATHEMATICS						
J. G. Horne, Head						Applications due: 2/15/73 Bachelor's by inst. 4000 Bachelor's by dept. 35 Master's by dept. 14
Teaching Assistantship (15)	2600-3733	9-12	173	5 crs.	Teaching	Ph. D. (1969-1971 incl.) A&NT 1, G&T 7, A&FA 2, AM 1, Other 1. Total: 12
Research Assistantship (10-15)	2600-3733	9-12	173	10	Duties vary	
DEPARTMENT OF STATISTICS AND COMPUTER SCIENCE						
Carl F. Kossack, Head						Applications due: 2/15/73 Bachelor's by inst. 4000 Bachelor's by dept. 15 Master's by dept. 12
Fellowship (1)	2000-3000	9				Ph. D. (1969-1971 incl.) S 15. Total: 15
Teaching Fellowship (1)	2600-2800	9		5		
Teaching Assistantship (6)	2600-2800	9		11	Assistant to Professor	
Research Assistantship (10)	2600-2800	9		11	Research	
Valdosta State College, Valdosta 31601						
DEPARTMENT OF MATHEMATICS						
D. L. Duncan, Head						Bachelor's by inst. 700 Bachelor's by dept. 25
Service (1)	1800	9		5	Varies	
West Georgia College, Carrollton 30117						
DEPARTMENT OF MATHEMATICS						
C. R. Pittman, Head						Applications due: 4/1/73 Bachelor's by inst. 822 Bachelor's by dept. 18 Master's by dept. 1
Teaching Assistantship (4)	2000	9	9.75/qtr. hr.	5-15	Duties vary	
HAWAII						
University of Hawaii, Honolulu 96822						
DEPARTMENT OF MATHEMATICS						
H. S. Bear, Chairman						Applications due: 2/1/73 Bachelor's by inst. 510 Bachelor's by dept. 50 Master's by dept. 3
Teaching Assistantship (12)	3708-4308	9		20	Teaching	Ph. D. (1969-1971 incl.) A&FA 1. Total: 1
BIOSTATISTICS SECTION, SCHOOL OF PUBLIC HEALTH						
C. S. Chung, Chairman						Applications due: 3/1/73 Master's by dept. 5
Fellowship (3)	200-250	12				
Teaching Assistantship (1)	400	9			6	

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972
DEPARTMENT OF INFORMATION AND COMPUTER SCIENCES Richard H. Jones, Chairman						Applications due: 2/1/73 Master's by dept. 16
Teaching Assistantship (2)	3708-4008	9		20		
Research Assistantship (8)	3402-3672			20		

IDAHO

Idaho State University, Pocatello 83201

DEPARTMENT OF MATHEMATICS John Hiltzman, Chairman						Applications due: 3/15/73 Bachelor's by inst. 613 Bachelor's by dept. 17 Master's by dept. 7
Fellowship (6)	2600	9				
Teaching Assistantship (4)	2300	9		4-5	Teaching	

University of Idaho, Moscow 83843

DEPARTMENT OF MATHEMATICS Howard E. Campbell, Chairman						Applications due: 2/15/73 Bachelor's by inst. 1128 Bachelor's by dept. 9 Master's by dept. 5
Teaching Assistantship (11)	2675-3075	9		6	Teaching	Ph. D. (1969-1971 incl.) A&NT 2, G&T 3, P&S 2. Total: 7

ILLINOIS

Bradley University, Peoria 61606

DEPARTMENT OF COMPUTER SCIENCE Herbert A. Morris, Chairman						Applications due: 3/1/73 Master's by dept. 7
Teaching Assistantship (2)	2100	9		18		



Ph. D. Program at Hawaii

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Department of Mathematics

UNIVERSITY OF HAWAII

Honolulu, Hawaii 96822

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TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	
DePaul University, Chicago 60614						
DEPARTMENT OF MATHEMATICS Jerry Goldman, Chairman						Bachelor's by inst. 1053 Bachelor's by dept. 47 Master's by dept. 11
Teaching Assistantship (4)	2200	9		10		
Eastern Illinois University, Charleston 61920						
DEPARTMENT OF MATHEMATICS Alphonso J. DiPietro, Head						Applications due: 3/1/73 Bachelor's by inst. 900 Bachelor's by dept. 65 Master's by dept. 11
Teaching Assistantship (8)	2700-5400	9		4-8	Teaching	
Graduate Assistantship (8)	1890	9		10	Tutoring, Computer Pro- gramming, Li- brary	
Illinois Institute of Technology, Chicago 60616						
DEPARTMENT OF MATHEMATICS Haim Reingold, Chairman						Applications due: 3/1/73 Bachelor's by inst. 609 Bachelor's by dept. 41 Master's by dept. 26
Fellowship (5)	2400-3600	12				Ph. D. (1969-1971 incl.) A&NT 8, G&T 3, A&FA 5, P&S 1, AM 1. Total: 18
Teaching Assistantship (30)	2200-2800	9		6		
DEPARTMENT OF COMPUTER SCIENCE Robert G. Tobey, Chairman						Applications due: 3/1/73 Bachelor's by inst. 609 Bachelor's by dept. 3 Master's by dept. 2
Fellowship (2)	2400	9				
Teaching Assistantship (16)	2100-2400	9		20	Class Assistant	
NSF (10)*		9				
NSF (2)	4000	9				
*Part-time.						
Illinois State University, Normal 61761						
DEPARTMENT OF MATHEMATICS R. K. Ritt, Chairman						Applications due: 6/10/73 Bachelor's by inst. 3146 Bachelor's by dept. 92
Teaching Assistantship (10)	240	9		12-15		
Loyola University, Chicago 60626						
DEPARTMENT OF MATHEMATICS J. Richard Vandevelde, Chairman						Applications due: 3/1/73 Bachelor's by inst. 935 Bachelor's by dept. 44 Master's by dept. 5
Teaching Assistantship (3)	2200	9		3-4	Teaching	
Northern Illinois University, DeKalb 60115						
DEPARTMENT OF MATHEMATICAL SCIENCES John L. Selfridge, Chairman						Applications due: 7/1/73* Bachelor's by inst. 3647 Bachelor's by dept. 96 Master's by dept. 18
Teaching Assistantship (38)	2520-3060	9		12	Teaching	
Research Assistantship (2)	2520-3060	9		12	Research	
Summer Assistantship (30)	560	2		6		
*May 1, 1973 for summer.						
Northwestern University, Evanston 60201						
DEPARTMENT OF MATHEMATICS Mark Mahowald, Chairman						Applications due: 2/1/73 Bachelor's by inst. 1620 Bachelor's by dept. 32
Fellowship (10)	2300-2400	9		12		Ph. D. (1969-1971 incl.) A&NT 12, G&T 6, A&FA 18, P&S 5, AM 1. Total: 42
COMMITTEE ON APPLIED MATHEMATICS W. E. Olmstead, Chairman						Applications due: 2/1/73 Bachelor's by inst. 1620 Bachelor's by dept. 5 Master's by dept. 4
Fellowship (5)	3000-3300	12				Ph. D. (1969-1971 incl.) CS 3, AM 8. Total: 11
Teaching Assistantship (2)	3500	9				
Research Assistantship (3)	2475-3600	9-12				

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972
DEPARTMENT OF COMPUTER SCIENCES S. S. Yau, Chairman			Applications due: 2/1/73		Bachelor's by dept.	3
Fellowship (12)	2880-4600	12	2785		Master's by dept.	8
Teaching Assistantship (10)	3500	9	2595	15	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (12)	3300-3660	12	2785	20	Research	CS 5. Total: 5
Scholarship (2)			2595			
Traineeships (2)	2880-4560	12	2785			

Southern Illinois University, Carbondale 62901

DEPARTMENT OF MATHEMATICS Neal E. Foland, Chairman			Applications due: 2/1/73*		Bachelor's by inst.	4700
Fellowship (4)	3060-3300	12	26-34**		Bachelor's by dept.	82
Teaching Assistantship (35)	2610-3150	9	26-34**	6	Master's by dept.	20
					Ph. D. (1969-1971 incl.)	
					A&NT 2, G&T 1, A&FA 1,	
					Other 4. Total: 8	

*Late applications will be considered.

**Fees per term; some optional.

DEPARTMENT OF COMPUTER SCIENCE A. M. Mark, Chairman			Applications due: 2/1/73*		Bachelor's by inst.	4700
Fellowship (2)	3060-3300	12	26-34**		Master's by dept.	3
Teaching Assistantship (10)	2610-3150	9	26-34**	6	Teaching	

*Late applications will be considered.

**Fees per term; some optional.

Southern Illinois University-Edwardsville 62025

DEPARTMENT OF MATHEMATICAL STUDIES Earl E. Lazerson, Chairman			Applications due: Open		Bachelor's by inst.	1705
Teaching Assistantship (25)	3060-3240	9		20	Bachelor's by dept.	60
Research Assistantship (2)	2250-2700	9			Master's by dept.	16
					Teaching	
					Research	

University of Chicago, Chicago 60637

DEPARTMENT OF MATHEMATICS Felix E. Browder, Chairman			Applications due: 2/1/73*		Bachelor's by inst.	458
Fellowship (10)	1800	9	2775		Bachelor's by dept.	27
Research Assistantship (7)	2100	9	1275		Master's by dept.	19
Scholarship (5)			2775		Ph. D. (1969-1971 incl.)	
Tutor (9)**	2100	9			A&NT 20, G&T 12,	
Lecturer (12)***	3600	9			A&FA 13, P&S 1, CS 1,	
					AM 1. Total: 48	

*January 1, 1973 for foreign applicants.

**Plus \$2475 tuition.

***Plus \$750 tuition. Normally, these are selected from among the successful tutors of the preceding year.

DEPARTMENT OF INFORMATION SCIENCES Robert L. Ashenhurst, Chairman			Applications due: 2/1/73		Bachelor's by inst.	458
Research Assistantship (4)	4000-5400	9-12	500/qtr.	5-10	Master's by dept.	16
Scholarship (3)		9			Ph. D. (1969-1971 incl.)	
Tutorship (4)	2700	9		5-10	CS 4. Total: 4	
					Teaching	

DEPARTMENT OF STATISTICS William H. Kruskal, Chairman			Applications due: 1/1/73*		Bachelor's by inst.	458
Fellowship (6)	1800-5000	9			Bachelor's by dept.	2
Teaching Assistantship (2)	1800-2700	9		5	Master's by dept.	5
Research Assistantship (4)	1800-2700	9		5	Ph. D. (1969-1971 incl.)	
					P&S 10. Total: 10	

*For foreign.

**For domestic.

University of Illinois at Chicago Circle, Chicago 60680

DEPARTMENT OF MATHEMATICS Joseph Landin, Head			Applications due: *		Bachelor's by inst.	3110
Fellowship (4)	2000-3500	9-12			Bachelor's by dept.	115
Teaching Assistantship (80)	3150	9		6	Master's by dept.	20
Research Assistantship (2)	3000	12		20	Ph. D. (1969-1971 incl.)	
Scholarship (4)		9			A&NT 2, G&T 1, L 1,	
					A&FA 1. Total: 5	

*February 1, 1973 Fellowships; August 15, 1973 Assistantships.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	hours per week	type of service	Academic year 1971-1972	

University of Illinois at Urbana-Champaign, Urbana 61801

DEPARTMENT OF MATHEMATICS AND STATISTICS				Applications due: 2/15/73*	Bachelor's by inst.	5689
P. T. Bateman, Head					Bachelor's by dept.	200
Fellowship (12)	2500-4200	12			Master's by dept.	126
Teaching Fellowship (16)	4200	12		8	Teaching	Ph. D. (1969-1971 incl.)
Teaching Assistantship (135)	1700-3400	9		8-20	Teaching	A&NT 19, G&T 12, L 5,
Research Assistantship (4)	2270-3400	9			Varies	A&FA 23, P&S 7, CS 3,
Tuition Waiver (5)		12				AM 15. Total: 84
Junior College Fellowship (13)	2500	12				
Academic Year Institute (17)	Varies	12				

*Late assistantship applications may be considered.

DEPARTMENT OF COMPUTER SCIENCE				Applications due:*	Bachelor's by inst.	5689
J. N. Snyder, Head					Bachelor's by dept.	42
Fellowship (4)	2480-2800	12			Master's by dept.	23
Teaching Assistantship (30)	3030-3230	9		20	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (65)	3030-4750	12		20	Research	CS 17. Total: 17
Tuition and Fee Waiver (3)	400-2000	9				

*December 1, 1972 for Spring; February 15, 1973 for Summer and Fall.

Western Illinois University, Macomb 61455

DEPARTMENT OF MATHEMATICS				Applications due: 4/1/73	Bachelor's by inst.	2221
A. Jerry Shryock, Chairman					Bachelor's by dept.	80
Fellowship (2)	*	12			Master's by dept.	15
Teaching Assistantship (12)	2610	9		6	Teaching	

*At the present time the dollar amounts are not available.

INDIANA

Ball State University, Muncie 47306

DEPARTMENT OF MATHEMATICAL SCIENCES				Applications due: 4/1/73	Bachelor's by inst.	1885
John H. Hoelzer, Chairman					Bachelor's by dept.	76
Teaching Assistantship (18)	2700	9	378	5	Teaching	Master's by dept. 45

Indiana State University, Terre Haute 47809

DEPARTMENT OF MATHEMATICS, STATISTICS AND COMPUTER SCIENCE				Applications due: 3/1/73	Bachelor's by inst.	2583
Vesper D. Moore, Chairman					Bachelor's by dept.	65
Teaching Assistantship (12)	1800-2200	9	9/sem. hr.	20		Master's by dept. 29

Indiana University, Bloomington 47401

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73	Bachelor's by inst.	7000
William P. Ziemer, Chairman					Bachelor's by dept.	40
Fellowship (1)	3000	12	*		Master's by dept.	35
Teaching Fellowship (3)	3800-4000	12	**	3	Teaching	Ph. D. (1969-1971 incl.)
Teaching Assistantship (35)***	3000-3600	9	#	5-6	Teaching	A&NT 12, G&T 4, A&FA 9,
Research Assistantship (1)	3000-3200	12	#	20	Research	P&S 1, CS 1, AM 3,
Summer Fellowships (16)	500	8 wks.		##		Other 4. Total: 34

*Provides exemption from all fees.

**Provides for payment of fees at rate for residents of Indiana.

***Number available for new students.

#May be accompanied by a tuition scholarship which pays all but \$73 for usual course load.

##Participation in a seminar to provide insight into teaching undergraduate mathematics.

DEPARTMENT OF COMPUTER SCIENCE				Applications due: 3/1/73	Bachelor's by inst.	7000
Franklin Prosser, Chairman					Bachelor's by dept.	10
Fellowship (2)	3300	9	*			
Teaching Assistantship (17)	2900-3000	9	146**	20	Teaching	
Research Assistantship (3)	3000	9	146**	20	Research	

*\$27 per credit hour for residents; \$62 per credit hour for nonresidents.

**If, as usually is the case, fee remission is also granted.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

University of Notre Dame, Notre Dame 46556

DEPARTMENT OF MATHEMATICS John E. Derwent, Chairman			Applications due: 2/15/73		Bachelor's by inst.	1391
Fellowship (12)	2700-4000	9-12			Bachelor's by dept.	25
Teaching Assistantship (33)	2700-3000	9		4 Teaching	Master's by dept.	26
						Ph. D. (1969-1971 incl.)
						A&NT 18, G&T 7, L 6,
						A&FA 3, CS 1. Total: 35

Purdue University, Lafayette 47907

DEPARTMENT OF MATHEMATICS Meyer Jerison, Chairman			Applications due: *		Bachelor's by inst.	4197
Fellowship (8)	3600-4000	12			Bachelor's by dept.	179
Teaching Assistantship (115)	3000-3600	10	120	6 Teaching	Master's by dept.	102
Research Assistantship (7)	2500-3000	10	120		Ph. D. (1969-1971 incl.)	
						A&NT 2, L 1, A&FA 19,
						AM 5. Total: 27

*Assistantships March 15, 1973; Fellowships February 1, 1973.

DEPARTMENT OF COMPUTER SCIENCE Samuel D. Conte, Head			Applications due: *		Bachelor's by inst.	4197
Fellowship (2-4)		9-12			Bachelor's by dept.	38
Teaching Assistantship (10-15)	3000-3600	10	60/sem.		Master's by dept.	52
Research Assistantship (10-15)	3000	10	60/sem.		Ph. D. (1969-1971 incl.)	
Black Fellowship (2)					L 1, CS 15. Total: 16	

*Assistantships, March 1, 1973; Fellowships, February 1, 1973.

DEPARTMENT OF STATISTICS Shanti S. Gupta, Head			Applications due: 3/1/73		Bachelor's by inst.	4197
Fellowship (1)	3400	12	60/sem.		Bachelor's by dept.	4
Teaching Assistantship (28)	3000-3600	10	60/sem.	10-20 Teaching	Master's by dept.	10
Research Assistantship (3)	3000-3600	10	60/sem.	10-20 Research	Ph. D. (1969-1971 incl.)	
Consultants (5)	3000-3600	10	60/sem.	15-20 Consulting	P&S 15. Total: 15	

IOWA

Drake University, Des Moines 50311

DEPARTMENT OF MATHEMATICS Wayne L. Woodworth, Chairman			Applications due: 3/1/73		Bachelor's by inst.	1176
Teaching Assistantship (6)	2000-2300	9		6-8 Teaching	Bachelor's by dept.	10
Work-Study with local companies (2-4)	2900-4800	9-12	71/hr.	20-25 Depends on company	Master's by dept.	3

Iowa State University, Ames 50010

DEPARTMENT OF MATHEMATICS Wilfred E. Barnes, Head			Applications due: 3/1/73		Bachelor's by inst.	3207
Fellowship (3)	2400-2800				Bachelor's by dept.	83
Teaching Assistantship (40)	2790-3060	9	120/qtr.	6 Teaching	Master's by dept.	3
Research Assistantship (2)	2700-3600	9-12	120/qtr.	20 Research	Ph. D. (1969-1971 incl.)	
						A&NT 3, G&T 3, L 2,
						A&FA 5, CS 3. Total: 16

DEPARTMENT OF AEROSPACE ENGINEERING R. F. Brodsky, Head			Applications due: 4/15/73		Bachelor's by inst.	3207
Fellowship (1)	3600	12	300*		Bachelor's by dept.	55
Teaching Assistantship (2)	2700	9	300*	22	Master's by dept.	4
Research Assistantship (3)	2700	9	300*		Ph. D. (1969-1971 incl.)	
						CS 3. Total: 3

*Reduction.

DEPARTMENT OF COMPUTER SCIENCE Robert M. Stewart, Chairman					Bachelor's by inst.	3207
Teaching Assistantship (15)	2970-3240	9	120/qtr.	3-6 Teaching	Bachelor's by dept.	56
Research Assistantship (13)	2790-3150	9	120/qtr.	20 Research	Master's by dept.	17
						Ph. D. (1969-1971 incl.)
						CS 14. Total: 14

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972
DEPARTMENT OF STATISTICS H. A. David, Head			Applications due: 4/1/73		Bachelor's by inst.	3207
					Bachelor's by dept.	5
					Master's by dept.	15
Teaching Assistantship (9)	330/mo. - 350/mo.	9	120/qtr.	22	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (7)	295/mo. - 350/mo.	9 & 12	120/qtr.	22	Research, Consulting	P&S 30. Total: 30

University of Iowa, Iowa City 52240

DEPARTMENT OF MATHEMATICS Richard Goldberg, Chairman			Applications due: 4/1/73		Bachelor's by inst.	1453
					Bachelor's by dept.	64
					Master's by dept.	16
Fellowship (1)	2200-3600	9				
Teaching Assistantship (35)	3400-4000	9	710	6	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (1)	3400-4000	9	710	20	Research	A&NT 19, G&T 5, I 2,
Teaching-Research Fellows (4)	3750-4250	12		6-20*		A&FA 4, Other 1. Total:31

*Free on Fellowship year.

DEPARTMENT OF COMPUTER SCIENCE Gerard P. Weeg, Chairman			Applications due: 1/31/73		Bachelor's by inst.	1453
					Bachelor's by dept.	64
					Master's by dept.	22
Fellowship (1)	2800	9				
Teaching Assistantship (10)	3600	9	*	20	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (4)	3600	9	*	20	Research	CS 6. Total: 6
Teaching-Research Fellows (4)	4400	12		20	Teaching	

*Out-of-state fees waived.

DEPARTMENT OF STATISTICS Robert V. Hogg, Chairman			Applications due: 2/15/73		Bachelor's by inst.	1453
					Bachelor's by dept.	64
					Master's by dept.	28
Fellowship (3)	2200-3600	9				
Teaching Assistantship (11)	3400-4000	9	710	6	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (4)	3400-4000	9	710	20	Research	P&S 12. Total: 12
Teaching-Research Fellows (3)	3750-4250	12		6-20*		

*Free on Fellowship year.

University of Northern Iowa, Cedar Falls 50613

DEPARTMENT OF MATHEMATICS E. W. Hamilton, Head			Applications due: 3/1/73		Bachelor's by inst.	500
					Bachelor's by dept.	60
					Master's by dept.	12
Research Assistantship (3)	1700-1800	9		10		

KANSAS

Fort Hays Kansas State College, Hays 67601

DEPARTMENT OF MATHEMATICS Wilmont Toalson, Chairman			Applications due: 3/1/73		Bachelor's by inst.	1128
					Bachelor's by dept.	43
					Master's by dept.	7
Fellowship (2)	650	9	233.50*	10	Teaching	
Teaching Assistantship (2)	2000	9	233.50*	10	Teaching	

*This estimate is based on a fifteen hour load.

Kansas State College of Pittsburg, Pittsburg 66762

DEPARTMENT OF MATHEMATICS Helen F. Kriegsmann, Chairman			Applications due: 3/1/73		Bachelor's by inst.	1103
					Bachelor's by dept.	24
					Master's by dept.	13
Teaching Assistantship (5)	1850-2016	9	191	6	Teaching	

Kansas State Teachers College, Emporia 66801

DEPARTMENT OF MATHEMATICS Marion Emerson, Chairman			Applications due: 4/1/73		Bachelor's by inst.	1276
					Bachelor's by dept.	106
					Master's by dept.	8
Teaching Assistantship (3)	1600-2400	9		4-6	Teaching	

Kansas State University, Manhattan 66502

DEPARTMENT OF MATHEMATICS John E. Maxfield, Head					Bachelor's by inst.	2714
					Bachelor's by dept.	30
					Master's by dept.	6
Fellowship (2)	3000	9		4	Teaching	
Teaching Assistantship (20)	2430-3060	9	356	4	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (1)	2430-3060	9	356	4	Research	A&NT 2, G&T 2, I 3, A&FA 2. Total: 9

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972
DEPARTMENT OF COMPUTER SCIENCE			Applications due: 3/15/73		Bachelor's by inst.	2714
Paul S. Fisher, Acting Head					Bachelor's by dept.	35
Teaching Assistantship (5)	2700-3400	9	12/cr. hr. +58	6	Master's by dept.	6
Research Assistantship (2)	2700-3400	9-12	12/cr. hr. +58			
DEPARTMENT OF STATISTICS			Applications due: 2/73		Bachelor's by inst.	2714
Holly C. Fryer, Head					Bachelor's by dept.	5
Fellowship (6)	2400-2800*	12			Master's by dept.	4
Teaching Assistantship (10)	2475-3600	9	*	20	Teaching	
Research Assistantship (4)	3000-3600	12	*	20	Research	
Scholarship (5)	2475-2800**	12				

*Eligible for staff fees.

**Plus dependents allowance of \$500 for each dependent.

University of Kansas, Lawrence 66044

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73		Bachelor's by inst.	2604
Paul S. Mostert, Chairman					Bachelor's by dept.	33
Fellowship (2)	2400-3300	12			Master's by dept.	11
Teaching Assistantship (60)	2750-3200	9	18/hr.	5-6	Ph. D. (1969-1971 incl.)	
Research Assistantship (1)	2700-3000	9	18/hr.	20	A&NT 3, G&T 2, A&FA 2, P&S 2. Total: 9	

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/15/73		Bachelor's by inst.	*
Floyd R. Horowitz, Acting Chairman					Master's by dept.	4
Teaching Assistantship (10)	2500-3200	9**	staff rates	20	Teaching	
Research Assistantship (5)	2300-3240	9**	staff rates	20	Research	

*No baccalaureate degree program offered in computer science at this time.

**Some summer positions available.

Wichita State University, Wichita 67208

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	1237
William M. Perel, Chairman					Bachelor's by dept.	32
Teaching Assistantship (12)	2800	9	13/cr. hr	6	Master's by dept.	5

KENTUCKY

Morehead State University, Morehead 40351

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	1047
Glenn E. Johnston, Head					Bachelor's by dept.	21
Teaching Assistantship (3)	2200	9	193/sem.	20	Teaching or Research	

Murray State University, Murray 42071

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst.	1129
Harold G. Robertson, Chairman					Bachelor's by dept.	40
Teaching Assistantship (5)	1800	9		4	Master's by dept.	3

University of Kentucky, Lexington 40506

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	2535
Raymond H. Box, Acting Chairman					Bachelor's by dept.	37
Fellowship (4)	2400-3600	12			Master's by dept.	13
Teaching Assistantship (60)	3200-3400	9	215/sem.	4-6	Teaching	
University Fellowship (5)	2500	9	215/sem.		Ph. D. (1969-1971 incl.) A&NT 11, G&T 6, A&FA 12, AM 1. Total: 30	

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 4/1/73		Bachelor's by inst.	2535
Thaddeus B. Curtz, Chairman					Bachelor's by dept.	10
Teaching Assistantship (4)	3400-3600	9	215/sem.	20		

DEPARTMENT OF STATISTICS			Applications due: *		Bachelor's by inst.	2535
R. L. Anderson, Chairman					Master's by dept.	4
Fellowship (US) (2)	2400-3600	12			Ph. D. (1969-1971 incl.)	
Teaching Assistantship (15)	3000-5400	9	430	15-20	P&S 2. Total: 2	
Research Assistantship (5)	3700-4000	12	430	15-20	Research, Consulting	
University Fellowship (3)	2500	9	430			

*February 1, 1973 for Fellowship; April 1, 1973 for Assistantship.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
				hours per week	type of service	
University of Louisville, Louisville 40208						
DEPARTMENT OF MATHEMATICS Roger H. Geeslin, Chairman						Bachelor's by inst. 979 Bachelor's by dept. 30 Master's by dept. 13
Teaching Assistantship (6)	2750-2950	9		6	Teaching	
DEPARTMENT OF APPLIED MATHEMATICS AND COMPUTER SCIENCE Bart Childs, Chairman						Bachelor's by inst. 979 Bachelor's by dept. 3 Master's by dept. 1
Teaching Assistantship (1)	2750	9				
Research Assistantship (3)	*					
Instructor (1)	*					
*Variable.						
Western Kentucky University, Bowling Green 42101						
DEPARTMENT OF MATHEMATICS Robert C. Bueker, Chairman						Applications due: 3/1/73 Bachelor's by inst. 1604 Bachelor's by dept. 40 Master's by dept. 4
Fellowship (8)	2200-2700	9	193/sem.	10	Teaching, Tutorials	
LOUISIANA						
Louisiana State University, Baton Rouge 70803						
DEPARTMENT OF MATHEMATICS L. I. Wade, Head						Applications due: 3/1/73 Bachelor's by inst. 2523 Bachelor's by dept. 39 Master's by dept. 5
Fellowship (4)	2400-3000	9				
Teaching Assistantship (40)	3200	9	110	6	Teaching	Ph. D. (1969-1971 incl.) A&NT 7, G&T 3, A&FA 8, AM 1. Total: 19
Research Assistantship (2)	2800	9				
Scholarship (2)						
Louisiana State University in New Orleans 70122						
DEPARTMENT OF MATHEMATICS J. R. Foote, Chairman						Applications due: 5/1/73 Bachelor's by inst. 987 Bachelor's by dept. 38 Master's by dept. 5
Teaching Assistantship (10)	2250-2600	9	70	15	Teaching	
Louisiana Tech University, Ruston 71270						
DEPARTMENT OF MATHEMATICS W. B. Temple, Head						Applications due: 2/15/73 Bachelor's by inst. 863 Bachelor's by dept. 23 Master's by dept. 9
Teaching Assistantship (8)	4000	9		6	Teaching	
Graduate Assistantship (6)	2400	9		6	Teaching	Ph. D. (1969-1971 incl.) A&FA 1. Total: 1
McNeese State University, Lake Charles 70601						
DEPARTMENT OF MATHEMATICAL SCIENCES Patrick L. Ford, Head						Applications due: 3/1/73 Bachelor's by inst. 668 Bachelor's by dept. 10 Master's by dept. 7
Teaching Assistantship (10)	2400	9		6	Teaching	
Northeast Louisiana University, Monroe 71201						
DEPARTMENT OF MATHEMATICS Richard D. Finley, Head						Applications due: 3/15/73 Bachelor's by inst. 1035 Bachelor's by dept. 25 Master's by dept. 5
Teaching Assistantship (15)	2400	9		6	Teaching	
Northwestern State University, Natchitoches 71457						
DEPARTMENT OF MATHEMATICS Russell Whittington, Jr., Head						Applications due: 5/1/73 Bachelor's by inst. 838 Bachelor's by dept. 18 Master's by dept. 4
Teaching Assistantship (3)	600-2400	9		6-12		
Southeastern Louisiana University, Hammond 70401						
DEPARTMENT OF MATHEMATICS Robert C. Brown, Head						Applications due: 5/73 Bachelor's by inst. 944 Bachelor's by dept. 22 Master's by dept. 4
Teaching Assistantship (5)	2000-2400	9	63	6	Teaching	

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

Tulane University, New Orleans 70118

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73		Bachelor's by inst.	680
Frank D. Quigley, Chairman						Bachelor's by dept.	24
Fellowship (1)	500-2400	12				Ph. D. (1969-1971 incl.)	
Teaching Fellowship (5)	2400-2800	9		3	Teaching	A&NT 6, G&T 6, A&FA 13.	
Teaching Assistantship (17)	2400-2800	9		3	Teaching	Total: 25	
NSF Traineeship (3)	2400-2800	9					
NDEA (2)	2400-2800	12					

University of Southwestern Louisiana, Lafayette 70501

DEPARTMENT OF MATHEMATICS*				Applications due: 3/1/73		Bachelor's by inst.	1313
David R. Andrew, Head						Bachelor's by dept.	69
Teaching Assistantship (42)	2000-3000	9		6		Master's by dept.	11
						Ph. D. (1969-1971 incl.)	
						CS I. Total: 1	

*Including computer science and statistics.

MAINE

Bowdoin College, Brunswick 04011

DEPARTMENT OF MATHEMATICS						Bachelor's by inst.	230
Richard L. Chittim, Chairman						Bachelor's by dept.	15
AYI* (10)	4450	12				Master's by dept.	27
NSF Sequential Summer Institute (35)	450**	6 wks./4 summers					

*Proposal submitted to NSF, but no grant has been made to date.

**Plus a travel and dependency allowance.

University of Maine at Orono 04473

DEPARTMENT OF MATHEMATICS AND ASTRONOMY				Applications due: 4/73		Bachelor's by inst.	1291
John C. Mairhuber, Chairman						Bachelor's by dept.	34
Fellowship (2)	3000	12				Master's by dept.	4
Teaching Assistantship (13)	2300-2500	9		20	Recitations Sections Lab Supervision Computer Lab		
Research Assistantship (1)	2300-2500	9		20			
Scholarship (20)		9					

MARYLAND

Johns Hopkins University, Baltimore 21218

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73		Bachelor's by inst.	526
J. H. Sampson, Chairman						Bachelor's by dept.	6
Teaching Assistantship (22)	2400	9	3000	4	Teaching	Master's by dept.	3
Tuition (25)	3000					Ph. D. (1969-1971 incl.)	
						A&NT 4, A&FA 4. Total: 8	

DEPARTMENT OF BIostatISTICS, SCHOOL OF HYGIENE AND PUBLIC HEALTH				Applications due: 3/15/73		Bachelor's by inst.	526
Alan Ross, Chairman						Master's by dept.	3
Fellowship (19)	2400-2600	12		4		Ph. D. (1969-1971 incl.)	
Scholarship (1)	2400-2600	12		4		P&S 11. Total: 11	

DEPARTMENT OF MATHEMATICAL SCIENCES				Applications due: 3/1/73		Bachelor's by inst.	526
Roger A. Horn, Chairman						Bachelor's by dept.	11
Teaching Fellowship (15)	2000-2700	9		6-8	Teaching	Master's by dept.	4
						Ph. D. (1969-1971 incl.)	
						P&S 7, Other 14. Total: 21	

TYPE <small>of financial assistance (with number anticipated 1973-1974)</small>	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

University of Maryland, Baltimore County, Baltimore 21228

DIVISION OF MATHEMATICS AND PHYSICS			Applications due: *		Bachelor's by inst.	479
Richard C. Roberts, Chairman					Bachelor's by dept.	18
Teaching Assistantship (7)	2900-3400	9		20		

*March 1, 1973 for Fall; August 1, 1973 for Spring.

University of Maryland, College Park 20742

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73*		Bachelor's by inst.	6003
J. K. Goldhaber, Chairman					Bachelor's by dept.	89
Fellowship (7)	4000	9	351-459		Master's by dept.	39
Teaching Assistantship (122)	2900-3500**	9		4-6 Teaching	Ph. D. (1969-1971 incl.)	
						A&NT 10, G&T 9, L 2,
						A&FA 19, P&S 3, CS 1,
						AM 26. Total: 70

*September 1, 1973 for Spring term.
**We hope to raise the maximum to \$4100 in 1973-74.

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/1/73		Bachelor's by inst.	6003
William F. Atchison, Director					Master's by dept.	26
Teaching Assistantship (19)	2900-3300	9	Remitted	4-6 Teaching		
Research Assistantship (10)	4693-5475	12				

MASSACHUSETTS

Boston College, Chestnut Hill 02167

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst.	1556
Joseph A. Sullivan, Chairman					Bachelor's by dept.	82
Teaching Fellowship (12)	2400-2600	9		6 Teaching	Master's by dept.	25
Scholarship (2)		9		3 Tutoring		

Boston University, Boston 02215

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	1400
Robin E. Esch, Chairman					Bachelor's by dept.	45
Teaching Fellowship (17)	2800	9		6 Teaching	Master's by dept.	15
Assistantship (2)		9		10 Varies	Ph. D. (1969-1971 incl.)	
						A&NT 2, L 1, A&FA 3,
						CS 2, AM 1. Total: 9

Brandeis University, Waltham 02154

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	541
Harold I. Levine, Chairman					Bachelor's by dept.	15
Fellowship (14)	1200-3000	9-12			Master's by dept.	9
Teaching Assistantship (16)	1300-1400	9		3 Grading, Research	Ph. D. (1969-1971 incl.)	
Research Assistantship (16)	1200-1300	9		Teaching	Total: 12	
Scholarship - Tuition (30)	250-2900			Research		
Wein, Afgrad (2)	2400-2500	9-10				

UNIVERSITY OF MARYLAND BALTIMORE COUNTY

Graduate Study in Applied Mathematics Leading to M.S. and Ph.D. Degrees

FIELDS: Functional and Numerical Analysis; Systems Analysis, Stochastic Control and Estimation; Ordinary Partial and Functional Differential Equations; Fluid Dynamics; Dynamical Systems; Mathematical Physics; Real and Complex Analysis; Probability Theory.

TEACHING ASSISTANTSHIPS: \$2900-\$3400 with Remission of Fees.

APPLY TO: **Chairman, Graduate Committee**
Division of Mathematics & Physics

UNIVERSITY OF MARYLAND BALTIMORE COUNTY
Baltimore, Maryland 21228

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	
Clark University, Worcester 01610						
DEPARTMENT OF MATHEMATICS			Applications due: 2/20/73		Bachelor's by inst. 364	
John F. Kennison, Chairman						
Teaching Assistantship (6)	2600-3000	9		4	Teaching	Bachelor's by dept. 13
Computer (2)	2600	9		1/4 time		Ph. D. (1969-1971 incl.) A&NT 1, A&FA 1. Total: 2
Harvard University, Cambridge 02138						
DEPARTMENT OF MATHEMATICS			Applications due: 1/10/73		Bachelor's by inst. 1200	
Raoul Bott, Chairman						
Fellowship (19-24)	6600	12			Research	Bachelor's by dept. 29
Teaching Fellowship (27)	1800-2280	9	*	3	Teaching	Master's by dept. 10
Research Assistantship (2)	varies				Research	Ph. D. (1969-1971 incl.) A&NT 8, G&T 10, L 2, A&FA 7, CS 2. Total: 29
Scholarship (6)	1000-5000	9				
*Teaching fellows may apply for Staff-tuition scholarship which covers most of tuition.						
COMMITTEE ON APPLIED MATHEMATICS*			Applications due: 1/10/73		Bachelor's by inst. 1496	
D. G. M. Anderson, Chairman						
Teaching Fellowship (50)	1200-1520	9		8	Grading, teaching	Bachelor's by dept. 24
Teaching Assistantship (5)	1000	9		8	Grading	Master's by dept. 7
Research Assistantship (100)	2175-4725	12	Varies	10-20	Research	
Scholarship (30)	Varies-2500	9				
DIVISION OF ENGINEERING AND APPLIED PHYSICS*			Applications due: 1/10/73		Bachelor's by inst. 1496	
Harvey Brooks, Dean						
*The figures on financial aid are combined.						
DEPARTMENT OF STATISTICS			Applications due: 1/20/73		Bachelor's by inst. 1200	
Arthur P. Dempster, Chairman						
Fellowship (2)	3000-5500	9	3000			Bachelor's by dept. 1
Teaching Fellowship (7)	1200-1500	9	Variable	8		Master's by dept. 2
Research Assistantship (8)	1500-4500	9	1000 or 3000	8-24		Ph. D. (1969-1971 incl.) F&S 12. Total: 12
Lowell Technological Institute, Lowell 01854						
DEPARTMENT OF MATHEMATICS			Applications due: 5/15/73		Bachelor's by inst. 500	
I. Jacob Weinberg, Chairman						
Teaching Assistantship (4)	3000	9		6	Teaching	Bachelor's by dept. 50
						Master's by dept. 5
Massachusetts Institute of Technology, Cambridge 02139						
DEPARTMENT OF MATHEMATICS			Applications due: 1/15/73		Bachelor's by inst. 1068	
Kenneth Hoffman, Head						
Fellowship (26)	2250-3000	9				Bachelor's by dept. 89
	3400	12				Master's by dept. 8
Teaching Assistantship (36)	3375*	9		6	Teaching or	Ph. D. (1969-1971 incl.) A&NT 9, G&T 17, L 9, A&FA 23, CS 9, AM 13, Other 3. Total: 83
				16	Grading papers	
Research Assistantship (10)	5742*	9	3100	16		
Traineeship (3)	1800-2250	9				
	2400-3000	12				
*1972-73 rates.						
Southeastern Massachusetts University, North Dartmouth 02747						
DEPARTMENT OF MATHEMATICS			Applications due: 7/15/73		Bachelor's by inst. 591	
L. S. Kennison, Chairman						
Teaching Assistantship (3-5)	1000-3000	9	300	6		Bachelor's by dept. 17
						Master's by dept. 2
Tufts University, Medford 02155						
DEPARTMENT OF MATHEMATICS					Bachelor's by inst. 818	
James W. Schlesinger, Chairman						
Fellowship (1)	3000	12	3050	3	Teaching	Bachelor's by dept. 35
Teaching Assistantship (6)	1200	9		3	Teaching	Master's by dept. 2
Scholarship (7 1/2)		9	3050			Ph. D. (1969-1971 incl.) L 1. Total: 1

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

University of Massachusetts, Amherst 01002

DEPARTMENT OF MATHEMATICS AND STATISTICS			Applications due: 2/1/73		Bachelor's by inst.	3390
Murray Eisenberg, Acting Head					Bachelor's by dept.	62
Fellowship (4)	2400-2800	12			Master's by dept.	22
Teaching Fellowship (10)	3600-3800	9	6	Teaching	Ph. D. (1969-1971 incl.)	
Teaching Assistantship (35)	3400	9	6	Teaching	A&NT 4, G&T 1, A&FA 2.	
Total: 7						

Worcester Polytechnic Institute, Worcester 01609

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	283
J. J. Malone, Chairman					Bachelor's by dept.	21
Teaching Assistantship (6)	2400	9	10-12	Duties vary	Master's by dept.	9

MICHIGAN

Andrews University, Berrien Springs 49104

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst.	273
Harold T. Jones, Chairman					Bachelor's by dept.	6
Fellowship (1)	2000	9	900			Master's by dept.
Teaching Assistantship (3)	2100-2400	9	900	10	Teaching	12

Central Michigan University, Mount Pleasant 48858

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	2522
Edward H. Whitmore, Chairman					Bachelor's by dept.	112
Fellowship (2)	1000-2000	9			Master's by dept.	15
Teaching Assistantship (8)	2430-2730	9	6 sem. hrs.	Teaching		

Eastern Michigan University, Ypsilanti 48197

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	2809
Robert S. Pate, Head					Bachelor's by dept.	121
Teaching Fellowship (6)	3000-3300	9	630	6	Teaching	20
						Master's by dept.

Michigan State University, East Lansing 48823

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73		Bachelor's by inst.	6500
Charles P. Wells, Chairman					Bachelor's by dept.	160
Fellowship (7)*	2400-3000	12			Master's by dept.	60
Teaching Assistantship (94)**	3174-3624	9	20	Teaching, Paper grading	Ph. D. (1969-1971 incl.) A&NT 24, G&T 13, A&FA 20, CS 3, AM 2, Other 1. Total: 63	
Research Assistantship (4)	3114-3310	9				
Scholarship (4)	500	9				

*Most of the Fellows are also appointed as teaching assistants for one term.

**Appointments of 1/4 and 3/4 time are also made and paid accordingly.

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 3/15/73		Bachelor's by inst.	6500
Harry G. Hedges, Chairman					Bachelor's by dept.	60
Fellowship (2)	2400-3000	9			Master's by dept.	8
Teaching Assistantship (4)	3300-4000	9	16/cr.	6	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (3)	3300-4000	9	16/cr.	20	Research	CS 4. Total: 4

DEPARTMENT OF STATISTICS AND PROBABILITY			Applications due: 3/1/73		Bachelor's by dept.	3
James Stapleton, Chairman					Master's by dept.	5
Fellowship (1)	2400-3600	12			Ph. D. (1969-1971 incl.)	
Teaching Assistantship (15)	3168-3537	9	16/cr. hr.	12-15	Teaching	P&S 12. Total: 12
Research Assistantship (2)	3168-3537		16/cr. hr.	15	Research, Consulting	

Michigan Technological University, Houghton 49931

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	814
Zane C. Motteler, Head					Bachelor's by dept.	31
Teaching Assistantship (12)	2550-3000	9	20	Teaching, grading	Master's by dept.	5

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
				hours per week	type of service	
Oakland University, Rochester 48063						
DEPARTMENT OF MATHEMATICS George F. Feeman, Chairman			Applications due: 4/1/73		Bachelor's by inst. 825 Bachelor's by dept. 42 Master's by dept. 9	
Teaching assistantship (6)	2700	8	1116*	10	Teaching	
*Waived in most cases.						
University of Detroit, Detroit 48221						
DEPARTMENT OF MATHEMATICS Karl W. Folley, Chairman			Applications due: *		Bachelor's by inst. 1319 Bachelor's by dept. 50 Master's by dept. 37	
Teaching Assistantship (6)	2400	9	Summer tuition included	6	Teaching	
Other (2)				6	Paper grad- ing	
*At least 8 weeks before term.						
University of Michigan, Ann Arbor 48104						
DEPARTMENT OF MATHEMATICS James M. Kister, Chairman			Applications due: 2/1/73		Bachelor's by inst. 4614 Bachelor's by dept. 122 Master's by dept. 81	
Fellowship (10)*	2000-3000	9			Research	
Teaching Fellowship (85)**	2400-3950	9	700-840	4-6	Teaching	Ph. D. (1969-1971 incl.) A&NT 11, G&T 11, L 5, A&FA 21, P&S 5, CS 4, AM 1, Other 3. Total: 61
Teaching Assistantship (50)	600-1800	9	700-2360	4-15	Grading papers	
Research Assistantship (5)	up to 2400	9		Full- time	Research	
Scholarship (5)***	up to 2000	9	700-2360			
Other (15)#	up to 2000	9				
*All types, including University, NSF, State and Actuarial Science Fellowships. Some are available on a 12 month basis with a proportionally higher stipend.						
**Approximately 10 of these fellowships will be combination appointments.						
***Primarily for students in Actuarial Science.						
#Primarily for students of certain minority groups.						
DEPARTMENT OF BIostatISTICS Richard G. Cornell, Chairman			Applications due: 5/15/73*		Master's by dept. 6 Ph. D. (1969-1971 incl.) P&S 6. Total: 6	
Fellowship (5)	1200-2400	12				
*For Fall term.						
DEPARTMENT OF COMPUTER AND COMMUNICATION SCIENCES Bruce W. Arden, Chairman			Applications due: 2/1/73		Bachelor's by inst. 4614 Bachelor's by dept. 50 Master's by dept. 15	
Fellowship (5)	2500-3600	9-12				
Teaching Fellowship (28)	1600-3600	9	840	2-4	Teaching	Ph. D. (1969-1971 incl.) CS 18. Total: 18
Teaching Assistantship (6)	750-1500	12	2400	20		
Research Assistantship (30)	3000-8000	12	2400	10-30	Research	
DEPARTMENT OF STATISTICS W. A. Ericson, Chairman			Applications due: 2/1/73		Bachelor's by inst. 4614 Master's by dept. 12	
Fellowship (5)	1500-3500	9	0 or 2360*			Ph. D. (1969-1971 incl.) P&S 1. Total: 1
Teaching Fellowship (8)	2800-3700	9	840	8-20		
Teaching Assistantship (5)	1000-2000	9	2360*	8-20		
Research Assistantship (2)	1500-4675	9-12	2360*	8-20		
*\$840 for Michigan residents.						
Wayne State University, Detroit 48202						
DEPARTMENT OF MATHEMATICS A. T. Bharucha-Reid, Acting Chairman			Applications due: 3/1/73*		Bachelor's by inst. 4340 Bachelor's by dept. 80 Master's by dept. 21	
Fellowship (4)						
Teaching Fellowship (30)	2800-4000	9	300	6		Ph. D. (1969-1971 incl.) A&NT 6, G&T 2, A&FA 7, P&S 11. Total: 26
Teaching Assistantship (15)	3100-4700	9	300	6		
Scholarship (2)						
*Late applications will be considered if positions are still available.						

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

Western Michigan University, Kalamazoo 49001

DEPARTMENT OF MATHEMATICS						Applications due: *	Bachelor's by inst.	4300
A. Bruce Clarke, Chairman							Bachelor's by dept.	80
Fellowship (6)	3000-4000	8	24/cr. hr.	6	Teaching		Master's by dept.	25
Teaching Assistantship (20)	3000-3200	8	24/cr. hr.	18	Teaching or Computer Center Assistant		Ph. D. (1969-1971 incl.) A&NT 3, A&FA 2, Other 1.	Total: 6
Spring or Summer Assistantship (20)	750	2		18	Teaching			

*Assistantships March 1, 1973, Fellowships February 15, 1973

MINNESOTA

Bemidji State College, Bemidji 56601

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE						Applications due: *	Bachelor's by inst.	945
W. Richard Slinkman, Chairman							Bachelor's by dept.	40
Teaching Assistantship (2)	2500	9	**	6-7	Teaching		Master's by dept.	13

*No fixed date but April 15, 1973 preferred.

**\$9.50 per credit hour for residents; \$19.50 per credit hour for nonresidents. In addition, \$30 in fees if registered for 9 hours; \$15 in fees if registered for 8 hours or less.

Moorhead State College, Moorhead 56560

DEPARTMENT OF COMPUTER SCIENCE							Bachelor's by inst.	1101
Martin O. Holoien, Chairman								
Employment in Computer Center (2)	500-600	9	7.25/cr. * 9.00/cr. **	10	Machine Operator			

*Undergraduate

**Graduate

St. Cloud State College, St. Cloud 56301

DEPARTMENT OF MATHEMATICS						Applications due: 5/1/73	Bachelor's by inst.	1686
Alyn N. Dull, Chairman							Bachelor's by dept.	43
Teaching Assistantship (4-6)	2400	9	*	8	Teaching		Master's by dept.	5

*\$9.50/credit hour for residents and \$19.50/credit hour for nonresidents.

University of Minnesota, Minneapolis 55455

DEPARTMENT OF MATHEMATICS						Applications due: 2/15/73	Bachelor's by inst.	5000
Johannes Nitsche, Head							Bachelor's by dept.	136
Fellowship (5)	3000-4600*	9-12					Master's by dept.	15
Teaching Fellowship (4)	3483	9	600*				Ph. D. (1969-1971 incl.)	
Teaching Assistantship (80)	3483-3906*	9	600*				A&NT 5, G&T 5, L 3,	
Research Assistantship (4)	3375-4500*	9-12	600*				A&FA 18, P&S 5, AM 1.	
S. E. E. D. Assistantship (5)**	7500						Total: 37	

*These represent current rates. Rates for 1973-74 have yet to be decided.

**Teaching conceptual mathematics in inner-city elementary schools.

DEPARTMENT OF BIOMETRY						Applications due: 3/15/73	Bachelor's by inst.	5000
Marcus Kjelsberg, Director							Bachelor's by dept.	5
Fellowship (13)							Master's by dept.	5
Teaching Assistantship (5)				20	Teaching		Ph. D. (1969-1971 incl.)	
Research Assistantship (2)				20	Research		Other 16, Total: 16	

DEPARTMENT OF COMPUTER INFORMATION AND CONTROL SCIENCE						Applications due: 2/15/73	Bachelor's by inst.	5000
J. B. Rosen, Head							Bachelor's by dept.	23
Fellowship (2)	2000-6000	12		5-10	Teaching		Master's by dept.	20
Teaching Fellowship (5)	2000-4000	9	600	10-15	Teaching		Ph. D. (1969-1971 incl.)	
Teaching Assistantship (8)	1800-3700	9	600	10-15	Teaching		CS 3, Total: 3	
Research Assistantship (5)	1800-3700	9	600	10-15	Programming			

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
				hours per week	type of service	
SCHOOL OF STATISTICS Seymour Geisser, Director				Applications due: 4/1/73		Bachelor's by inst. 5000 Bachelor's by dept. 1 Master's by dept. 5
Fellowship (3)	2400-3000	12				
Teaching Fellowship (1)	4000-4200	9		5	Teaching	Ph. D. (1969-1971 incl.)
Teaching Assistantship (17)	3500-3600	9	585*	10-20	Teaching, Grading	P&S 6. Total: 6
Research Assistantship (3)	4500-4800	12	585*	20	Research	

*Resident tuition.

MISSISSIPPI

Mississippi State College for Women, Columbus 39701

DEPARTMENT OF MATHEMATICS Donald A. King, Head				Applications due: 4/1/73		Bachelor's by inst. 500 Bachelor's by dept. 18 Master's by dept. 2
Fellowship (2)	300-500	9				
Graduate Assistantship (2)	1000-1600	9		6-10	Tutoring, Paper grad- ing	

Mississippi State University, State College 39762

DEPARTMENT OF MATHEMATICS Thomas A. Atchison, Head				Applications due: 3/15/73		Bachelor's by inst. 1013 Bachelor's by dept. 16 Master's by dept. 6
Teaching Assistantship (14)	3000	9	249/sem.	6	Teaching	

University of Mississippi, University 38677

DEPARTMENT OF MATHEMATICS Roy D. Sheffield, Chairman				Applications due: 3/1/73		Bachelor's by inst. 1900 Bachelor's by dept. 44 Master's by dept. 8
Fellowship (2)	2400-3000	12	253/sem.			
Teaching Assistantship (16)	2600-3200	9	253/sem.	6		Ph. D. (1969-1971 incl.) G&T 1, A&FA 6. Total: 7

University of Southern Mississippi, Hattiesburg 39401

DEPARTMENT OF MATHEMATICS James Caveny, Chairman				Applications due: 3/15/73		Bachelor's by inst. 1900 Bachelor's by dept. 46 Master's by dept. 8
Teaching Fellowship (8)	1500	9	159/qtr.	4	Teaching	

MISSOURI

Central Missouri State College, Warrensburg 64093

DEPARTMENT OF MATHEMATICS H. Keith Stumpff, Head				Applications due: 4/1/73		Bachelor's by inst. 1800 Bachelor's by dept. 45 Master's by dept. 10
Teaching Assistantship (6)	1800	9	300	5	Teaching	

Northeast Missouri State University, Kirksville 63501

DIVISION OF MATHEMATICS Dale Woods, Head				Applications due: 4/1/73		Bachelor's by inst. 1578 Bachelor's by dept. 31 Master's by dept. 13
Fellowship (10)	1350	9	320	15	Grading	
Teaching Fellowship (5)	2000	9		3	Teaching	

St. Louis University, St. Louis 63103

DEPARTMENT OF MATHEMATICS Raymond Freese, Chairman				Applications due: 2/15/73		Bachelor's by inst. 885 Bachelor's by dept. 47 Master's by dept. 18
Teaching Fellowship (10)	2500	9	70/sem. hr.*	6	Teaching or equivalent	Ph. D. (1969-1971 incl.) G&T 7, A&FA 3, P&S 1, CS 1. Total: 12

*Some includes remission of tuition.

Southwest Missouri State University, Springfield 65802

DEPARTMENT OF MATHEMATICS L. T. Shiflett, Head				Applications due: 3/15/73		Bachelor's by inst. 1460 Bachelor's by dept. 45 Master's by dept. 3
Teaching Assistantship (6)	2500	9	150/sem.	6	Teaching	

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

University of Missouri-Columbia 65201

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	3232
W. R. Utz, Chairman					Bachelor's by dept.	40
Teaching Assistantship (60)	2900-5250	9	550	6-10	Master's by dept.	20
Research Assistantship (3)	2900-3400	9	550	6	<u>Ph. D.</u> (1969-1971 incl.)	
Scholarship (5)	2900-3400	9	550		A&NT 6, G&T 2, A&FA 4.	
						Total: 12

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 4/1/73		Bachelor's by inst.	3232
Paul Blackwell, Chairman					Master's by dept.	18
Teaching Assistantship (4)	2960	9		6	Teaching	
Research Assistantship (2)	3900	12		20	Research	
Error analyst in computer center (3)	4000	12		20		

DEPARTMENT OF STATISTICS			Applications due: 3/1/73		Bachelor's by inst.	3232
David L. Hanson, Chairman					Bachelor's by dept.	3
Teaching Assistantship (12)	3000-3800	9	*	6	Teaching	Master's by dept. 9
Research Assistantship (5)	3000-5400	9-12	*	12-20	Research	<u>Ph. D.</u> (1969-1971 incl.)
						P&S 8. Total: 8

*Fees are currently \$270 per semester.

University of Missouri-Kansas City 64110

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	1074
Paul Liebnitz, Chairman					Bachelor's by dept.	22
Fellowship (3)	2500-3000	9			Master's by dept.	5
Teaching Assistantship (12)	3500-3700	9	275/sem.	4	Teaching	<u>Ph. D.</u> (1969-1971 incl.)
Research Assistantship (1)	3600	9	275/sem.	20	Research	A&NT 1, A&FA 2. Total: 3
Other (7)	5600-7200	9	70/sem.	8-12	Teaching	

University of Missouri-Rolla 65401

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73		Bachelor's by inst.	894
Glen Haddock, Chairman					Bachelor's by dept.	17
Fellowship (1)	3000	9		20	Master's by dept.	7
Teaching Assistantship (34)	3500	9	460	6-8 cr. hrs.	<u>Ph. D.</u> (1969-1971 incl.)	
Research Assistantship (2)	3000	9	460	20	A&NT 2, G&T 2, A&FA 2,	P&S 5, CS 7. Total: 18

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 3/1/73		Bachelor's by inst.	894
John W. Hamblen, Chairman					Bachelor's by dept.	54
Fellowship (2)	3500	9			<u>Ph. D.</u> (1969-1971 incl.)	
Teaching Assistantship (10)	3500	9		20	Teaching	CS 8. Total: 8
Research Assistantship (3)	3500	9		20	Research	

Washington University, St. Louis 63130

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73		Bachelor's by inst.	692
Mitchell Taibleson, Chairman					Bachelor's by dept.	20
Fellowship (6)	2400-3500	12		3-6	Grading	Master's by dept. 7
Teaching Assistantship (16)	2500-3000	9		9	Teaching,	<u>Ph. D.</u> (1969-1971 incl.)
Research Assistantship (8)	2600-3100	9		9	grading	A&NT 3, G&T 4, A&FA 11,
Scholarship (5)		9			Research	Other 1. Total: 19

DEPARTMENT OF APPLIED MATHEMATICS AND COMPUTER SCIENCE			Applications due: 2/15/73		Bachelor's by inst.	692
William E. Ball, Chairman					Bachelor's by dept.	23
Teaching Assistantship (8)	4480	9		10-20	Teaching	Master's by dept. 21
Research Assistantship (8)	4480-4850	9		10-20	Research	<u>Ph. D.</u> (1969-1971 incl.)
Scholarship (Tuition) (10)	330-1980	9				P&S 2, CS 1, AM 1,
						Other 6. Total: 10

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
				hours per week	type of service	

MONTANA

Montana State University, Bozeman 59715

DEPARTMENT OF MATHEMATICS Robert Engle, Acting Head				Applications due: 2/15/73		Bachelor's by inst. 1221 Bachelor's by dept. 30 Master's by dept. 9
Teaching Assistantship (15)	3000-3400	9	*	6-7	Teaching	Ph. D. (1969-1971 incl.) G&T 3, A&FA 1, P&S 2. Total: 6

*\$59/qtr. residents, \$81/qtr. nonresidents.

University of Montana, Missoula 59801

DEPARTMENT OF MATHEMATICS Charles A. Bryan, Acting Chairman				Applications due: 3/15/73		Bachelor's by inst. 1265 Bachelor's by dept. 10 Master's by dept. 25
Teaching Fellowship (1)	3000-3600	9-12				
Teaching Assistantship (26)	2600-3000	9	*	5	Teaching	Ph. D. (1969-1971 incl.) A&NT 1, CS 2. Total: 3

*\$52 for residents and \$134.50 for nonresidents.

DEPARTMENT OF COMPUTER SCIENCE
Robert P. Banaugh, Chairman

				Applications due: 2/1/73		Bachelor's by dept. 4
Teaching Assistantship (4)	2400-2600	9	*	15	Teaching	

*\$50 resident, \$135 nonresident.

NEBRASKA

Chadron State College, Chadron 69337

DEPARTMENT OF MATHEMATICS Keith B. Olson, Acting Head				Applications due: 3/15/73		Bachelor's by inst. 354 Bachelor's by dept. 28 Master's by dept. 2
Teaching Assistantship (1)	2000	9	368	6	Teaching	

Creighton University, Omaha 68131

DEPARTMENT OF MATHEMATICS D. J. H. Fuller, Chairman				Applications due: 3/15/73		Bachelor's by inst. 450 Bachelor's by dept. 21 Master's by dept. 8
Teaching Fellowship (3)	2600-2700	9		6	Teaching	

Kearney State College, Kearney 68847

DEPARTMENT OF MATHEMATICS L. M. Larsen, Head				Applications due: 3/1/73		Bachelor's by inst. 1009 Bachelor's by dept. 87 Master's by dept. 5
Teaching Assistantship (3)	2500	9		5-6	Teaching	

University of Nebraska, Lincoln 68508

DEPARTMENT OF MATHEMATICS AND STATISTICS Loren N. Argabright, Chairman				Applications due: 3/1/73		Bachelor's by inst. 3200 Bachelor's by dept. 40 Master's by dept. 14
Fellowship (3)	2400-3000	9-12				
Teaching Assistantship (45)	3200-3700	9	215/sem.	4-6	Teaching	Ph. D. (1969-1971 incl.) A&NT 5, G&T 2, L 1, A&FA 4. Total: 12

University of Nebraska at Omaha 68101

DEPARTMENT OF MATHEMATICS Paul A. Haeder, Head				Applications due: 4/1/73		Bachelor's by inst. 1400 Bachelor's by dept. 22 Master's by dept. 5
Teaching Assistantship (6)	2520	9	17/cr. hr.	20		

NEVADA

University of Nevada, Las Vegas 89109

DEPARTMENT OF MATHEMATICS Sadanand Verma, Chairman				Applications due: 6/15/73		Bachelor's by inst. 468 Bachelor's by dept. 7 Master's by dept. 4
Teaching Assistantship (8)	2500-3100	9		6	Teaching	

University of Nevada, Reno 89503

DEPARTMENT OF MATHEMATICS E. M. Beesley, Chairman				Applications due: 4/1/73		Bachelor's by inst. 875 Bachelor's by dept. 10 Master's by dept. 4
Teaching Fellowship (4)	2500-2900	9		20		

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUIITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

NEW HAMPSHIRE

Dartmouth College, Hanover 03755

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/73		Bachelor's by inst.	685
J. Laurie Snell, Chairman						Bachelor's by dept.	28
						Master's by dept.	9
Teaching Fellowship (20)	1500-2565	9		4-10	Teaching		
Research Assistantship (3)	2250-2565	9		4-10	Research	Ph. D. (1969-1971 incl.)	
NDEA and NSF Traineeships (3)	2400-3420	12		4-10	Teaching	A&NT 4, G&T 4, L 2, A&FA 4, P&S 4, Other 1.	
						Total:	19

University of New Hampshire, Durham 03824

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73		Bachelor's by dept.	45
M. Evans Munroe, Chairman						Master's by dept.	25
						Ph. D. (1969-1971 incl.)	
Fellowship (1)	3400-3800	12				A&NT 3, G&T 1, A&FA 2.	
Teaching Assistantship (16)	2800	9		6	Teaching	AM 1, Total: 7	
Scholarship (3)	Tuition	9					

NEW JERSEY

Fairleigh Dickinson University, Florham-Madison, Madison 07940

DEPARTMENT OF MATHEMATICS AND PHYSICS				Applications due: 3/1/73		Bachelor's by inst.	385
H. A. Elkholy, Chairman						Bachelor's by dept.	6
						Master's by dept.	6
Teaching Fellowship (3)	2000	9	256	6	Teaching		

Fairleigh Dickinson University, Teaneck 07666

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE				Applications due: 3/1/73		Bachelor's by inst.	532
Richard Bronson, Chairman						Bachelor's by dept.	15
						Master's by dept.	18
Research Assistantship (12)	3000	12	*	9	Teaching		

*In excess of \$566.

Newark College of Engineering, Newark 07102

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73		Bachelor's by inst.	783
Henry Zatzkis, Chairman						Bachelor's by dept.	6
						Master's by dept.	5
Fellowship*	2000	9					
Teaching Fellowship*	2900	9		6	Teaching		

*Information not available.

Princeton University, Princeton 08540

DEPARTMENT OF MATHEMATICS				Applications due: 1/15/73		Bachelor's by inst.	1000
William Browder, Chairman						Bachelor's by dept.	21
						Master's by dept.	15
Fellowship (35)	2700-3600	9-12				Ph. D. (1969-1971 incl.)	
Teaching Assistantship (8-1/2)*	2300-3800	10	3150	6		A&NT 8, G&T 17, L 2,	
Research Assistantship (9-1/2)*	3300-3700	12	3150	10		A&FA 11, P&S 1, AM 2.	
Scholarship (2)	1800	10	3150			Total: 41	

*Assistants at Princeton are 1/2 Teaching and 1/2 Research.

DEPARTMENT OF STATISTICS				Applications due: 1/15/73		Bachelor's by inst.	1000
G. S. Watson, Chairman						Bachelor's by dept.	3
						Ph. D. (1969-1971 incl.)	
NSF Fellowship (3)	2700-3600	9-12				P&S 6. Total: 6	
Teaching Assistantship (3)	3200-3800	10		20	Teaching		
Research Assistantship (7)	2300-2700	10		20	Research		
University Scholarship (7)	1800	10			Varies		

Rutgers University, New Brunswick 08903

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/73		Bachelor's by inst.	4442
Kenneth G. Wolfson, Chairman						Bachelor's by dept.	38
						Master's by dept.	16
General University						Ph. D. (1969-1971 incl.)	
Fellowship (5)*	2000	9				A&NT 9, G&T 4, A&FA 7.	
Teaching Assistantship (31)	3375	9		5-6	Teaching	Total: 20	
Research Assistantship (36)	3375	9					
NDEA Fellowship (2)	2400-2800**	12					

*Not available to first year students.

**Additional allowance for dependents.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972
DEPARTMENT OF APPLIED AND MATHEMATICAL STATISTICS Arthur Cohen, Director				Applications due: 3/1/73		Bachelor's by inst. 4442 Bachelor's by dept. 5 Master's by dept. 20
Teaching Assistantship (6)	3375	9	420/sem.	15*		Ph. D. (1969-1971 incl.) P&S 11. Total: 11
Research Assistantship (4)	3375-3720	9-12	420/sem.	15*		
Traineeship (1)	3000	12				

*Maximum.

Seton Hall University, South Orange 07079

DEPARTMENT OF MATHEMATICS Charles H. Franke, Chairman				Applications due: 3/15/73		Bachelor's by inst. 900 Bachelor's by dept. 20 Master's by dept. 8
Teaching Assistantship (9)	2200	9		6	Teaching	
Scholarship (2)						

Stevens Institute of Technology, Hoboken 07030

DEPARTMENT OF MATHEMATICS Roger S. Pinkham, Head				Applications due: 2/1/73		Bachelor's by inst. 288 Bachelor's by dept. 17 Master's by dept. 45
Fellowship (1)	2400-3000	12				Ph. D. (1969-1971 incl.) A&N 1, L 4, A&FA 4, P&S 2, CS 4. Total: 15
Teaching Assistantship (10)	2800-3100	9		15	Teaching	
Research Assistantship (1)	2800-3100	9		15	Research	

Trenton State College, Trenton 08625

DEPARTMENT OF MATHEMATICS William Hausdoerffer, Chairman				Applications due: 5/1/73		Bachelor's by inst. 1471 Bachelor's by dept. 47 Master's by dept. 4
Graduate Assistant (1-2)	2100	9		12-15	Varies	

RUTGERS UNIVERSITY

The State University of New Jersey

Graduate Study in Mathematics toward the M.S. or Ph.D. degree

FIELDS: Algebra (group theory, ring theory, category theory, commutative algebra, and non-associative algebra); Analysis (real analysis, complex analysis, differential equations, functional analysis, nonlinear functional analysis, numerical analysis, and linear and nonlinear programming); Geometry (algebraic geometry, differential geometry, and Lie groups); Logic (axiomatic set theory, model theory, and recursive functions); Topology (point-set topology, algebraic topology, and differential topology).

A new graduate program in Applied Mathematics will include the areas of control and systems theory, economics, hydrodynamics, mathematical biology, mathematical physics, numerical analysis, psychology, and social and environmental science.

FACILITIES: The mathematics library contains about 18,000 volumes and receives approximately 300 journals. This collection is housed in the new Mathematical Sciences building. Every graduate student is assigned an individual desk in a graduate student office. The department sponsors more than 200 seminars each year. The University has an IBM 360/67 computer; a number of terminals are available for time-sharing use.

FINANCIAL AID: Government-sponsored fellowships and numerous research and teaching assistantships are available; each applicant for an assistantship will also be considered for these other awards. Apply by March 1, 1973.

APPLICATION FORMS: Write to

**Graduate Admissions Office
RUTGERS UNIVERSITY
New Brunswick, New Jersey 08903**

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

NEW MEXICO

Eastern New Mexico University, Portales 88130

DEPARTMENT OF MATHEMATICS			Applications due: Open		Bachelor's by inst.	400
C. K. Wilson, Chairman					Bachelor's by dept.	20
Teaching Assistantship (6)	2100	9	234.50	20	Master's by dept.	3

New Mexico Highlands University, Las Vegas 87701

DEPARTMENT OF PHYSICS AND MATHEMATICS					Bachelor's by inst.	300
K. A. Kirkpatrick, Chairman					Bachelor's by dept.	10
Teaching Assistantship (3)	1800	9		8-10	Tutoring, Grading	4

New Mexico Institute of Mining and Technology, Socorro 87801

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	114
R. W. Ball, Chairman					Bachelor's by dept.	18
Teaching Assistantship (5)	2600-2750	9	100	5-6	Teaching	2
DEPARTMENT OF COMPUTER SCIENCE			Applications due: 3/1/73		Bachelor's by inst.	114
T. A. Nartker, Chairman					Bachelor's by dept.	6
Teaching Assistantship (2)	2600-2750	9	110	20	Teaching	
Research Assistantship (2)	2400-2600	9	110	20	Research	

New Mexico State University, Las Cruces 88001

DEPARTMENT OF MATHEMATICAL SCIENCES			Applications due: 3/15/73		Bachelor's by inst.	1268
John D. DePree, Chairman					Bachelor's by dept.	20
Fellowship (3)	2400-3000	9			Master's by dept.	8
Teaching Assistantship (24)	2400-2800	9		20	Teaching	Ph. D. (1969-1971 incl.) Total: 20
DEPARTMENT OF COMPUTER SCIENCE			Applications due: 4/15/73		Bachelor's by inst.	980
J. Mack Adams, Head					Bachelor's by dept.	1
Fellowship (1)	2400-2800	12			Master's by dept.	14
Teaching Assistantship (4)	2800	9	200/sem.	20	Teaching, Research	

University of New Mexico, Albuquerque 87106

DEPARTMENT OF MATHEMATICS AND STATISTICS			Applications due: 2/1/73		Bachelor's by inst.	1930
L. H. Koopmans, Chairman					Bachelor's by dept.	32
Fellowship (1)					Master's by dept.	15
Teaching Assistantship (14)	2900	9		20	Teaching	Ph. D. (1969-1971 incl.)
Graduate Assistantships (14)	2500-2700	9		20	Assistant to lecturer	A&NT 7, G&T 1, A&FA 9, P&S 4, CS 4, AM 1. Total: 26

NEW YORK

Adelphi University, Garden City 11530

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst.	1009
M. Yanowitch, Chairman					Bachelor's by dept.	31
Teaching Assistantship (9)	2400-3710	9		5-6	Teaching	Master's by dept.
Research Assistantship (3)	2837-3056	9		20	Program- ming	45
Scholarship (5)						Ph. D. (1969-1971 incl.) A&NT 3, P&S 1, CS 3, AM 4, Total: 11

City University of New York, Brooklyn College, Brooklyn 11210

DEPARTMENT OF MATHEMATICS			Applications due: 4/1/73		Bachelor's by inst.	3000
James Singer, Chairman					Bachelor's by dept.	100
Teaching Assistantship (2)	6350-7675	9		6	Teaching	Master's by dept.

City University of New York, City College, New York 10031

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	2050
Fritz Steinhardt, Chairman					Bachelor's by dept.	137
Non-Teaching Graduate Assistantship (1-2)	2500	9	900	15-20	Non- teaching	Master's by dept.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

City University of New York, Graduate Center, New York 10036

DEPARTMENT OF MATHEMATICS Alex Heller, Executive Officer			Applications due: 2/1/73		Ph. D. (1969-1971 incl.) A&NT 2, G&T 6, L 2, A&FA 2, P&S 1, CS 1, AM 3. Total: 17
Fellowship (8)	2400-2800	12		12	
Teaching Assistantship (30)	3000-7000	9	45/cr.	6-9	
Research Assistantship (5)	3200-3600	9-12	45/cr.		Guided Re- search

City University of New York, Hunter College, New York 10021

DEPARTMENT OF MATHEMATICS Barry M. Cherkas, Chairman			Applications due: 4/1/73		Bachelor's by inst. 1600 Bachelor's by dept. 60 Master's by dept. 15
Teaching Assistantship (10)	3020-5040	9		6-8	Teaching
Scholarship (3)		9			

City University of New York, Lehman College, Bronx 10468

DEPARTMENT OF MATHEMATICS John C. Mineka, Chairman			Applications due: 3/1/73		Bachelor's by inst. 1424 Bachelor's by dept. 76 Master's by dept. 19
Teaching Assistantship (6)	2850-5130	9	45/cr.	5-9	Teaching
Part time Lecturer (3)	6350	7	45/cr.	7	Teaching

City University of New York, Queens College, Flushing 11367

DEPARTMENT OF MATHEMATICS Joseph Hershenov, Chairman			Applications due: 3/1/73		Bachelor's by inst. 1739 Bachelor's by dept. 73 Master's by dept. 16
Teaching Assistantship (2)	1800-6500	9	45/cr.	3-8	Teaching



The Doctoral Program in Mathematics of *The City University of New York*

is at the Graduate School and University Center Building of CUNY in mid-Manhattan, opposite the Public Library and Bryant Park.

Advanced students have office space and there is an excellent departmental library. The student body is small enough to facilitate close contact with the staff.

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For a description of courses currently offered and other information, write to the

Executive Officer in Mathematics
Graduate School
THE CITY UNIVERSITY OF NEW YORK
33 West 42nd Street
New York, New York 10036



TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUIITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

Clarkson College of Technology, Potsdam 13676

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73	Bachelor's by inst.	591
Alan C. Newell, Chairman				Bachelor's by dept.	11
Fellowship (2)	2400-2800	9		Varies	Research
Teaching Assistantship (6)	2400-2700	9		3	Teaching
Research Assistantship (2)	4800-5200	12	2460	Varies	Research
Scholarship (4)	820-2460	9	2460		
Ph. D. (1969-1971 incl.) A&FA 1, CS 1, AM 1. Total: 3					

Columbia University, New York 10027

DEPARTMENT OF MATHEMATICS			Applications due: 1/8/73	Bachelor's by inst.	999
Lipman Bers, Chairman				Bachelor's by dept.	17
Fellowship (10)*	275/mo.	9		7-1/2**	Master's by dept.
Ph. D. (1969-1971 incl.) A&NT 13, G&T 12, A&FA 12. Total: 37					

*All admitted students are awarded a 9-month fellowship. We hope and expect to continue such fellowship up to a total of 4 years provided student remains in good standing. Summer support may be provided occasionally if funds are available.

**All students are expected to serve 2 years as teaching assistants as part of the degree requirement.

DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE			Applications due: 1/1/73	Bachelor's by dept.	33
Thomas E. Stern, Chairman				Master's by dept.	51
Fellowship (7)					Ph. D. (1969-1971 incl.)
Teaching Assistantship (17)			6	Assisting Faculty	CS 12. Total: 12
Research Assistantship (10)			6		
Scholarship (9)					

DEPARTMENT OF MATHEMATICAL STATISTICS			Applications due: Open	Master's by dept.	4
Herbert E. Robbins, Chairman				Ph. D. (1969-1971 incl.)	
Fellowship (12)	275/mo.	9-12	*		P&S 17. Total: 17
Research Assistantship (5)	275/mo.	9-12			

*Up to 10 hours of teaching required of all students in second and third years.

Cornell University, Ithaca 14850

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73	Bachelor's by inst.	2402
W. H. J. Fuchs, Chairman				Bachelor's by dept.	65
Fellowship (10)	2000-3000	9			Master's by dept.
Teaching Assistantship (45)	2700-2800	9		15	Teaching
Research Assistantship (5)	5400	9	3000		Research
Ph. D. (1969-1971 incl.) A&NT 10, G&T 13, L 4, A&FA 17, P&S 2, CS 21, AM 16. Total: 83					

CENTER FOR APPLIED MATHEMATICS			Applications due: 2/1/73	Bachelor's by inst.	2402
William F. Lucas, Director				Master's by dept.	3
Fellowship (8)	2000-3000	9			Ph. D. (1969-1971 incl.)
Teaching Assistantship (12)	2700-2850	9		15	Teaching, Grading
Research Assistantship (5)	2000-2800	9-12		15-20	Research
AM 16. Total: 16					

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 1/15/73	Master's by dept.	8
Gerard Salton, Chairman				Ph. D. (1969-1971 incl.)	
Fellowship (9)	2000-3000	9			CS 21. Total: 21
Teaching Assistantship (22)	2700-3000	9		15	Teaching, Grading
Research Assistantship (20)	2400-2600	9		15	Research, Programming

DEPARTMENT OF OPERATIONS RESEARCH			Applications due: 2/1/73	Bachelor's by inst.	2402
Robert E. Bechhofer, Chairman				Bachelor's by dept.	94
Fellowship (5)	2300-3000	9	3000		Master's by dept.
Teaching Assistantship (16)	2700-3000	9	3000	15	Teaching, Grading
Research Assistantship (19)	5400	9		15	Research
Scholarship (4)			3000		
Ph. D. (1969-1971 incl.) Other 19. Total: 19					

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

Fordham University, New York 10458

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	1622
Hing Tong, Chairman					Bachelor's by dept.	28
Fellowship (1)	2400-3000	9			Master's by dept.	5
Teaching Fellowship (4)	2400-3000	9	3	Teaching		
Teaching Assistantship (7)	2400-3000	9	8	Miscellaneous		
Scholarship (7)		9				

Hofstra University, Hempstead 11550

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73		Bachelor's by inst.	1650
Robert J. Bumcrot, Chairman					Bachelor's by dept.	35
Fellowship (2)	2500	9	77/cr.	3	Tutoring	6
Teaching Assistantship (4)	675-3050	4 1/2-12	77/cr.	3-6	Teaching	
Graders (2)	Varies		77/cr.		Varies	
					Grading	

Manhattan College, New York 10471

DEPARTMENT OF MATHEMATICS					Bachelor's by inst.	747
John P. McCabe, Head					Bachelor's by dept.	50
NSF In-Service (32)	425	9			Master's by dept.	2

New York University, New York 10003

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE			Applications due: 1/1/73		Bachelor's by dept.	37
Peter D. Lax, Director					Master's by dept.	58
Courant Institute of Mathematical Sciences					Ph. D. (1969-1971 incl.)	
Fellowship (22)	3300-3700	12			A&NT 17, G&T 1, L 2,	
Research Assistantship (33)	3300-3700	12			A&FA 22, P&S 8, CS 8,	
					AM 18. Other 2. Total: 78	

New York University, University Heights, Bronx 10453

DEPARTMENT OF MATHEMATICS
Joseph B. Keller, Chairman

This campus is closing as of September 1973. Direct applications to New York University, Courant Institute of Mathematical Sciences, 251 Mercer Street, New York, New York 10012.

Polytechnic Institute of Brooklyn, Brooklyn 11201

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	451
Harry Hochstadt, Head					Bachelor's by dept.	31
Teaching Fellowship (12)	2000-2400	9	4	Teaching	Ph. D. (1969-1971 incl.)	
					A&NT 4, A&FA 11, P&S 3.	
					Total: 18	

POLYTECHNIC INSTITUTE OF BROOKLYN

Graduate Study In Mathematics

LOCATION: Brooklyn Campus, and Long Island Center at Farmingdale, Long Island, New York.

DEGREES: M.S. and Ph.D.

FIELDS: Applied Mathematics, Algebra, Analysis, Probability, Statistics, etc.

AVAILABLE MINOR OPTIONS: Applied Mechanics, Aerospace Engineering, Electrophysics, Communication Theory, Automatic Control, Network Theory, Physics, etc.

FELLOWSHIPS: Teaching, Research.

Write for information to:

Dean of Graduate School . . . or . . . Department of Mathematics
Polytechnic Institute of Brooklyn
333 Jay Street
Brooklyn, New York 11201

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

Rensselaer Polytechnic Institute, Troy 12181

DEPARTMENT OF MATHEMATICS Richard C. DiPrima, Chairman			Applications due: 2/15/73		Bachelor's by inst.	840
Fellowship (3)*	2025-2400	2 at 9 1 at 12			Bachelor's by dept.	43
Teaching Assistantship (30)*	2500-3100		6-8 cr. hrs.	Teaching	Ph. D. (1969-1971 incl.) A&NT 3, A&FA 4, CS 7, AM 13, Other 10. Total: 37	
Research Assistantship (6)* Scholarship (5)*	2400-3000		20			

*Number given is total number not the number available to new students.

St. John's University, Jamaica 11432

DEPARTMENT OF MATHEMATICS Edward J. Miranda, Chairman			Applications due: 4/30/73		Bachelor's by inst.	512
Teaching Assistantship (11)	2400-2600	9	12	Teaching	Bachelor's by dept.	55
					Master's by dept.	10

St. John's University, Staten Island 10301

DIVISION OF MATHEMATICS AND SCIENCE Michael Capobianco, Chairman			Applications due: 3/15/73		Bachelor's by inst.	164
Graduate Assistantship (1)	2400	9	12	Computer Lab, Supervising, Grading, Proctoring	Bachelor's by dept.	7

State University College at Brockport 14420

DEPARTMENT OF MATHEMATICS Edward O. Stephany, Chairman			Applications due: 3/15/73		Bachelor's by inst.	1400
Teaching Assistantship (3)	2500	9	10-15	Teaching assistant	Bachelor's by dept.	90
					Master's by dept.	16

State University College at Buffalo 14222

DEPARTMENT OF MATHEMATICS Richard A. Wiesen, Chairman			Applications due: 2/15/73		Bachelor's by dept.	60
Teaching Assistantship (2)	2500	9	3-6		Master's by dept.	17

State University College at Cortland 13045

DEPARTMENT OF MATHEMATICS Thomas O'Loughlin, Acting Chairman			Applications due: 1/15/73		Bachelor's by inst.	939
Teaching Assistantship	2500	9	20		Bachelor's by dept.	25
					Master's by dept.	5

State University College at Fredonia 14063

DEPARTMENT OF MATHEMATICS Frank R. Olson, Chairman			Applications due: 4/15/73		Bachelor's by inst.	756
Teaching Assistantship (4)	2200-2400	9	4	Teaching	Bachelor's by dept.	24
					Master's by dept.	12

ST. JOHN'S UNIVERSITY

An urban university in a suburban setting... within easy travel distance of some of the world's richest cultural and research resources.

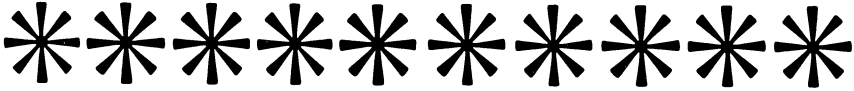
The Mathematics faculty is actively engaged in research relating to fluid dynamics, diffraction theory, graph theory, statistics, operations research, ordinary differential equations, control theory, functional analysis, point set topology, elasticity, and computer science.

Graduate work leading to the Master of Arts is offered in both pure and applied mathematics.

Approximately twelve graduate assistantships will be available for the academic year 1973-74.

Interested students are requested to write:

Edward J. Miranda, Chairman
Department of Mathematics — St. John's University
Jamaica, New York 11432



THE STATE UNIVERSITY OF NEW YORK AT ALBANY

is one of four university centers in the statewide SUNY system, and is located just outside of Albany, in a new \$110,000,000 campus designed by Edward Durell Stone.

The Mathematics Department has more than tripled in size in the last five years, aided by a National Science Foundation Departmental Development Grant, and as part of the large overall expansion of the SUNY system during this period.

Graduate students in the small, but growing Ph.D. program receive a large amount of individual attention from the faculty – both in their courses, which are small, and when pursuing research and independent activities.

Current graduate staff includes:

G. Allaud	R. Gangolli	T. MacGregor	M. Smiley
D. Ballou	R. Goldstein	G. Martin	H. Stratton
J. Becker	H. Gordon	R. Norris	J. Stutz
L. Brickman	W. Hammond	R. Nirenberg	R. Sullivan
H. Brown	R. Hornblower	H. Ogawa	E. Thomas
L. Childs	B. Jamison	R. O'Neil	A. Tong
V. Cowling	J. Jenkins	D. Porter	E. Turner
E. Davis	M. Katz	R. Rupp	D. Wilken
R. Elderkin	V. Larney	M. Sherman	C. Yu
N. Friedman	L. Lininger	W. Shih	

Studies leading to the Ph.D. are offered in:

algebra—including commutative & homological algebra	function algebras
algebraic geometry	several complex variables
algebraic & differential topology	partial differential equations
transformation groups	probability & ergodic theory
global analysis	statistics
group representations	control theory
real, complex and functional analysis	number theory

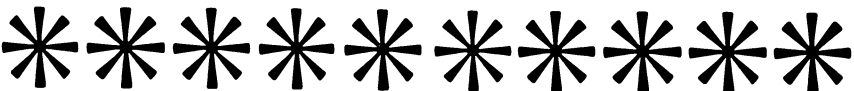
A new masters degree program in applied statistics will be offered in addition to the normal range of master's degree programs.

Financial assistance is readily available for good M.A. and Ph.D. students. Stipends range from \$2,800 to \$3,600.

Applications from minority and female students are especially welcomed.

Direct inquiries to

Graduate Chairman
Department of Mathematics
SUNY at Albany
Albany, New York 12222
PH: (518) 457-3963



TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	
State University College at New Paltz 12561						
DEPARTMENT OF MATHEMATICS Gerson B. Robison, Chairman			Applications due: 3/1/73		Bachelor's by inst. 1200 Bachelor's by dept. 34 Master's by dept. 15	
Teaching Assistantship (6)	2800	9		3-6	Teaching	
State University College at Oswego 13126						
DEPARTMENT OF MATHEMATICS Richard D. Mayer, Chairman					Bachelor's by inst. 1500 Bachelor's by dept. 77 Master's by dept. 4	
Teaching Assistantship (10)	2500	9		9 sem. hrs.	Teaching	
State University of New York at Albany 12222						
DEPARTMENT OF MATHEMATICS Hajimu Ogawa, Chairman			Applications due: 3/1/73		Bachelor's by inst. 2000 Bachelor's by dept. 169 Master's by dept. 12	
Fellowship (1)	3600	12		20	Research	
Teaching Assistantship (18)	2800-3000	10		6	Teaching	Ph. D. (1969-1971 incl.)
				14	Related	A&FA 2. Total: 2
Research Assistantship (1)	3600	12		20	Research	
DEPARTMENT OF COMPUTER SCIENCE E. D. Reilly, Jr., Chairman			Applications due: 3/1/73		Bachelor's by inst. 2000 Master's by dept. 5	
Teaching Assistantship (6)	2800	9		15	Teaching	

STATE UNIVERSITY OF NEW YORK AT BINGHAMTON

The Mathematics Department of the State University of New York at Binghamton offers graduate work leading to MAT/MST, M.A. and Ph.D. degrees in mathematics. Areas of specialization for doctoral research include algebra (in particular group theory), differential equations, functional analysis, graph theory and topology. The department is especially strong in certain areas of topology such as mappings, geometric topology, PL topology, decomposition and fiber spaces.

Numerous seminars both on the research and instructional level, together with small classes, make it possible to offer students an unusual amount of attention from an active faculty. All graduate students will gain experience in teaching through assistantships. For a more detailed account of our graduate programs, research interests of our faculty, course selections, examination procedures, etc. write for folder B to the

**Graduate Committee, Dept. of Mathematics
SUNY at Binghamton
Binghamton, New York 13901**

STATE UNIVERSITY OF NEW YORK AT BUFFALO

Graduate assistantships are available in various amounts (this year from \$2900 to \$3550) with remission of tuition. Duties may include a maximum of four classroom hours of teaching per week, or about eight hours of paper grading per week. Also, SUNY at Buffalo offers graduate fellowships at \$4000 per twelve months, tenable for three years. Last year two of these fellowships were awarded to students in the Department of Mathematics. A number of summer teaching appointments are customarily offered.

SUNY at Buffalo has an active program in graduate mathematics leading to both M.A. and Ph.D. degrees. Doctorates are offered in algebra, algebraic geometry, complex analysis, differential equations, applied mathematics, functional analysis, logic, number theory, and topology. Interdisciplinary work, especially in mathematical biology, is being expanded and encouraged. For additional information and application forms, write to:

**Director of Graduate Studies—Department of Mathematics
STATE UNIVERSITY OF NEW YORK AT BUFFALO
4246 Ridge Lea Road—Amherst, New York 14226**

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

State University of New York at Binghamton 13901

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst. 982	
Louis F. McAuley, Chairman					Bachelor's by dept. 38	
Fellowship (1)	3000	9			Master's by dept. 7	
Teaching Fellowship (13)	625-3250	9	4	Assisting	Ph. D. (1969-1971 incl.)	
Teaching Assistantship (8)	2750-3250	9	4	Teaching	G&T 5. Total: 5	
Research Assistantship (2)	2500-3500	9	4	Research		
Scholarship (2)	2500	9				
Graduate Assistantship (2)	2500-3500	9	4	Teaching		

State University of New York at Buffalo, Amherst 14226

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst. 3252	
Nicholas D. Kazarinoff, Chairman					Bachelor's by dept. 80	
Fellowship *	4000	12			Master's by dept. 32	
Teaching Assistantship (42)	2800-3905	9	4	Teaching	Ph. D. (1969-1971 incl.)	
					A&NT 3, G&T 1, L 2,	
					A&FA 2, Other 1. Total: 9	

*Awarded by University at large. Last year 2 were won by mathematics students.

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/15/73		Bachelor's by inst. 3252	
Anthony Ralston, Chairman					Bachelor's by dept. 9	
Fellowship (2)	3000-4000	9			Master's by dept. 8	
Teaching Assistantship (8)	2900-3500	9	16		Ph. D. (1969-1971 incl.)	
Research Assistantship (15)	2900-3500	9	16		CS 2. Total: 2	

DEPARTMENT OF STATISTICS			Applications due: 3/1/73		Bachelor's by inst. 3252	
Emanuel Parzen, Chairman					Bachelor's by dept. 4	
Fellowship (13)	2400-3800	12	9		Master's by dept. 6	
Teaching Assistantship (14)	2800-3500	9	9		Ph. D. (1969-1971 incl.)	
Research Assistantship (1)	2800-3500	9	9		P&S 8. Total: 8	

State University of New York at Buffalo

The Department of Mathematics will award *George William Hill* and *Emmy Noether Research Instructorships* to young mathematicians who have received their Ph.D. degree since, but no earlier than December 1, 1971, thereby enabling them to carry forward a research program. All requirements for the Ph.D. must be completed by September 1, 1973. At least one and not more than two Research Instructorships will be awarded for 1973-74 with each appointment being for two years. The 12 month stipend, beginning September 1973, is \$15,600 including generous staff benefits. Teaching load will total two one-semester courses during the 12-month period. Upon expiration of the two-year appointment, priority consideration for a three-year appointment as assistant professor will be given and will be based upon success and potential in both research and teaching. Each applicant should prepare a summary of his or her post-high school educational background, as well as a sketch of past and projected research activity, and should request three mathematicians to send letters of recommendation. Application forms are available upon request. The applications and supporting letters should be sent to

Professor N. D. Kazarinoff, Chairman
Department of Mathematics
SUNY AT BUFFALO

4246 Ridge Lea Road, Amherst, New York 14226

so as to arrive by January 22, 1973. Appointments will be made early in February.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

State University of New York at Stony Brook 11790

DEPARTMENT OF MATHEMATICS						Bachelor's by inst.	1250
R. G. Douglas, Chairman						Bachelor's by dept.	131
Fellowship (2)	3000	9		5-10*		Ph. D. (1969-1971 incl.)	
Teaching Fellowship (44)	2000-3000	9		5-10*		A&NT 2, G&T 2, A&FA 3,	
Research Assistantship (6-10)	2000-3000	9		5-10*		AM 1. Total: 8	

*Required of all full time students regardless of support.

DEPARTMENT OF APPLIED MATHEMATICS AND STATISTICS

A. H. Zemanian, Acting Chairman						Applications due: 3/1/73	Bachelor's by inst.	1250
							Bachelor's by dept.	15
Fellowship (2)	3000	9				Master's by dept.	30	
Teaching Fellowship (1)	3500	12		5	Teaching,	Ph. D. (1969-1971 incl.)		
						Grading	P&S 1, NA 1, AM 14.	
Teaching Assistantship (25)	2100-3000	9		15-20	Teaching,	Total: 16		
						Grading,		
Research Assistantship (20)	2100-3000	9		15-20	Research			
Scholarship (Tuition) (19)	1200-1500	9	1200-1500					

Syracuse University, Syracuse 13210

DEPARTMENT OF MATHEMATICS						Applications due: 3/15/73	Ph. D. (1969-1971 incl.)	
Erik Hemmingsen, Chairman							A&NT 12, G&T 4,	
Fellowship (1)	2000	9				A&FA 12, P&S 1.		
Teaching Assistantship (18)	2550-3000	9		6	Teaching	Total: 29		

SYSTEMS AND INFORMATION SCIENCE PROGRAM

Warren L. Semon, Director						Applications due: 3/1/73	Bachelor's by inst.	2487
							Ph. D. (1969-1971 incl.)	
Fellowship (2)						CS 18. Total: 18		
Teaching Assistantship (5)	2550	9		20				
Research Assistantship (5)	2550	9		20				

University of Rochester, Rochester 14627

DEPARTMENT OF MATHEMATICS						Applications due: 2/15/73	Bachelor's by inst.	1167
Gail S. Young, Chairman							Bachelor's by dept.	34
Fellowship (15)	2000-2800	12				Master's by dept.	7	
Teaching Assistantship (30)	2700	9		4	Teaching	Ph. D. (1969-1971 incl.)		
							A&NT 7, G&T 8, A&FA 11,	
							AM 1, Other 1. Total: 28	

DEPARTMENT OF STATISTICS

W. Jackson Hall, Chairman						Applications due: 2/15/73	Bachelor's by inst.	1167
							Bachelor's by dept.	1
Fellowship (3)	2700-3200		2925			Master's by dept.	1	
Teaching Assistantship (15)	2000-2700	9	2925	12-15				
Research Assistantship (2)	2700-3500	9	2925	12-15				

Yeshiva University, New York 10033

DEPARTMENT OF MATHEMATICS						Applications due: 2/15/73	Master's by dept.	8
BELFER GRADUATE SCHOOL OF SCIENCE							Ph. D. (1969-1971 incl.)	
Lewis A. Coburn, Chairman							A&NT 5, G&T 2, A&FA 7,	
Fellowship (4)	2400-3000	12				P&S 1. Total: 15		
Teaching Fellowship (8)	2400-3200	12		3-4	Teaching			
Research Assistantship (4)	2400-4000	12						
Scholarship (10)								

NORTH CAROLINA

Appalachian State University, Boone 28607

DEPARTMENT OF MATHEMATICAL SCIENCES						Applications due: 4/1/73		
Ray L. Graham, Chairman								
Teaching Assistantship (7)	3000	9	198	20	Teaching*			

*Six hours teaching.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

Duke University, Durham 27706

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	987
J. R. Shoenfield, Chairman					Bachelor's by dept.	49
Fellowship (7)	2600-3500	12			Master's by dept.	3
Teaching Assistantship (15)	3100-4200	9	432-1728	3-6 Teaching	Ph. D. (1969-1971 incl.) A&NT 7, G&T 4, A&FA 4, P&S 3, CS 1, Other 3. Total: 22	

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/15/73		Bachelor's by inst.	987
Merrell Patrick, Acting Chairman						
Fellowship (3)	4500		2160			
Teaching Fellowship (4)	4000		2160	10 Teaching		
Research Assistantship (4)	4000		2160	20 Research		

East Carolina University, Greenville 27834

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	1638
Tullio J. Pignani, Chairman					Bachelor's by dept.	46
Teaching Fellowship (12)	2000	9	*	5 Teaching	Master's by dept.	19
Computer and Office Institutional Research (4)	2000	9	*	15 Assist in Computer Lab or OIR		

*\$423/yr. (in-state); \$2,004/yr. (out-of-state); \$954/yr. (special talent tuition, out-of-state.)

North Carolina State University, Raleigh 27607

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	2000
Nicholas J. Rose, Head					Bachelor's by dept.	42
Fellowship (3)	2400-3000	12			Master's by dept.	30
Teaching Fellowship (55)	3000-3800	9	425	6-10 Teaching	Ph. D. (1969-1971 incl.) A&NT 5, G&T 1, A&FA 4, P&S 2, AM 4. Total: 16	

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 5/1/73		Bachelor's by inst.	2000
P. E. Lewis, Head					Bachelor's by dept.	71
Teaching Assistantship (3)	2700-3600	9-12	*	20		
Research Assistantship (3)	2700-3600	9-12	*	20		

*\$800 in-state, \$1800 out-of-state.

DEPARTMENT OF STATISTICS			Applications due: 3/1/73		Bachelor's by inst.	2000
D. D. Mason, Head					Bachelor's by dept.	4
Fellowship (1)	2400-3600	12			Master's by dept.	11
Teaching Assistantship (8)	2900-3500	9	*	0-20 Teaching	Ph. D. (1969-1971 incl.)	
Research Assistantship (3)	3300-3800	12	*	0-20 Research	P&S 32, Other 5. Total: 37	

*See Catalogue.

University of North Carolina, Chapel Hill 27514

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	2812
Fred B. Wright, Chairman					Bachelor's by dept.	44
Teaching Fellowship (2)	4200	9	*	Master's by dept.		10
Teaching Assistantship (27)	3660-4580	9	*	Ph. D. (1969-1971 incl.) A&NT 5, G&T 1, A&FA 3. Total: 9		

*\$398 in-state, \$1973 out-of-state. Normally Teaching Assistants receive in-state rate but this is not guaranteed.

DEPARTMENT OF BIostatISTICS			Applications due: 3/15/73		Bachelor's by inst.	2812
James E. Grizzle, Head					Master's by dept.	14
Fellowship (30)	2400-2800*	12			Ph. D. (1969-1971 incl.)	
Research Assistantship (4)	4400-5200**	12	20		P&S 18. Total: 18	
USPHS Traineeship (5)	2400-2800*	12				

*Plus allowance of \$500 per dependent, plus payment of tuition and fees.

**Plus tuition and fees.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUIITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	
DEPARTMENT OF COMPUTER SCIENCE Frederick P. Brooks, Jr., Chairman				Applications due: 2/1/73		Bachelor's by inst. 2812 Master's by dept. 12
Teaching Assistantship (14)	3600	9		20	Teaching	Ph. D. (1969-1971 incl.) CS 8. Total: 8
Research Assistantship (12)	3600	9		20	Research	
CURRICULUM IN OPERATIONS RESEARCH AND SYSTEMS ANALYSIS Fred B. Wright, Acting Head				Applications due: 2/1/73		Bachelor's by inst. 2812 Ph. D. (1969-1971 incl.) Other 1. Total: 1
Fellowship (1)	2800	9	398			
Teaching Fellowship (1)	3000	9	*			
Teaching Assistantship (5)	3660-4580	9	*			
Research Assistantship (5)	2800-3600	9	*			
*\$398 in-state, \$1973 out-of-state. Normally, Teaching Assistant receives in-state rate but this is not guaranteed.						
DEPARTMENT OF STATISTICS Norman L. Johnson, Chairman				Applications due: 2/1/73		Bachelor's by inst. 2812 Master's by dept. 4
Fellowship (4)	2800-3200	9		10	Research	Ph. D. (1969-1971 incl.) P&S 13. Total: 13
Teaching Assistantship (2)	2800	9	*	10	Teaching, Research	
Research Assistantship (9)	2800	9	*	10	Research	
*\$398 in-state, \$1973 out-of-state. In-state tuition rate is recommended on the basis of special qualifications, but approval is not guaranteed.						
University of North Carolina at Greensboro 27412						
DEPARTMENT OF MATHEMATICS E. E. Posey, Head				Applications due: 4/1/73		Bachelor's by inst. 1250 Bachelor's by dept. 50 Master's by dept. 15
Teaching Assistantship (19)	1600-3200	9	320	3-6	Teaching	
Research Assistantship (3)	1200-2400	9	320	Varies	Research	
Wake Forest University, Winston-Salem 27109						
DEPARTMENT OF MATHEMATICS Ivey C. Gentry, Chairman				Applications due: 3/1/73		Bachelor's by inst. 514 Bachelor's by dept. 47 Master's by dept. 3
Fellowship (4)	3300	9	1900			
Teaching Assistantship (2)	4300-4500	9	1900	12		
Scholarship (4)	1900	9	1900			
NORTH DAKOTA						
North Dakota State University, Fargo 58102						
DEPARTMENT OF MATHEMATICS Robert F. Tidd, Chairman				Applications due: 3/1/73		Bachelor's by inst. 985 Bachelor's by dept. 23 Master's by dept. 2
Teaching Assistantship (5)	2000-3000	9	25/qtr.	20	Teaching, grading, advising	
University of North Dakota, Grand Forks 58201						
DEPARTMENT OF MATHEMATICS Ronald Bzoch, Chairman				Applications due: 4/1/73		Master's by dept. 7
Teaching Assistantship (3)	2300	9		6	Teaching	
OHIO						
Bowling Green State University, Bowling Green 43403						
DEPARTMENT OF MATHEMATICS Louis C. Graue, Chairman				Applications due: 3/15/73		Bachelor's by inst. 2633 Bachelor's by dept. 74 Master's by dept. 36
Fellowship (3)	2400	12				
Teaching Fellowship (8)	2000-4000	9		10-20	Teaching	
Teaching Assistantship (20)	1470-2940	9		10-20	Teaching	
Research Assistantship (1-2)	2000-4000	12	1050	10-20	Research	
DEPARTMENT OF COMPUTER SCIENCE David L. Fulton, Chairman				Applications due: 4/1/73		Bachelor's by inst. 2933 Bachelor's by dept. 10 Master's by dept. 3
Teaching Assistantship (4)	2940	9		20		

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

Case Western Reserve University, Cleveland 44106

DEPARTMENT OF MATHEMATICS AND STATISTICS			Applications due: 3/1/73		Bachelor's by inst.	929
A. J. Lohwater, Chairman					Bachelor's by dept.	14
					Master's by dept.	6
Fellowship (15)	2300	9			Ph. D. (1969-1971 incl.)	
Teaching Fellowship (15)	3000	9	3-4	Teaching	A&NT 4, G&T 2, L 3, A&FA 6, P&S 12, CS 3, AM 3. Total: 33	

DEPARTMENT OF BIOMETRY			Applications due: 3/1/73		Master's by dept.	2
H. B. Houser, Acting Chairman						
Research Assistantship (1)	200	9				
Scholarship (2)						

DEPARTMENT OF OPERATIONS RESEARCH			Applications due: *		Bachelor's by inst.	929
Burton V. Dean, Chairman					Bachelor's by dept.	21
					Master's by dept.	27
Fellowship (8)	2600	9	8	Grading	Ph. D. (1969-1971 incl.)	
Teaching Assistantship (4)	3825-4185	9-12	20	Teaching	Other 16. Total: 16	
Research Assistantship (12)	3825-4185	9-12	20	Research		
NDEA (1)	2400	12	8	Research		

*April 1, 1973; December 1, 1973.

Cleveland State University, Cleveland 44115

DEPARTMENT OF MATHEMATICS			Applications due: 5/1/73		Bachelor's by inst.	1240
Robert R. Stoll, Chairman					Bachelor's by dept.	52
					Master's by dept.	27
Teaching Assistantship (5)	3000	9	20	Teaching		

John Carroll University, Cleveland 44118

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	450
Leo J. Schneider, Chairman					Bachelor's by dept.	28
					Master's by dept.	4
Teaching Assistantship (7)	2000	9	20	Grading, Tutoring		

Kent State University, Kent 44240

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73*		Bachelor's by inst.	4166
Richard K. Brown, Chairman					Bachelor's by dept.	99
					Master's by dept.	12
Fellowship (3)	2400-2500	9			Ph. D. (1969-1971 incl.)	
Teaching Fellowship (7)	3400-4200	9	5-6	Teaching	A&FA 1. Total: 1	
Teaching Assistantship (20)	2500-3000	9	5-6	Teaching		

*Late applications will be considered if vacancies exist.

Miami University, Oxford 45056

DEPARTMENT OF MATHEMATICS			Applications due: 4/15/73		Bachelor's by inst.	2502
Lyman C. Peck, Chairman					Bachelor's by dept.	66
					Master's by dept.	16
Teaching Assistantship (25)	2610	9	5/qtr. -hr.	18-20	Teaching, Assisting	

Ohio State University, Columbus 43210

DEPARTMENT OF MATHEMATICS			Applications due: 2/12/73		Bachelor's by inst.	7028
Arnold E. Ross, Chairman					Bachelor's by dept.	71
					Master's by dept.	41
Fellowship (10)	2400	12			Ph. D. (1969-1971 incl.)	
Teaching Assistantship (120)	2700	9	20*	Teaching	A&NT 12, G&T 5, A&FA 6,	
Research Assistantship (5)	2400	9	20	Research	AM 1, Other 1. Total: 25	

*One 5-hour class.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
				hours per week	type of service	
DEPARTMENT OF COMPUTER AND INFORMATION SCIENCE						
Marshall C. Yovits, Chairman			Applications due: *		Bachelor's by inst. 6500 Bachelor's by dept. 83 Master's by dept. 48	
Fellowship (20)	2000	9				Ph. D. (1969-1971 incl.)
	2400-3600	12				CS 4. Total: 4
Teaching Assistantship (40)	2700-3375	9	20	Teaching		
Research Assistantship (10)	3300-4500	12	20	Research		
Mechanized Information Center (4)						
Computer Center (2)	3300 and up	12		Research		
	3300 and up	12		Programming		

*Fellowships: February 1, 1973; Assistantships: April 15, 1973.

DEPARTMENT OF STATISTICS						
D. R. Whitney, Chairman			Applications due: 2/15/73		Bachelor's by inst. 6500 Bachelor's by dept. 3 Master's by dept. 5	
Teaching Assistantship (18)	2700-3300	9	5			Ph. D. (1969-1971 incl.) P&S 15. Total: 15

Ohio University, Athens 45701

DEPARTMENT OF MATHEMATICS						
Robert G. Helse, Chairman			Applications due: 3/1/73		Bachelor's by inst. 3929 Bachelor's by dept. 32 Master's by dept. 12	
Fellowship (1)	2500	9	40/qtr.			Ph. D. (1969-1971 incl.)
Teaching Assistantship (24)	2800-4000	9	40/qtr.	5	Teaching	A&NT 1. Total: 1
Research Assistantship (2)	4000	12	40/qtr.	15	Research	
Scholarship Tuition (3/qtr.)	180-540	9	40/qtr.			

University of Akron, Akron 44304

DEPARTMENT OF MATHEMATICS						
William H. Beyer, Head			Applications due: 3/1/73		Bachelor's by inst. 1889 Bachelor's by dept. 29 Master's by dept. 10	
Teaching Assistantship (16)	2400	9		18	Teaching, Assisting Professors	

University of Cincinnati, Cincinnati 45221

DEPARTMENT OF MATHEMATICS						
F. P. Merkes, Head			Applications due: 6/73		Bachelor's by inst. 4032 Bachelor's by dept. 63 Master's by dept. 38	
Fellowship (10)	2000-4000	9				Ph. D. (1969-1971 incl.)
Teaching Assistantship (36)	2400-2800	9		6		A&NT 1, A&FA 4, AM 2.
Scholarship (21)		12				Total: 7

Xavier University, Cincinnati 45207

DEPARTMENT OF MATHEMATICS						
William J. Larkin, Chairman			Applications due: 4/1/73		Bachelor's by inst. 562 Bachelor's by dept. 13 Master's by dept. 5	
Teaching Assistantship (2)	2300	9		6	Teaching	

University of Dayton, Dayton 45409

DEPARTMENT OF MATHEMATICS						
H. G. Mushenheim, Chairman					Bachelor's by inst. 1685 Bachelor's by dept. 16 Master's by dept. 6	
Teaching Assistantship (7)	2800	9		6	Teaching	

University of Toledo, Toledo 43606

DEPARTMENT OF MATHEMATICS						
Simmie S. Blakney, Chairman			Applications due: 3/15/73		Bachelor's by inst. 1294 Bachelor's by dept. 30	
Teaching Fellowship (18)	2400-4000	9		4-6		Ph. D. (1969-1971 incl.) A&NT 1, G&T 1, A&FA 1, AM 1. Total: 4

Wright State University, Dayton 45431

DEPARTMENT OF MATHEMATICS						
Robert D. Dixon, Chairman			Applications due: 7/1/73		Bachelor's by inst. 958 Bachelor's by dept. 21 Master's by dept. 7	
Teaching Assistantship (15)	3000-3100	9	5/qtr. hr.	6	Teaching	

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED hours per week	DEGREES AWARDED type of service	DEGREES AWARDED Academic year 1971-1972
Youngstown State University, Youngstown 44503						
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst. 1329	
Luke N. Zaccaro, Chairman					Bachelor's by dept. 23	
Teaching Assistantship (5)	3200	9	15/qtr. hr.	5	Teaching	Master's by dept. 2

OKLAHOMA

Oklahoma State University, Stillwater 74074

DEPARTMENT OF MATHEMATICS AND STATISTICS			Applications due: 2/15/73*		Bachelor's by inst. 3400	
John Jewett, Head					Bachelor's by dept. 75	
Teaching Assistantship (65)	2700-2880	9	14/sem. hr.	6	Teaching	Master's by dept. 11
Research Assistantship (5)	2700-2880	9		20		Ph. D. (1969-1971 incl.)
*Later applications will be considered for any vacancies that remain.						G&T 2, A&FA 4, P&S 8.
						Total: 14

DEPARTMENT OF COMPUTING AND INFORMATION SCIENCE

Donald D. Fisher, Head			Applications due: 3/73		Bachelor's by inst. 3400	
					Master's by dept. 12	
Teaching Assistantship (4)	300/mo.	9	14/cr. hr. *	20	Research	
(8)	150/mo.	9	14/cr. hr. *	10	Teaching	

*Graduate assistants do qualify for in-state tuition rates.

University of Oklahoma, Norman 73069

DEPARTMENT OF MATHEMATICS			Applications due: *		Bachelor's by inst. 2500	
Gene Levy, Chairman					Bachelor's by dept. 63	
Teaching Assistantship (50)	2700-3000	9	14/cr. hr.	6	Teaching	Master's by dept. 6
*Preference given to those filed by March 1, 1973.						Ph. D. (1969-1971 incl.)
						A&NT 9, G&T 5, A&FA 4,
						CS 1, Other 3. Total: 22

DEPARTMENT OF INFORMATION AND COMPUTING SCIENCES

James A. Payne, Chairman			Applications due: 3/15/73		Bachelor's by inst. 2500	
					Master's by dept. 3	
Teaching Assistantship (5)	2250-3000	9	14/cr. hr.	20	Teaching	Ph. D. (1969-1971 incl.)
						CS 1. Total: 1

University of Oklahoma, Oklahoma City 73190

DEPARTMENT OF BIostatISTICS AND EPIDEMIOLOGY			Applications due: 6/1/73		Master's by dept. 2	
Health Sciences Center, College of Health					Ph. D. (1969-1971 incl.)	
Paul S. Anderson, Jr., Chairman					P&S 7, Other 2. Total: 9	
Research Assistantship (1)	3000	9		2-4		
Pre-doctoral Traineeship (NIH) (12)	2600-3600	12				
Post-doctoral Traineeship (NIH) (1)	6000-7500	12				

OREGON

Oregon State University, Corvallis 97331

DEPARTMENT OF MATHEMATICS					Bachelor's by inst. 2564	
B. H. Arnold, Acting Chairman					Bachelor's by dept. 84	
NDEA Fellowship (2)		9				Master's by dept. 16
Teaching Assistantship (32)	2610-3144	9	126	10	Teaching, Preparing	Ph. D. (1969-1971 incl.)
						A&NT 8, G&T 5, A&FA 6,
						P&S 2, CS 2, AM 3.
						Total: 26
DEPARTMENT OF STATISTICS			Applications due: 3/1/73		Bachelor's by inst. 2564	
Lyle D. Calvin, Chairman					Master's by dept. 15	
Fellowship (8)	2400-3000	9-12				Ph. D. (1969-1971 incl.)
Teaching Assistantship (10)	2952-3400	9	120 fees	12-15		P&S 9, Other 1. Total: 10
Research Assistantship (2)	2952-3600	9-12	120 fees	12-20		
Postdoctoral Fellowship (2)	6000-7000	12				

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

Portland State University, Portland 97207

DEPARTMENT OF MATHEMATICS			Applications due: 5/30/73		Bachelor's by inst.	1717
J. Richard Byrne, Chairman					Bachelor's by dept.	78
Teaching Assistantship (4)	2826-3060	9	50/qtr. hr.	15	Teaching	Master's by dept. 16

University of Oregon, Eugene 97403

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	2603
C. W. Curtis, Head					Bachelor's by dept.	47
Teaching Fellowship (26)	2500-4050	9	125	4-5	Teaching	Master's by dept. 43
Research Assistantship (4)	2500-4050	9	125	8-10	Research	Ph. D. (1969-1971 incl.) A&NT 9, G&T 8, A&FA 9, P&S 3, CS 5. Total: 34

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/15/73		Bachelor's by inst.	2603
David Moursund, Head					Bachelor's by dept.	14
Teaching Fellowship (6-8)	2450-3200	9	42/term	12-15	Teaching	Master's by dept. 4

PENNSYLVANIA

Bryn Mawr College, Bryn Mawr 19010

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73		Bachelor's by inst.	168
John C. Oxtoby, Chairman					Bachelor's by dept.	3
Fellowship (1)	2000	9			Ph. D. (1969-1971 incl.)	
Teaching Assistantship (2)	1700	9	1/3 time		A&FA 1. Total: 1	
Scholarship (1-2)	1500	9				
Tuition Scholarship	2250	9				

Bucknell University, Lewisburg 17837

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	563
David S. Ray, Chairman					Bachelor's by dept.	37
Fellowship (2)	600	9			Master's by dept.	11
Teaching Assistantship (5)	2200-2400	9				
Scholarship (3)		9				

California State College, California 15419

DEPARTMENT OF MATHEMATICS			Applications due: 4/1/73		Bachelor's by inst.	1200
August J. Bethem, Chairman					Bachelor's by dept.	75
Fellowship (2)	1300-2600	9	20		Research	Master's by dept. 15

Carnegie-Mellon University, Pittsburgh 15213

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst.	707
Richard A. Moore, Chairman					Bachelor's by dept.	52
Fellowship (3)	2200-2600	9			Master's by dept.	13
Teaching Fellowship (5)	2200	9	2-4		Teaching	Ph. D. (1969-1971 incl.)
Teaching Assistantship (7)	2200-2600	9	2-4		Teaching	G&T 2, L 1, A&FA 7, CS 1, AM 4, Other 3.
Research Assistantship (5)	2200-2600	9				Total: 18

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/15/73		Ph. D. (1969-1971 incl.)	
J. F. Traub, Head					CS 20. Total: 20	
Teaching Assistantship (3)						
Research Assistantship (12)	602/mo.	9				

DEPARTMENT OF STATISTICS			Applications due: 3/15/73		Bachelor's by inst.	707
Joseph B. Kadane, Head					Master's by dept.	3
Fellowship (3)	3000	12			Ph. D. (1969-1971 incl.)	
Teaching Fellowship (4)	2000-2500	9	12		Teaching, grading	P&S 6. Total: 6
Teaching Assistantship (8)	2000-2500	9	12		Research	

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	
Drexel University, Philadelphia 19104						
DEPARTMENT OF MATHEMATICS Bernard Kolman, Acting Head			Applications due: 4/15/73		Bachelor's by inst. 1226 Bachelor's by dept. 52 Master's by dept. 13	
Fellowship (1)	1800-3600	9-12				
Teaching Assistantship (18)	2475-2925	9		6	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (4)	2250-3600	9-12		20	Research	A&FA 2, CS 1, AM 1.
						Total: 4

Duquesne University, Pittsburgh 15219

DEPARTMENT OF MATHEMATICS C. F. Sebesta, Chairman					Bachelor's by inst. 824 Bachelor's by dept. 10 Master's by dept. 8	
Teaching Assistantship (5)	2000	9		6-7		

East Stroudsburg State College, East Stroudsburg 18301

DEPARTMENT OF MATHEMATICS Samuel P. Wallace, Head			Applications due: 5/31/73		Bachelor's by inst. 384 Bachelor's by dept. 20 Master's by dept. 1	
Research Assistantship (2)	1352-1490	9	324	10		

Indiana University of Pennsylvania, Indiana 15701

DEPARTMENT OF MATHEMATICS Melvin R. Woodard, Chairman			Applications due: 3/1/73		Bachelor's by inst. 1465 Bachelor's by dept. 40 Master's by dept. 15	
Teaching Assistantship (6-10)	1200-2700	9		6		

Kutztown State College, Kutztown 19530

DEPARTMENT OF MATHEMATICS Edward W. Evans, Chairman			Applications due: 4/1/73		Bachelor's by inst. 925 Bachelor's by dept. 65 Master's by dept. 10	
Teaching Assistantship (1 or 2)	2705	9		20	Tutoring, proctoring, grading	

Lehigh University, Bethlehem 18015

DEPARTMENT OF MATHEMATICS, Everett Pitcher, Chairman			Applications due: 3/1/73*		Bachelor's by inst. 698 Bachelor's by dept. 18 Master's by dept. 8	
Fellowship (2)	2400-3600	12		0-2	Teaching**	
Teaching Assistantship (31)	2300-2750***	9		2-4	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (2)				20	Research	A&NT 3, G&T 6, L 2, A&FA 10, P&S 1, AM 4.
Scholarship (2)						Total: 26

*Late applications considered.
**For additional compensation.
***Subject to revision upward.

DREXEL UNIVERSITY

The Drexel Mathematics Department offers graduate programs leading to the M. S. and Ph. D. degrees. In addition to the regular masters' degree program is a cooperative M. S. program with cooperating industries during the summers. The Ph. D. program is primarily concentrated in the areas of analysis and applied mathematics. Financial aid is available through teaching and research assistantships, fellowships, and traineeships which carry stipends from \$2,475 to \$3,600 and a waiver of tuition and fees.

Interested applicants should request further information from:

**Dr. Bernard Kolman, Acting Head, Mathematics Department
Drexel University
Philadelphia, Pennsylvania 19104**

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	

Pennsylvania State University, University Park 16802

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73		Bachelor's by inst.	6918
Paul Axt, Head					Bachelor's by dept.	67
Fellowship (0-2)	2400-2800				Master's by dept.	59
Teaching Fellowship (3)	4032	12	2 courses/ calendar yr.		Ph. D. (1969-1971 incl.)	
Teaching Assistantship (15-20)	3024-3222	9	4.5 teaching/ ing/term		A&NT 20, G&T 5, L 2, A&FA 5, AM 6. Total: 38	

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/15/73		Bachelor's by inst.	6918
Preston C. Hammer, Head					Bachelor's by dept.	86
Fellowship (4)	2400	12			Ph. D. (1969-1971 incl.)	
Teaching Assistantship (30)	2844	9	20		CS 16. Total: 16	
Research Assistantship (6)	3600	12	20			

DEPARTMENT OF STATISTICS			Applications due: 2/15/73		Bachelor's by inst.	6918
William L. Harkness, Head					Master's by dept.	4
Fellowship (2)	3000	12			Ph. D. (1969-1971 incl.)	
Teaching Fellowship (3)	2700-3600	9	20 Teaching		P&S 10. Total: 10	

Shippensburg State College, Shippensburg 17257

DEPARTMENT OF MATHEMATICS			Applications due: Open		Bachelor's by inst.	882
James L. Sieber, Chairman					Bachelor's by dept.	56
Teaching Assistantship (2)	2700	9	20 Varies		Master's by dept.	12

Temple University, Philadelphia 19122

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst.	1074
Albert Schild, Chairman					Bachelor's by dept.	44
Fellowship (5)	2700-3100	12			Master's by dept.	13
Teaching Assistantship (20)	3000-3400	9	8 Teaching		Ph. D. (1969-1971 incl.)	
Research Assistantship (6)	3000-3400	9			A&NT 3, G&T 2, A&FA 3, P&S 1. Total: 9	
Scholarship (4)						

DEPARTMENT OF BIOMETRICS, MEDICAL SCHOOL			Applications due: 4/1/73		Master's by dept.	4
Stanley Schor, Chairman						
Fellowship (15)	2800-3400	12				
Research Assistantship (2)	3000	12				
Scholarship (20)		12				

DEPARTMENT OF STATISTICS						
William Stewart, Chairman						
Fellowship (3)	2700-3300	12				
Research Assistantship (5)	3000-3300	9	20			
Scholarship (2)						

TEMPLE UNIVERSITY, PHILADELPHIA

offers an M. A. and Ph. D. program in Mathematics in a variety of fields including Algebra, Group Theory, Number Theory, Geometry, Topology, Probability and Statistics, Analysis, and Functional Analysis. In addition, a new Ph. D. program with special consideration for pedagogical theory and methods, and a terminal evening MA program in Applied Mathematics are being initiated.

A limited number of assistantships and fellowships is available. For further information and applications for admission and financial support write to:

Dr. Albert Schild, Chairman
Department of Mathematics
TEMPLE UNIVERSITY
Philadelphia, Pennsylvania 19122

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

University of Pennsylvania, Philadelphia 19104

DEPARTMENT OF MATHEMATICS
Eugenio Calabi, Chairman

Applications due: * Bachelor's by inst. 1449
Bachelor's by dept. 38
Master's by dept. 6
Ph. D. (1969-1971 incl.)
A&NT 10, G&T 7, A&FA 9.
Total: 26

Fellowship (6)	2400-3000	12				
Teaching Fellowship (24)	2950	9				
Scholarship (1)		9	500			

*Assistantships 3/1/73; Fellowships 2/1/73.

DEPARTMENT OF STATISTICS
John S. de Cani, Chairman

Applications due: 2/1/73 Master's by dept. 3
Ph. D. (1969-1973 incl.)
P&S 8. Total: 8

Teaching Fellowship (4-6)	2750-3150	9	2450	6	Teaching	
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University of Pittsburgh, Pittsburgh 15213

DEPARTMENT OF MATHEMATICS
W. E. Deskins, Chairman

Applications due: 3/15/73 Bachelor's by inst. 2503
Bachelor's by dept. 153
Master's by dept. 13
Ph. D. (1969-1971 incl.)
A&NT 1, G&T 1, L 2.
A&FA 10, CS 3. Total: 17

Fellowship (2)	3000-4300	9-12				
Teaching Fellowship (15)	2800-4800	8		6	Teaching	
Teaching Assistantship (30)	2600-3900	8		6	Teaching	

DEPARTMENT OF BIostatISTICS
C. C. Li, Head

Bachelor's by inst. 2503
Master's by dept. 10
Ph. D. (1969-1971 incl.)
AM 2, Other 1. Total: 3

Fellowship (28)	2400-2800	12	*			
Teaching Fellowship (2)	2600	8	**	20	Teaching	
Human Cytogenetics Fellowship (4)	2400-2800	12	*			
Human Genetics Fellowship (3)**	6000-7000	12	*			

*\$1455 Pennsylvania residents; \$2940 out-of-state residents.
**\$528 Pennsylvania residents; \$1080 out-of-state residents.
***Should have DDS or DMD degree.

DEPARTMENT OF COMPUTER SCIENCE
Orrin E. Taulbee, Chairman

Applications due: 3/1/73 Bachelor's by inst. 2503
Master's by dept. 30

Teaching Fellowship (6)	2800-4200	8-12		15-18	Teaching	
Teaching Assistantship (8)	2600-3900	8-12		15-18	Teaching	
Research Assistantship (6)	3000-4500	8-12	1000-1500*	15-18	Research	
Scholarship (2)	Tuition					
Industry Cooperative Program (3)	3000-4800	12	750*	20	Industry	

*In-state tuition.

Villanova University, Villanova 19085

DEPARTMENT OF MATHEMATICS
James O. Brooks, Chairman

Applications due: 3/15/73 Bachelor's by inst. 1478
Bachelor's by dept. 24
Master's by dept. 31

Teaching Assistantship (8)	2400	9		6	Teaching	
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UNIVERSITY OF PENNSYLVANIA

GRADUATE PROGRAMS IN STATISTICS AND IN OPERATIONS RESEARCH

TEACHING FELLOWSHIPS: ----- 9 months, \$2,750-\$3,150 plus tuition

UNIVERSITY FELLOWSHIPS:----- minimum, \$2,400 plus tuition and fees

MANAGEMENT RESEARCH ANALYSTS: - - - 12 months, \$5,400 plus tuition and fees

APPLICATIONS:- - - - For admission forms and further information, please write to:

The Chairman,
Department of Statistics and Operations Research
E-220 Dietrich Hall

UNIVERSITY OF PENNSYLVANIA
Philadelphia, Pennsylvania 19104

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

West Chester State College, West Chester 19830

DEPARTMENT OF MATHEMATICS Richard G. Branton, Chairman			Applications due: 4/15/73	Bachelor's by inst.	1197					
Teaching Assistantship (2)			2705-2980	9	6	Teaching	Bachelor's by dept.	33	Master's by dept.	7

Wilkes College, Wilkes-Barre 18702

DEPARTMENT OF MATHEMATICS Bing K. Wong, Chairman			Applications due: 4/1/73	Bachelor's by inst.	510					
Teaching Assistantship (2)			2700	9	15	Teaching	Bachelor's by dept.	17	Master's by dept.	7
Tuition Scholarships *										

*Number available is not fixed.

PUERTO RICO

University of Puerto Rico, Mayaguez 00708

DEPARTMENT OF MATHEMATICS Augusto H. Ortiz, Chairman				Bachelor's by inst.	1052					
Teaching Assistantship (13)			2625-3000	9	6	Teaching	Bachelor's by dept.	20	Master's by dept.	8

RHODE ISLAND

Brown University, Providence 02912

DEPARTMENT OF MATHEMATICS Allan Clark, Chairman			Applications due: 1/10/73	Bachelor's by inst.	893					
Fellowship (7)			2200-3000	9			Bachelor's by dept.	18	Master's by dept.	6
Teaching Assistantship (16)			2500-3000	9	7	Teaching	Ph. D. (1969-1971 incl.)			
Research Assistantship (2)			2000-3000	9		Research	A&NT 3, G&T 3, A&FA 9, P&S 1. Total: 16			

DEPARTMENT OF APPLIED MATHEMATICS

J. P. LaSalle, Chairman			Applications due: 1/10/73	Bachelor's by inst.	893					
Fellowship (14)			2400	9			Bachelor's by dept.	131	Master's by dept.	11
Teaching Assistantship (10)			2400-3000	9	3-9	Teaching	Ph. D. (1969-1971 incl.)			
Research Assistantship (10)			2776-5287.50	9	376-2287.50	3-9	Research	A&FA 8, P&S 6, CS 4, AM 15. Total: 33		

Rhode Island College, Providence 02908

DEPARTMENT OF MATHEMATICS Philip M. Whitman, Chairman			Applications due: 3/1/73	Bachelor's by inst.	718					
Teaching Assistantship (2)			2500	9	20	Teaching, related duties	Bachelor's by dept.	28	Master's by dept.	23

University of Rhode Island, Kingston 02881

DEPARTMENT OF MATHEMATICS Gerasimos Ladas, Chairman			Applications due: 3/15/73	Bachelor's by inst.	1785					
Fellowship (1)			3000	9			Bachelor's by dept.	31	Master's by dept.	5
Teaching Assistantship (16)			2600-3000	9	3-6	Teaching	Ph. D. (1969-1971 incl.)			
Scholarship URI (1)				9			A&FA 3, AM 1. Total: 4			

DEPARTMENT OF COMPUTER SCIENCE AND EXPERIMENTAL STATISTICS

William J. Hemmerle, Chairman			Applications due: *	Bachelor's by inst.	1785					
Teaching Assistantship (3)			2600-2700	9	20	Teaching	Master's by dept.	7		
Research Assistantship (8)			2600-2700	9	20	Research				

*November 1972 and April 15, 1973

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972	

SOUTH CAROLINA

Clemson University, Clemson 29631

DEPARTMENT OF MATHEMATICAL SCIENCES				Applications due: 3/1/73		Bachelor's by inst.	1195
John Kenelly, Head						Bachelor's by dept.	25
Fellowship (3)	*					Master's by dept.	24
Teaching Assistantship (60)	3660-4020	12	90/sem.	3-6	Teaching	Ph. D. (1969-1971 incl.)	
Research Assistantship (6)	3260-3660	12	90/sem.			A&NT 4, G&T 3, A&FA 5, P&S 2. Total: 14	

*\$2400 for first year graduate students; \$2600 for second year students; \$2800 for third year students plus \$500 per dependent.

University of South Carolina, Columbia 29208

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/73		Bachelor's by inst.	2186
J. H. Wahab, Head						Bachelor's by dept.	37
Teaching Assistantship (70)	2800-4000	9	30/sem.	5-6	Teaching	Master's by dept.	50
						Ph. D. (1969-1971 incl.)	
						A&NT 4, L 2, A&FA 1.	
						Total: 7	

Winthrop College, Rock Hill 29730

DEPARTMENT OF MATHEMATICS				Applications due: 4/1/73		Bachelor's by inst.	400
B. G. Hodges, Chairman						Bachelor's by dept.	25
Teaching Assistantship (3)	2400-2800	9	470	6	Teaching	Master's by dept.	2

SOUTH DAKOTA

South Dakota School of Mines & Technology, Rapid City 57701

DEPARTMENT OF MATHEMATICS				Applications due: 4/1/73		Bachelor's by inst.	184
Dean C. Benson, Chairman						Bachelor's by dept.	12
Teaching Assistantship (6)	2600	9	6/sem. hr.	4-5	Teaching	Master's by dept.	2
Research Assistantship (1)	2600	9	6/sem. hr.	18	Research		

**THE MATHEMATICS DEPARTMENT OF
 THE UNIVERSITY OF SOUTH CAROLINA
 IS NOW ACCEPTING APPLICATIONS FOR
 teaching assistantships for the 1973-1974 academic year**
STIPENDS RANGE FROM \$2800 TO \$4000
FOR
SIX HOURS CLASSROOM TEACHING OR EQUIVALENT
DEGREE PROGRAMS

The programs offered lead to the Master of Arts in Teaching Mathematics, Master of Mathematics, Master of Arts, Master of Science and Doctor of Philosophy degrees. The student's program of study is arranged after individual consultation; the master's program, in particular, is adaptable to a variety of objectives. Doctoral research direction is available in algebra, analysis, applied mathematics, probability and statistics, topology, number theory, logic and foundations. Careful attention will be given to initial advisement and to starting each student in a program commensurate with his training and competence.

Completed applications should be in the Graduate School Office by March 1. All inquiries are welcome and should be sent to:

Director
Graduate Studies in Mathematics
Department of Mathematics
University of South Carolina
Columbia, South Carolina 29208

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
				hours per week	type of service	

South Dakota State University, Brookings 57006

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/73		Bachelor's by inst. 750
J. E. Richards, Head						Bachelor's by dept. 34
Teaching Assistantship (4)	2500-2800	9	5/cr.	6	Teaching	Master's by dept. 3

University of South Dakota, Vermillion 57069

DEPARTMENT OF MATHEMATICS				Applications due: 3/15/73		Bachelor's by inst. 730
Wayne W. Gutzman, Chairman						Bachelor's by dept. 47
Teaching Assistantship (8)	1800	9	1/3 of in-state	4	Teaching	Master's by dept. 24

TENNESSEE

East Tennessee State University, Johnson City 37601

DEPARTMENT OF MATHEMATICS				Applications due: 4/30/73		Bachelor's by inst. 1374
Lester C. Hartsell, Chairman						Bachelor's by dept. 27
Research Assistantship (6)	1800-2070	9	*	15	Research	Master's by dept. 9

*All graduate students (residents and nonresidents) must pay \$136 per quarter.

George Peabody College for Teachers, Nashville 37203

DEPARTMENT OF MATHEMATICS				Applications due: Open		Bachelor's by inst. 190
J. H. Banks, Chairman						Bachelor's by dept. 5
Fellowship (6)	3000	12				Master's by dept. 4
Teaching Fellowship (2)	3500		1500	5	Teaching	Ph. D. (1969-1971 incl.)
Scholarship (5)	1500					Other 21. Total: 21

Memphis State University, Memphis 38111

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/73		Bachelor's by inst. 1993
Stanley P. Franklin, Chairman						Bachelor's by dept. 36
Teaching Fellowship (2)	3000-5000	9		6		Master's by dept. 14
Teaching Assistantship (10)	2500-3000	9		6		

Middle Tennessee State University, Murfreesboro 37130

DEPARTMENT OF MATHEMATICS				Applications due: 3/15/73		Bachelor's by inst. 1757
Harold S. Spraker, Chairman						Bachelor's by dept. 31
Teaching Assistantship (8)	2160-2340	9		12	Teaching	Master's by dept. 10

Tennessee Technological University, Cookeville 38501

DEPARTMENT OF MATHEMATICS				Applications due: 4/15/73		Bachelor's by inst. 717
Ralph C. Boles, Chairman						Bachelor's by dept. 5
Teaching Assistantship (8)	2250-2475	9		6	Teaching	Master's by dept. 4

University of Tennessee, Knoxville 37916

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/73		Bachelor's by inst. 3423
H. T. Mathews, Head						Bachelor's by dept. 72
Fellowship (2)	1600-3600	12	15/qtr.			Master's by dept. 21
Teaching Assistantship (52)	1600-5400	9	15/qtr.	3-12	Teaching	Ph. D. (1969-1971 incl.)
						A&NT 4, G&T 1, A&FA 2, Other 1. Total: 8

DEPARTMENT OF COMPUTER SCIENCE						Bachelor's by inst. 3423
Gordon R. Sherman, Head						Master's by dept. 12
Teaching Assistantship (10)	750-1500	9		20		

Vanderbilt University, Nashville 37203

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73		Bachelor's by inst. 865
B. F. Bryant, Chairman						Bachelor's by dept. 46
Fellowship (1)	2800	9				Master's by dept. 9
Teaching Assistantship (18)	3000	9		3-6	Teaching	Ph. D. (1969-1971 incl.)
						A&NT 6, G&T 3, A&FA 2. Total: 11

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972
DEPARTMENT OF SYSTEMS AND INFORMATION SCIENCES						
William H. Rowan, Director			Applications due: 2/15/73		Bachelor's by inst. 865 Bachelor's by dept. 23 Master's by dept. 1	
Teaching Fellowship (3)	2400-5200	9	2800	18	Teaching	
Research Assistantship (2)	2400-5200	9	2800	18	Research	
Computer Center (2)	2400-5200	9	2800	20	Computer Center	

TEXAS

Baylor University, Waco 76703

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst. 1300 Bachelor's by dept. 47 Master's by dept. 4	
Howard L. Rolf, Chairman						
Teaching Assistantship (2)	1500	9		3	Teaching	
Research Assistantship (2)	1500	9		12		

East Texas State University, Commerce 75428

DEPARTMENT OF MATHEMATICS			Applications due: 4/15/73		Bachelor's by inst. 2000 Bachelor's by dept. 52 Master's by dept. 20	
Dale R. Bedgood, Head						
Teaching Assistantship (12)	2700-3200	9	117	6 sem. hrs.	Teaching	

DEPARTMENT OF COMPUTER SCIENCE

Alton R. Goddard, Head					Bachelor's by inst. 2000 Bachelor's by dept. 330	
Teaching Assistantship (6)	2700	9	104.50	6	Teaching	

Lamar University, Beaumont 77710

DEPARTMENT OF MATHEMATICS			Applications due: 4/1/73		Bachelor's by inst. 1021 Bachelor's by dept. 32 Master's by dept. 6	
Jeremiah M. Stark, Head						
Teaching Fellowship (4)	2800	9	846	6	Teaching	

Midwestern University, Wichita Falls 76308

DEPARTMENT OF MATHEMATICS			Applications due: 5/15/73		Bachelor's by inst. 400 Bachelor's by dept. 25 Master's by dept. 5	
Louie C. Huffman, Chairman						
Teaching Assistantship (6)	2700	9	50/sem.	6	Teaching	

North Texas State University, Denton 76203

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73		Bachelor's by inst. 2431 Bachelor's by dept. 29 Master's by dept. 13	
Frank Conner, Chairman						
Teaching Assistantship (23)	3100-3500	9	142/sem.	8	Teaching, Tutoring	

Rice University, Houston 77001

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73		Bachelor's by inst. 448 Bachelor's by dept. 27 Master's by dept. 6	
Salomon Bochner, Chairman						
Fellowship (18)	1800-2600	9*		6	Teaching, Research	Ph. D. (1969-1971 incl.) A&NT 4, G&T 4, A&FA 7, CS 4. Total: 19
Scholarship (4)		9				

*Appropriately higher for 12 months.

DEPARTMENT OF MATHEMATICAL SCIENCES

Robert M. Thrall, Chairman			Applications due: 2/15/73		Bachelor's by inst. 448 Bachelor's by dept. 19 Master's by dept. 2	
Fellowship (4)	2300	9		10		
Research Assistantship (7)	4000-4600	9	2300	10-20		
Scholarship (3)		9				

St. Mary's University, San Antonio 78228

DEPARTMENT OF MATHEMATICS			Applications due: 5/15/73		Bachelor's by inst. 589 Bachelor's by dept. 23 Master's by dept. 8	
Frederick J. Carter, Chairman						
Teaching Assistantship (1)	2000	9	43/sem. hr. *	6	Teaching	

*Tuition rebates 9 semester hour per semester.

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

Sam Houston State University, Huntsville 77340

DEPARTMENT OF MATHEMATICS Glen E. Mattingly, Director				Applications due: 2/15/73	Bachelor's by inst.	1255
Fellowship (4)	2700-2925	9	50	15	Non-teaching	Bachelor's by dept. 30
Teaching Fellowship (3)	2700-2925	9	50	6	Teaching	Master's by dept. 14
Graduate Assistantship (5)	1890-2520	9	50	15-20	Non-teaching	
Junior College Intern (3)	250/mo. - 270/mo.					

Southern Methodist University, Dallas 75222

DEPARTMENT OF MATHEMATICS David W. Starr, Chairman				Applications due: 4/15/73	Bachelor's by inst.	1353
Teaching Assistantship (7)	2200-3300	9		6-9	Teaching	Bachelor's by dept. 43
Scholarship (1)	1800	9	1800			Master's by dept. 5
DEPARTMENT OF STATISTICS D. B. Owen, Chairman				Applications due: 4/15/73	Bachelor's by inst.	1353
Fellowship (5)	2400-2800	12				Master's by dept. 1
Teaching Fellowship (1)	4000		*	20		Ph. D. (1969-1971 incl.)
Teaching Assistantship (10)	1800-3600	9	*	5-20	Teaching	P&S 27. Total: 27
Research Assistantship (2)	1800	9				
Scholarship (tuition) (7)		9				

*Paid to nine hours.

Southwest Texas State University, San Marcos 78666

DEPARTMENT OF MATHEMATICS Robert Northcutt, Chairman				Applications due: 2/15/73	Bachelor's by inst.	2145
Teaching Assistantship (8)	3000	9	*	6-9	Teaching	Bachelor's by dept. 105
						Master's by dept. 8

*\$100 in-state.

Stephen F. Austin State University, Nacogdoches 75961

DEPARTMENT OF MATHEMATICS W. I. Layton, Head				Applications due: 2/1/73*	Bachelor's by inst.	1201
Teaching Assistantship (14)	1500-3000	9	130**	3-6		Bachelor's by dept. 40
						Master's by dept. 2

*Late applications will be considered if vacancies exist.
**Out-of-state tuition is waived.

Texas A & I University, Kingsville 78363

DEPARTMENT OF MATHEMATICS Virgil C. Kowalik, Chairman				Applications due: 4/15/73	Bachelor's by inst.	1347
Teaching Assistantship (10)	2844	9		6		Bachelor's by dept. 20
						Master's by dept. 10

TEXAS A & M UNIVERSITY

The Department of Mathematics of Texas A & M University offers programs leading to the M.S. and Ph.D. degrees. A student has great flexibility in choosing a program.

Faculty members are active in research in many fields of pure and applied mathematics from algebra to partial differential equations. The library and computing facilities are quite good.

Financial assistance is available.

For more information write:

Department of Mathematics
Graduate Student Committee
TEXAS A & M UNIVERSITY
College Station, Texas 77843

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

Texas A & M University, College Station 77843

DEPARTMENT OF MATHEMATICS			Applications due: 4/15/73		Bachelor's by inst.	2397
G. R. Blakley, Head					Bachelor's by dept.	31
Teaching Assistantship (45)	2925-3375	9	50	20	Master's by dept.	6
Non-Teaching Assistantship (5)	2925-3375	9	50	20	Ph. D. (1969-1971 incl.)	

A&NT 2, A&FA 4, CS 2.
Total: 8

DEPARTMENT OF STATISTICS			Applications due: 4/1/73		Bachelor's by inst.	2397
H. O. Hartley, Director					Master's by dept.	2
Teaching Assistantship (10)	3150-3375	9*	275	10-15	Ph. D. (1969-1971 incl.)	
Research Assistantship (15)	3150-3375	9*	275	10-15	P&S 13. Total: 13	

*Nine month assistantship is guaranteed; 12 month normally available.

Texas Christian University, Fort Worth 76129

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	736
L. A. Colquitt, Chairman					Bachelor's by dept.	15
Teaching Fellowship (10)	2400-3300	12		8 Teaching	Master's by dept.	7
Teaching Assistantship (4)	1800-2000	9		12 Teaching	Ph. D. (1969-1971 incl.)	
Scholarship (3)		12		8 Research	A&NT 5, G&T 5, A&FA 7.	
Computer Center Trainee (3)	3200-3400	9		20 Computer Center	Total: 17	

Texas Southern University, Houston 77004

DEPARTMENT OF MATHEMATICS			Applications due: 6/1/73		Bachelor's by inst.	500
L. L. Clarkson, Chairman					Bachelor's by dept.	20
Teaching Assistantship (2)	2400	9		6	Master's by dept.	9

Texas Tech University, Lubbock 79409

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	2845
Henry L. Gray, Chairman					Bachelor's by dept.	33
Teaching Assistantship (60)	2600-3400	9	50/sem.	6 Teaching	Master's by dept.	19
						Ph. D. (1969-1971 incl.)
						A&NT 8, A&FA 4, P&S 8, CS 4, AM 1. Total: 25

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 4/15/73		Master's by dept.	3
Barry L. Bateman, Chairman					Ph. D. (1969-1971 incl.)	
Teaching Assistantship (6)	2600-3000	9	50/sem.	6 Teaching	CS 1. Total: 1	

University of Houston, Houston 77004

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	2305
James Younglove, Head					Bachelor's by dept.	88
Fellowship (3)	2400-3600	9	in-state		Master's by dept.	8
Teaching Assistantship (30)	2700-3600	9	in-state	6 Teaching	Ph. D. (1969-1971 incl.)	
Research Assistantship (4)	3600	12	in-state		A&NT 5, G&T 10, A&FA 6.	
Scholarship (2)	3000-3600	9			CS 1, AM 1. Total: 23	

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 3/1/73		Master's by dept.	2
L. Duane Pyle, Chairman						
Teaching Assistantship (9)	2430-2700	9	110	15-20 Teaching		

University of Texas at Arlington 76010

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	1650
Basil M. Wall, Chairman					Bachelor's by dept.	158
Teaching Fellowship (18)	2700	9		6	Master's by dept.	16
Teaching Assistantship (4)	2700	9				

DEPARTMENT OF INDUSTRIAL ENGINEERING			Applications due: Varies		Bachelor's by inst.	1650
F. A. Meier, Chairman					Bachelor's by dept.	21
Teaching Assistantship (10)	2700-3600	9		20 Teaching	Master's by dept.	7
Research Assistantship (8)	2700-3600	12		20 Research	Ph. D. (1969-1971 incl.)	
						Other 5. Total: 5

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	hours per week	type of service	Academic year 1971-1972	

University of Texas at Austin 78712

DEPARTMENT OF MATHEMATICS			Applications due: 2/1/73			Bachelor's by inst. 7812		
Leonard Gillman, Chairman						Bachelor's by dept. 245		
						Master's by dept. 14		
Fellowship (5)	2000-3000	9-12				Ph. D. (1969-1971 incl.)		
Teaching Assistantship (100)	2800-4000	9	121/sem.	20	Teaching	A&NT 4, G&T 3, L 2,		
Research Assistantship (3)	4000-5000	12	121/sem.	20	Research	A&FA 12, CS 5, AM 2,		
Assistant Instructor (4)	4000	9		20	Teaching	Other 2. Total: 30		

DEPARTMENT OF COMPUTER SCIENCES			Applications due: 2/1/73			Master's by dept. 14		
J. C. Browne, Chairman						Ph. D. (1969-1971 incl.)		
						CS 23. Total: 23		
Fellowship (2)	2400-3400	9						
Teaching Assistantship (5)	3000	9		20				
Research Assistantship (6)	2500-3000	9-12		20				

DEPARTMENT OF GENERAL BUSINESS			Applications due: *			Bachelor's by inst. 7812		
Gaylord A. Jentz, Chairman						Bachelor's by dept. 77		
						Master's by dept. 1		
Teaching Assistantship (25)	5000-7999	9	50/sem.	10-20	Teaching	Ph. D. (1969-1971 incl.)		
Scholarship (1)	2000		50/sem.			P&S 7. Total: 7		

*Spring 1973.

University of Texas at El Paso 79968

DEPARTMENT OF MATHEMATICS			Applications due: 3/15/73			Bachelor's by inst. 1389		
Carl E. Hall, Chairman						Bachelor's by dept. 40		
						Master's by dept. 4		
Fellowship (2)	1500	9	126/sem.					
Teaching Assistantship (10)	2500-3000	9	126/sem.	6	Teaching			

West Texas State University, Canyon 79105

DEPARTMENT OF MATHEMATICS			Applications due: 4/1/73			Bachelor's by inst. 750		
Hollis L. Cook, Head						Bachelor's by dept. 35		
						Master's by dept. 6		
Teaching Assistantship (8)	2700	9	*	15	Teaching (9)			
						Preparation (6)		

*All Teaching Assistants pay \$130 in fees but out-of-state students do not pay out-of-state tuition.

UTAH

Brigham Young University, Provo 84601

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73			Bachelor's by inst. 4297		
Kenneth L. Hillam, Chairman						Bachelor's by dept. 31		
						Master's by dept. 7		
Teaching Assistantship (20)	475-1480*	9		10-20	Teaching,			
						Tutoring		
Research Assistantship (5)	2.00/hr -	9		20	Research			
						4.00/hr.		
Scholarship (6)								

*Per semester.

DEPARTMENT OF STATISTICS			Applications due: 3/1/73			Bachelor's by inst. 4297		
H. Gill Hilton, Chairman						Bachelor's by dept. 7		
						Master's by dept. 3		
Teaching Fellowship (1)	3900-4300	12		20	Research,			
						Teaching		
Teaching Assistantship (11)	2200-2840	9	450/sem.	20	Teaching			
Research Assistantship (2)	2500-3800	12	450/sem.	20	Research			

University of Utah, Salt Lake City 84112

DEPARTMENT OF MATHEMATICS						Bachelor's by dept. 62		
C. E. Burgess, Chairman						Master's by dept. 7		
						Ph. D. (1969-1971 incl.)		
Fellowship (2)	2400-3600	12				A&NT 1, G&T 1, A&FA 7,		
Teaching Fellowship (60)	3600-4000	9		8-10	Teaching	CS 5, AM 2. Total: 16		
Teaching Assistantship (2)	600/qtr. -3600	9		8-10	Teaching			
Research Assistantship (2)	2100-2500	9						

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND amount in dollars	9 or 12 months	TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
				hours per week	type of service	

Utah State University, Logan 84321

DEPARTMENT OF MATHEMATICS Lawrence O. Cannon, Head			Applications due: 4/1/73		Bachelor's by inst.	1503	
					Bachelor's by dept.	9	
Teaching Assistantship (16)	2500-4000	9		5-10	Teaching	Master's by dept.	8
Research Assistantship (1)	1200	9		5			

DEPARTMENT OF APPLIED STATISTICS AND
COMPUTER SCIENCE
Rex L. Hurst, Head

			Applications due: 5/1/73		Bachelor's by inst.	1503	
					Bachelor's by dept.	17	
Teaching Assistantship (2)	2200-2800	9	438-948	20		Master's by dept.	7
Research Assistantship (4)	2200-2800	9	438-948	20			

VERMONT

University of Vermont, Burlington 05401

DEPARTMENT OF MATHEMATICS N. James Schoonmaker, Chairman			Applications due: 3/1/73		Bachelor's by inst.	1100
					Bachelor's by dept.	55
					Master's by dept.	5
Fellowship (5)	1000	9				
Teaching Fellowship (13)	2600	9		6	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (2)	2600	9		20	Research	AM I. Total: 1

VIRGINIA

College of William and Mary, Williamsburg 23185

DEPARTMENT OF MATHEMATICS Thomas L. Reynolds, Chairman			Applications due: 3/12/73		Bachelor's by inst.	804
					Bachelor's by dept.	50
					Master's by dept.	3
Fellowship (2)	500-3000	9	*			
Graduate Assistantship (5)	2700	9		10	Non-teaching	

*\$353/semester for residents, \$888 for nonresidents. Part time students, (less than 9 semester hours) pay \$28/semester hour.

Madison College, Harrisonburg 22801

DEPARTMENT OF MATHEMATICS W. M. Sanders, Head			Applications due: 4/1/73		Bachelor's by inst.	754
					Bachelor's by dept.	24
					Master's by dept.	4
Teaching Assistantship (6)	3000	9	600	3-6	Teaching	

Radford College, Radford 24141

DEPARTMENT OF MATHEMATICS AND STATISTICS Joseph C. Nichols, Chairman			Applications due: 3/1/73		Bachelor's by inst.	800
					Bachelor's by dept.	30
					Master's by dept.	4
Fellowship (2)	1200-1800	9	414			
Teaching Assistantship (3)	1000	9	414	10		
Scholarship (2)	1050	9	414	20		
House Fellowships (2)	2600	12		20		

University of Virginia, Charlottesville 22903

DEPARTMENT OF MATHEMATICS Kevin, McCrimmon, Chairman			Applications due: 2/1/73		Bachelor's by inst.	1421
					Bachelor's by dept.	25
					Master's by dept.	19
Fellowship (17)	800-3500		633-1282		Research	
Teaching Assistantship (20)	1875-3750	9	633-1282	6	Teaching	Ph. D. (1969-1971 incl.)
Research Assistantship (5)	235-1500	9	633-1282		Research	A&NT 1, G&T 11, A&FA 4, P&S 1. Total: 17

DEPARTMENT OF APPLIED MATHEMATICS AND
COMPUTER SCIENCE
Robert H. Owens, Chairman

			Applications due: 2/1/73		Bachelor's by inst.	1421
					Bachelor's by dept.	3
					Master's by dept.	7
Fellowship (10)	2200-2400	9	597			
Teaching Assistantship (8)	3000-3300	9	597	15-20		Ph. D. (1969-1971 incl.)
Research Assistantship (6)	3000-3300	9	597	15-20		CS 2, AM 3. Total: 5

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

Virginia Commonwealth University, Richmond 23220

DEPARTMENT OF MATHEMATICAL SCIENCES			Applications due: 3/15/73		Bachelor's by inst.	1797
William A. Glynn, Chairman					Bachelor's by dept.	7
Teaching Assistantship (8-10)	3000-3200	9	430	6	Tutorial	

Virginia Polytechnic Institute and State University, Blacksburg 24061

DEPARTMENT OF MATHEMATICS			Applications due: 4/1/73		Bachelor's by inst.	2118
C. Wayne Patty, Head					Bachelor's by dept.	58
Fellowship (2)	2400-2800	12			Master's by dept.	5
Teaching Assistantship (40)	3195-3600	9	687	6	Teaching	Ph. D. (1969-1971 incl.) A&NT 1, G&T 4, A&FA 1, AM 2. Total: 8
DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/15/73		Bachelor's by inst.	2118
Bruce J. Klein, Acting Head					Bachelor's by dept.	20
Teaching Assistantship (6)	355/mo. - 400/mo.	9	510	20	Teaching, Assisting	
Research Assistantship (2)	355/mo. - 400/mo.	9	510	20	Assisting in Research	
DEPARTMENT OF STATISTICS			Applications due: 3/15/73		Bachelor's by inst.	2118
Clyde Y. Kramer, Acting Head					Bachelor's by dept.	5
Fellowship (10)	2400-2800	12			Master's by dept.	13
Teaching Assistantship (7)	3465-3735	9	229/qtr.	6		Ph. D. (1969-1971 incl.)
Research Assistantship (4)	3465-3735	9	229/qtr.	20		P&S 17. Total: 17

WASHINGTON

Central Washington State College, Ellensburg 98926

DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73		Bachelor's by inst.	2018
Robert Y. Dean, Chairman					Bachelor's by dept.	30
Teaching Assistantship (4)	1350-2700	9	185/qtr.	20	Teaching	Master's by dept. 5

Eastern Washington State College, Cheney 99004

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	1589
Hugh D. Sullivan, Chairman					Bachelor's by dept.	68
Teaching Assistantship (6)	2700	9		15-20		Master's by dept. 4

University of Washington, Seattle 98195

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	5787
Robert M. Blumenthal, Chairman					Bachelor's by dept.	156
Fellowship (10)	2400-5100	12			Master's by dept.	24
Teaching Assistantship (50)	3519-3798	9	624	20*	Teaching	Ph. D. (1969-1971 incl.) A&NT 7, G&T 15, L 1, A&FA 14, CS 1, AM 2.
Research Assistantship (4)	3195-3708	9	624		Research	Other 1. Total: 41

*6 hours in class plus office hours and preparation time.

BIOMATHEMATICS GROUP			Applications due: 2/1/73		Master's by dept.	2
Richard Kronmal, Acting Chairman					Ph. D. (1969-1971 incl.)	
Fellowship (26)	2400-2800	9			P&S 4. Total: 4.	
Teaching Assistantship (16)	310/qtr.		*	10	Teaching	
Research Assistantship (2)	355/mo.		*	20	Research	

*\$208 in-state per quarter; \$547 out-of-state per quarter.

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 2/1/73		Master's by dept.	4
Jerre D. Noe, Chairman					Ph. D. (1969-1971 incl.)	
Teaching Assistantship (4)	3519-4077	9	208/qtr.	6	Teaching	CS 11. Total: 11
Research Assistantship (14)	3195-3708	9	208/qtr.	5	Research	

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

CENTER FOR QUANTITATIVE SCIENCE IN
FORESTRY, FISHERIES AND WILDLIFE
Benjamin A. Jayne, Director

Applications due: 3/1/73

Fellowship (5)	4260	12	832*		
Teaching Assistantship (3)	3519	9	624	20	
Research Assistantship (15)	4260	12	832	20	

*Resident rate.

Washington State University, Pullman 99163

DEPARTMENT OF PURE AND APPLIED MATHEMATICS
T. G. Ostrom, Acting Chairman

Applications due: 3/1/73

Bachelor's by inst. 2427
Bachelor's by dept. 23
Master's by dept. 1

Teaching Assistantship (29)	3528-3695	9	312/sem.	20	
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Ph. D. (1969-1971 incl.)
A&NT 4, G&T 4, L 1,
A&FA 1, AM 2, Other 4.
Total: 16

DEPARTMENT OF COMPUTER SCIENCE
Ottis W. Rechard, Chairman

Applications due: 3/1/73

Bachelor's by inst. 2427
Bachelor's by dept. 8
Master's by dept. 23

Teaching Assistantship (16)	882-3694.50	9	312	5-20	
Research Assistantship (5)	824.67-4032	12	312	5-20	
Staff Assistantship (10)	1007.93- 4031.50	11	312	5-20	

Ph. D. (1969-1971 incl.)
CS II. Total: 11

Western Washington State College, Bellingham 98225

DEPARTMENT OF MATHEMATICS AND
COMPUTER SCIENCE

Applications due: 4/1/73

Bachelor's by inst. 1594
Bachelor's by dept. 50
Master's by dept. 20

Albert J. Froderberg, Chairman					
Teaching Assistantship (13)	2790	9	185	one course	

WEST VIRGINIA

Marshall University, Huntington 25701

DEPARTMENT OF MATHEMATICS
John W. Hogan, Chairman

Applications due: 5/1/73*

Bachelor's by inst. 1245
Bachelor's by dept. 9

Teaching Assistantship (4-7)	1800-2400	9	**	6 cr. hrs.	Teaching
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*Late applications will be considered.

**Tuition is waived. A student activity fee must be paid.

West Virginia University, Morgantown 25606

DEPARTMENT OF STATISTICS AND COMPUTER
SCIENCE

Applications due: 3/15/73

Bachelor's by inst. 2303
Bachelor's by dept. 23
Master's by dept. 7

Stanley Wearden, Chairman					
Teaching Assistantship (8)		9	*	20	
Research Assistantship (2)	3200-3600	12	*	20	

*Students on assistantship must pay \$21 per semester student fee.

WISCONSIN

Marquette University, Milwaukee 53233

DEPARTMENT OF MATHEMATICS
C. C. Braunschweiger, Chairman

Applications due: 3/1/73

Bachelor's by inst. 1496
Bachelor's by dept. 47
Master's by dept. 16

Teaching Assistantship (11)	2400-2900	9		12-20	Teaching
Research Assistantship (1)	2400-2600	9		12-20	Teaching
NSF Traineeship (1)	2400-2800	12		12-20	Teaching, Research

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION		SERVICE REQUIRED		DEGREES AWARDED	
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972		
University of Wisconsin, Madison 53706								
DEPARTMENT OF MATHEMATICS			Applications due: 1/15/73*			Bachelor's by inst. 4925		
Michael N. Bleicher, Chairman						Bachelor's by dept. 97		
Fellowship (21)**	4070***	9-12	Varies				Master's by dept. 52	
Teaching Assistantship (110)	3525-4392	9			1/2time Teaching	Ph. D. (1969-1971 incl.)		
Research Assistantship (12)	3267	9			1/2time Research	A&NT 27, G&T 26, L 6,		
MRC Regular (8)	3300-3900#	12			Research towards Ph. D.	A&FA 32, P 3, AM 5, Other 5. Total: 104		
MRC R. E. Langer (2)	4400-4800#	12			Research towards Ph. D.			
*For Spring Semester, November 15, 1973.								
**To be competed for in all University competition.								
***Academic Year and Summer.								
#Plus \$750 for each dependent.								
DEPARTMENT OF COMPUTER SCIENCES			Applications due: 1/15/73			Bachelor's by dept. 25		
O. L. Mangasarian, Chairman						Master's by dept. 46		
Fellowship (2)	2700	9					Ph. D. (1969-1971 incl.)	
3/8 Teaching Assistantship (10)	3173-3294	9	480	15	Teaching	CS 21. Total: 21		
1/2 Teaching Assistantship (30)	4230-4392	9	480	20	Teaching			
Research Assistantship (20)	3267-4000	9-12	480	20	Research			
Project Assistantship (10)	*		480					
MRC Fellowship (6)	3300-3900	12						
MRC R. E. Langer Fellowship (2)	4800-5400	12						
*Individually arranged.								
MATHEMATICS RESEARCH CENTER			Applications due: 1/15/73					
J. Barkley Rosser, Director								
Fellowship (10)	3300-3900*	12					**	
R. E. Langer Fellowship (2)	4800-5400*	12					**	
*Stipends increased by \$750 for each dependent.								
**In addition to stipend, MRC pays tuition and fees.								
DEPARTMENT OF STATISTICS			Applications due: 1/15/73			Bachelor's by inst. 4925		
Norman R. Draper, Chairman						Bachelor's by dept. 1		
Fellowship (3)	3300-3900	9	652					Master's by dept. 9
Teaching Assistantship (12)	4230-4400	9	652	20	Teaching	Ph. D. (1969-1971 incl.)		
Research Assistantship (12)	4000-4200	9	652	20	Research	P&S 20. Total: 20		
MRC Fellowship (4)	3300-3900*	12						
R. E. Langer Fellowship (1)	4800-5400*	12						
*Stipend increased by \$750 for each dependent.								
University of Wisconsin-Eau Claire 54701								
DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73			Bachelor's by inst. 1008		
Lawrence Wahlstrom, Chairman						Bachelor's by dept. 33		
Fellowship (1)	500	9	*	20			Master's by dept. 2	
Scholarship		9						
*Resident \$600 per academic year, subject to increase; nonresident \$2100.								
University of Wisconsin-Milwaukee 53201								
DEPARTMENT OF MATHEMATICS			Applications due: 2/15/73			Bachelor's by inst. 2320		
Richard L. Gantos, Chairman						Bachelor's by dept. 55		
NDEA Fellowship (4)	2400-2800	9	9		Research	Master's by dept. 20		
Combined Appointments: (2)							Ph. D. (1969-1971 incl.)	
1/4 Teaching Assistantship	2196	9	3-4		Teaching	A&NT 7, G&T 1, A&FA 6.		
and NSF or NDEA Fellowship	2400-3000	9	6-9		Research	AM 1. Total: 15		
Teaching Assistantship (64)	4230-4392	9	6		Teaching			
University of Wisconsin-River Falls 54022								
DEPARTMENT OF MATHEMATICS			Applications due: 4/15/73			Bachelor's by inst. 722		
Lillian Gough, Chairman						Bachelor's by dept. 45		
Teaching Assistantship (5)	2000-2500	9	200/qtr.	5	Teaching	Master's by dept. 7		

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUIITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

University of Wisconsin-Whitewater 53190

DEPARTMENT OF MATHEMATICS				Applications due: 4/1/73	Bachelor's by inst.	1891
C. E. Flanagan, Chairman					Bachelor's by dept.	55
Graduate Assistantship (1)	2500	9	*	20	Master's by dept.	8

*Out-of-state remitted.

WYOMING

University of Wyoming, Laramie 82070

DEPARTMENT OF MATHEMATICS				Applications due: 2/15/73	Bachelor's by inst.	1422
Joseph M. Martin, Head					Bachelor's by dept.	31
Fellowship (1)	6000-8000	12	*	20	Research	Master's by dept. 4
Teaching Assistantship (21)	2898-3861	9	*	6-8	Teaching	Ph. D. (1969-1971 incl.) A&NT 7, G&T 2, L 1, CS 1, AM 3. Total: 14

*Students pay a fee of \$54.50.

CANADA

Acadia University, Wolfville, Nova Scotia

DEPARTMENT OF MATHEMATICS				Applications due: 4/1/73	Bachelor's by inst.	600
K. D. C. Haley, Head					Bachelor's by dept.	30
Fellowship (5)	2150-2700	9	550	6	Master's by dept.	3

Carleton University, Ottawa, Ontario

DEPARTMENT OF MATHEMATICS					Bachelor's by inst.	2698
V. Dlab, Chairman					Bachelor's by dept.	88
Fellowship (2)	2250-2850	12	653		Ph. D. (1969-1971 incl.)	
Teaching Fellowship (2)	4000-4500	12	653	6	A&NT 1, G&T 1, A&FA 1,	
Teaching Assistantship (3)	1800-2400	9-12	653	6-8	Teaching	P&S 1. Total: 4
Research Assistantship (10)	1000-3360	12	653	0-6	Research	
Scholarship (8)	3200-4800	12	653	0-6	Teaching	
Combined Research Teaching (15)	3300-4500	12	653	3-8	Teaching	

Dalhousie University, Halifax, Nova Scotia

DEPARTMENT OF MATHEMATICS					Bachelor's by inst.	800
A. J. Tingley, Chairman					Bachelor's by dept.	90
Teaching Fellowship (1)	3800-5500	12	725	7	Master's by dept.	19
Teaching Assistantship (17)	1975-3925	12		7	Ph. D. (1969-1971 incl.)	
Scholarship (9)	3800-5500	12	725		A&NT 1, G&T 1, L 1, A&FA 3, CS 1, Other 2.	
						Total: 9

Lakehead University, Thunder Bay, Ontario

DEPARTMENT OF MATHEMATICAL SCIENCES				Applications due: 8/73	Bachelor's by inst.	529
John H. M. Whitfield, Chairman					Bachelor's by dept.	10
Teaching Assistantship (8)	1600-4000	12	635	4-15		

McGill University, Montreal, Quebec

DEPARTMENT OF MATHEMATICS				Applications due: 3/1/73	Bachelor's by inst.	1506
E. Rosenthal, Chairman					Bachelor's by dept.	101
Fellowship (5)	2000-3600	9	652		Master's by dept.	19
Teaching Assistantship (30)	2750-5500	9	652	3-6	Ph. D. (1969-1971 incl.)	
Research Assistantship (30)	2000-3180	12	652	6	A&NT 9, G&T 2, L 2,	
Demonstrator (70)	425-1500	7	652	3-6	A&FA 5, P&S 2. Total: 20	

McMaster University, Hamilton, Ontario

DEPARTMENT OF MATHEMATICS				Applications due: 3/73	Bachelor's by inst.	1572
T. Husain, Chairman					Bachelor's by dept.	9
Teaching Assistantship (15)	1800-4300	12		10	Master's by dept.	16
						Ph. D. (1969-1971 incl.)
						A&NT 4, G&T 5, A&FA 6.
						Total: 15

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972

Memorial University of Newfoundland, St. John's, Newfoundland

DEPARTMENT OF MATHEMATICS			Applications due: 9/1/73		Bachelor's by inst.	1000
W. J. Blundon, Head					Bachelor's by dept.	70
Fellowship (6)	3000-3600	12	500		Master's by dept.	6

Queen's University at Kingston, Kingston, Ontario

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	1573
A. J. Coleman, Head					Bachelor's by dept.	37
Fellowship (5)	2000-3800	12			Master's by dept.	7
Teaching Assistantship (36)*	1000-2400	12		4-10	Ph. D. (1969-1971 incl.)	
Research Assistantship (26)	1200-2400	12		4-10	A&NT 6, A&FA 5, P&S 1, AM 5. Total: 17	

*Teaching Assistantships of varying amounts are combined with internally and externally awarded Fellowships, Scholarships and Research Assistantships. The total annual stipend does not normally exceed \$4500.

Simon Fraser University, Burnaby, British Columbia

DEPARTMENT OF MATHEMATICS			Applications due: 3/31/73		Bachelor's by inst.	712
R. W. Lardner, Chairman					Bachelor's by dept.	16
Teaching Assistantship (20)	2760-3360	8*	150/sem. **	15	Teaching	Master's by dept. 5
Research Assistantship (5)	3360	12	150/sem. **		Research	Ph. D. (1969-1971 incl.)
Scholarship (5)	3800	12	150/sem. **			A&NT 1, L 3. Total: 4

*Many extendable to 12 months with \$1120 research assistantship.

**Fees reduced to \$20 per semester in second year of graduate studies.

Université Laval, Quebec, Quebec

DEPARTMENT OF MATHEMATICS			Applications due: 5/1/73		Bachelor's by inst.	25
Norbert Lacroix, Chairman					Bachelor's by dept.	22
Teaching Assistantship (16)	2160-3200	9	500	8-11	Preparation, Teaching, Grading	Master's by dept. 3 Ph. D. (1969-1971 incl.) G&T 1. Total: 1
Research Assistantship (4)	1700-2500	9	500	6		
Scholarship (10)	3200-3800	12	500			
1967 Science Scholarship (1)	5500	12	500			

Université de Sherbrooke, Sherbrooke, Quebec

DEPARTMENT OF MATHEMATICS			Applications due: 5/1/73		Bachelor's by inst.	300
Jean-Pierre Samson, Chairman					Bachelor's by dept.	28
Teaching Assistantship (6)	1100-3300	9	450	6	Teaching	Master's by dept. 6
Research Assistantship (2)	6000-8000	12	450	6	Teaching	Ph. D. (1969-1971 incl.) A&FA 2. Total: 2

University of Alberta, Edmonton, Alberta

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	2830
S. G. Ghurye, Chairman					Bachelor's by dept.	10
Fellowship (3)	3600-5000	12			Master's by dept.	6
Teaching Fellowship (8)	4200-4800	12		2	Teaching	Ph. D. (1969-1971 incl.)
Teaching Assistantship (33)	3000-4600	8-12		4	Teaching	A&NT 6, G&T 6, A&FA 4,
Research Assistantship (4)	3180-4180	12		0-2	Teaching	P&S 1, AM 2, Other 1. Total: 20

DEPARTMENT OF COMPUTING SCIENCE			Applications due: 3/1/73		Bachelor's by inst.	2830
A. Wouk, Chairman					Bachelor's by dept.	34
Teaching Assistantship (25)	1800-3600	8		12	Teaching, grading	Master's by dept. 10
Research Assistantship (30)	2400-3180	12	500	12	Research	
Scholarship (16)	3200-3800	12	500			

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

University of British Columbia, Vancouver, British Columbia

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	3300
R. D. James, Head					Bachelor's by dept.	100
					Master's by dept.	10
Fellowship (5)	2000-3200	9-12	455		Teaching, grading Research	Ph. D. (1969-1971 incl.) A&NT 7, G&T 2, L 1, A&FA 14, P&S 1, AM 1. Total: 26
Teaching Assistantship (45)	1500*-3000	9	455	5-10		
Research Assistantship (25)**	280-1120	1-4				

*\$1500 teaching assistantships are primarily for students with concurrent fellowships.
**Available in summer to landed immigrants and Canadian citizens.

DEPARTMENT OF COMPUTER SCIENCE			Applications due: 4/1/73		Bachelor's by dept.	64
J. E. L. Peck, Head					Master's by dept.	12
Fellowship (5)	2500-3800	12	455*		Ph. D. (1969-1971 incl.) CS 1. Total: 1	
Teaching Assistantship (15)	2810	8	455*	12		
Research Assistantship (10)	2240	8	455*	12		
Summer Research Grant (15)	1120-1400	4				

*First year.

University of Calgary, Calgary, Alberta

DEPARTMENT OF MATHEMATICS, STATISTICS AND COMPUTING SCIENCE			Applications due: 4/30/73		Bachelor's by inst.	1838
H. K. Farahat, Head					Bachelor's by dept.	93
					Master's by dept.	6
Teaching Assistantship (30)	2800-3800	8		12 Teaching, Grading	Ph. D. (1969-1971 incl.) G&T 1, A&FA 3, CS 2, Other 1. Total: 7	
Research Assistantship (5)	1800-2600	8				

University of Manitoba, Winnipeg, Manitoba

DEPARTMENT OF MATHEMATICS AND ASTRONOMY			Applications due: 3/15/73		Bachelor's by inst.	2200
N. S. Mendelsohn, Head					Bachelor's by dept.	125
					Master's by dept.	7
Fellowship (8)	2000-3000	8	425		Ph. D. (1969-1971 incl.) A&NT 2. Total: 2	
Teaching Fellowship (20)	3000-4000	12	425	3 Demonstrat- ing		
Teaching Assistantship (10)	2000	15	425	3 Demonstrat- ing		
Summer Research (20)	1000	3		3 Demonstrat- ing		

DEPARTMENT OF STATISTICS			Applications due: 3/31/73		Bachelor's by inst.	2200
B. K. Kale, Head					Bachelor's by dept.	13
					Master's by dept.	7
Fellowship (1)	2300	8	425-450		Lab Demon- stration	
Teaching Assistantship (16)	1600-2120	8	425-450	6-8		

University of New Brunswick, Fredericton, New Brunswick

DEPARTMENT OF MATHEMATICS			Applications due: 3/1/73		Bachelor's by inst.	1225
Brian Tupper, Head					Bachelor's by dept.	16
					Master's by dept.	2
Fellowship (10)	2000-2500	9	500	6 Grading	Ph. D. (1969-1971 incl.) Other 1. Total: 1	
Teaching Fellowship (1)	2500	9	500	3 Teaching		
Research Assistantship (6)	1000-2400	9	500	6 Research		

University of Ottawa, Ottawa, Ontario

DEPARTMENT OF MATHEMATICS			Applications due: 4/15/73		Bachelor's by inst.	2191
Remi Vaillancourt, Acting Chairman					Bachelor's by dept.	28
					Master's by dept.	5
Teaching Fellowship (8)	2400-2500	12	700	2 Demonstra- tion	Ph. D. (1969-1971 incl.) G&T 1, A&FA 1, CS 1. Total: 3	
Research Assistantship (1)	4500-4900	9		5 Teaching		
Scholarship (1)	2400-3500	12	700			
Post Doctoral Fellowship (1)	6000-7500	12		3 Teaching		

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION	SERVICE REQUIRED		DEGREES AWARDED
	amount in dollars	9 or 12 months	if not included in stipend (dollars)	hours per week	type of service	Academic year 1971-1972
DEPARTMENT OF COMPUTER SCIENCE Louis G. Birta, Chairman			Applications due: 4/1/73		Bachelor's by inst.	2191
					Bachelor's by dept.	25
Teaching Assistantship (2)	800-1000	9	900	6		
Research Assistantship (2)	2000-2400	12	900	8		
University of Saskatchewan, Regina, Saskatchewan						
DEPARTMENT OF MATHEMATICS I. McDonald, Chairman			Applications due: 7/14/73		Bachelor's by inst.	500
					Bachelor's by dept.	50
					Master's by dept.	3
Teaching Fellowship (2)	4400	12	425	5	Teaching	
					Ph. D. (1969-1971 incl.)	
					G&T 1. Total: 1	
University of Saskatchewan, Saskatoon, Saskatchewan						
DEPARTMENT OF MATHEMATICS G. H. M. Thomas, Head			Applications due: 2/1/73		Master's by dept.	3
					Ph. D. (1969-1971 incl.)	
					A&FA 1, CS 2. Total: 3	
Teaching Assistantship (10)	3500	12	450	3-4		
University of Toronto, Toronto, Ontario						
DEPARTMENT OF MATHEMATICS G. F. D. Duff, Chairman			Applications due: 3/15/73		Bachelor's by inst.	6384
					Bachelor's by dept.	25
					Master's by dept.	23
Teaching Assistantship and Research Assistantship Scholarship (40)	(25) 3850-4000 3200-5300	12 12	585 585	4	Tutoring	
					Ph. D. (1969-1971 incl.)	
					A&NT 3, G&T 6, L 1, A&FA 16, P&S 9, CS 2, AM 4. Total: 41	
DEPARTMENT OF COMPUTER SCIENCE Thomas E. Hull, Chairman			Applications due: 3/15/73*		Bachelor's by inst.	6394
					Bachelor's by dept.	11
					Master's by dept.	13
Fellowship (47)	2250-5500	12	585		Research	
Teaching Assistantship (45)**	800	8	585	4	Tutoring, Grading	
					Research	
Research Assistantship (30)	3360	12	585			
					Ph. D. (1969-1971 incl.)	
					CS 12. Total: 12	
*December 15 for NRC fellowships.						
**A teaching assistantship may be held together with a research assistantship or with certain fellowships.						
University of Waterloo, Waterloo, Ontario						
FACULTY OF MATHEMATICS W. F. Forbes, Dean					Bachelor's by inst.	1926
					Bachelor's by dept.	354
					Master's by dept.	83
Fellowship (60)	3200-5500	12	878			
Teaching Fellowship (230)	2400-6200	8-12	878	5-10	Marking, tutoring, lecturing Research	
					Ph. D. (1969-1971 incl.)	
					A&NT 1, G&T 1, P&S 3, CS 14, AM 14, Other 10. Total: 43	
Research Assistantship (140)	3180	12	878			
Scholarship (15)	1000-2000	8-12	878			
DEPARTMENT OF COMBINATORICS AND OPTIMIZATION G. Berman, Chairman			Applications due: 3/31/73		Master's by dept.	7
					Ph. D. (1969-1971 incl.)	
					Other 9. Total: 9	
Teaching Fellowship (30)	2400	12	900	4-5	Grading	
Teaching Assistantship (2)	2400	9		3	Teaching	
Research Assistantship (5)	1800-3200	12		5	Research	
Bursary (3)	2000	9				
University of Western Ontario, London, Ontario						
DEPARTMENT OF MATHEMATICS D. Borwein, Head			Applications due: 8/15/73		Bachelor's by inst.	2307
					Bachelor's by dept.	77
					Master's by dept.	15
Teaching Assistantship (9)	1500-2400	8-12	310, 50/term	3-6	Tutoring, Grading	
					Research	
					Ph. D. (1969-1971 incl.)	
					A&NT 2, A&FA 2, P&S 5, CS 1. Total: 10	
Research Assistantship (5)	3180	8-12	310, 50/term	1-6		
Scholarship (10)	1500-5300	8-12	310, 50/term			

TYPE of financial assistance (with number anticipated 1973-1974)	STIPEND		TUITION if not included in stipend (dollars)	SERVICE REQUIRED		DEGREES AWARDED Academic year 1971-1972
	amount in dollars	9 or 12 months		hours per week	type of service	

University of Windsor, Windsor, Ontario

DEPARTMENT OF MATHEMATICS
Rev. D. T. Faught, Head

Teaching Assistantship (25)	1800-2400	9	600	10	Conducting tutorials.	Bachelor's by inst. 1900 Bachelor's by dept. 45 Master's by dept. 9
Research Assistantship (5)	3000-4000	9	600		Grading	Ph. D. (1969-1971 incl.) P&S 6, AM 2. Total: 8

York University, Downsview, Ontario

DEPARTMENT OF MATHEMATICS
D. Solitar, Chairman

Teaching Assistantship (18)	1500-3150	9-12	600	10	Teaching	Bachelor's by inst. 2500 Bachelor's by dept. 35 Master's by dept. 19
Scholarship (2)	1000	9	600			

II. STIPENDS FOR STUDY AND TRAVEL

Graduate Support

Ames Laboratory. Graduate assistantships in applied mathematics and computer science. Direct inquiries to Dr. Clair G. Maple, Chief, Mathematics and Computer Science Division, Ames Laboratory of the U. S. Atomic Energy Commission, Iowa State University, Ames, Iowa 50010.

Center for Naval Analyses. 1972 Summer Employment. CNA, operated under contract with the University of Rochester, is engaged in a broad spectrum of operations research and systems analysis studies for the U. S. Navy and other government agencies. Opportunities are available for graduate students in operations research, economics, engineering, mathematics, physics, and statistics. Assignments include analysis related to force level planning, manpower, logistics, and operational effectiveness. U. S. citizenship required. Information may be obtained from Mr. Richard M. Doolittle, Manager, Professional Staffing, Center for Naval Analyses, 1401 Wilson Boulevard, Arlington, Virginia 22209.

Danforth Foundation. Danforth Fellowships. Purpose is to encourage and support persons who intend to study for a Ph. D. in any field of study in the arts and sciences which contributes to a liberal education in preparation for teaching in colleges and universities. Open to seniors or recent graduates of accredited colleges and universities in the United States who are less than thirty years of age and who have not begun any graduate study. Candidates for appointment are restricted to those persons nominated by Liaison Officers (faculty members appointed by college and university presidents) in accredited U. S. undergraduate colleges. Information is available from the Liaison Officer, or by writing to the Director of the Danforth Fellowship Program, Danforth Foundation, 222 South Central Avenue, St. Louis, Missouri 63105.

Danforth Foundation. Kent Fellowships. Purpose is to encourage and support persons who intend to study for a Ph. D. in any field of study in the arts and sciences which contributes to a liberal education in preparation for teaching or administration in colleges and universities. Open to men and women less than thirty-five years of age with a minimum of one year of full-time graduate study in a doctoral program at the time of application. A maximum of fifty awards is made. Information is available from the Director of the Kent Fellowship Program, Danforth Foundation, 222 South Central Avenue, St. Louis, Missouri 63105.

General Electric Foundation. Provides research and study grants to selected graduate institutions on a programmed, rotational basis, to be used by the departments in a number of ways, including fellowships and teaching assistantships. Write to Richard E. Kramer, Jr., 1285 Boston Avenue, Bridgeport, Connecticut 06602.

Graduate Women in Science. A grant-in-aid of \$750 is available to any woman who holds a degree from a recognized institution of higher learning and has demonstrated outstanding ability and promise in research in one of the mathematical, physical, or biological sciences. The period of the grant shall not exceed one calendar year. The stipend may be applied either directly to the research project or to course work, provided the latter is relevant to the research program. Appointments will be made irrespective of race, nationality, creed, or marital status. Special consideration will be shown to applicants thirty-five years of age or older, but younger women should feel free to apply. Application forms and further information may be obtained from Sr. Mary O'Rourke, Saint Mary College, Leavenworth, Kansas 66048. Application form and credentials should be submitted before February 1, 1973. Announcement of awards will be made by April 1, 1973.

Daniel and Florence Guggenheim Foundation. Fellowships for U. S. and Canadian residents interested in jet propulsion, space flight, and flight structures. For information write to California Institute of Technology, Columbia, and Princeton University.

Hughes Aircraft Company. Doctoral, Engineer, and Master's Fellowship Programs. Academic training leading to these degrees and correlated experience developed through professional work assignments. Over 100 new awards each year in various fields of engineering, mathematics, and physics. Value of awards, including salary associated with work assignments, ranges from approximately \$8,500 to \$13,000 annually. Write to Scientific Education Office, Hughes Aircraft Company, P. O. Box 90515, Los Angeles, California 90009.

Humanities Fund, Inc. A Boris A. Bakhmeteff Research Fellowship will be available for the 1972-1973 academic year in an amount up to \$4,500. It is intended to be a specific contribution for a definite research project of an original and creative nature in the general field of mechanics of fluids. The recipient shall be a graduate student who is a candidate for the master's or doctor's degree. He shall have no commitment that will interfere with his research work and study on a full-time basis. It is expected that the stipend will be applied principally toward fees, tuition, and subsistence. The study and research may be undertaken at an institution of the Fellow's choice. In the judgment of the committee, the adequacy of the facilities of the institution will have substantial weight in the selection of the Fellow. Application forms should be filed by February 15, 1973, with Professor James R. Steven, Department of Civil Engineering, School of Engineering, The City College of The City University of New York, New York, New York 10031.

Johns Hopkins University. USPHS traineeships are available to students seeking the Sc. M. or Ph. D. in biostatistics. Applicants would have one year of biological, physical, or social science in addition to preparation in mathematics. Address inquiries to Chairman, Department of Biostatistics, School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Maryland 21205.

Kappa Kappa Gamma Fraternity. Fellowships. Awards of \$500 or more for graduate study. These are open to women who are citizens of the United States or Canada and who have received a Bachelor's degree or will obtain it prior to July 1 of the year in which the awards are made. This degree must be from an institution where a chapter of Kappa Kappa Gamma is located or graduate work must be taken on a campus where a chapter is located. Awards are made entirely on a competitive basis without regard to fraternity affiliation. A candidate must be a person with high scholastic standing who is outstanding in some form of activity and who has made a real contribution to the life of her alma mater. She should have a well outlined plan for graduate activity, have a definite goal in prospect, and know what use she expects to make of her work in the future. Applications must be completed before March 1. Forms are available from Dr. Miriam Locke, Chairman of Fellowships, Kappa Kappa Gamma Fraternity, Box 1484, University, Alabama 35486.

Laboratory Graduate Participation. Opportunity for graduate students working toward master's and doctoral degrees in scientific fields, including mathematics, to use AEC installations at National Bureau of Standards, Oak Ridge National Laboratory, Puerto Rico Nuclear Center, Savannah River Laboratory, and Savannah River Ecology Laboratory for thesis research. An annual stipend payment of \$3,000 is applicable for all levels. U. S. citizenship is required. About twenty-five appointments are awarded annually. Inquiries may be addressed to University Programs Office, Oak Ridge Associated Universities, P. O. Box 117, Oak Ridge, Tennessee 37830.

University of Massachusetts. Sabbatical Lectureships. Available in the Department of Mathematics and Statistics, these lectureships are open to faculty members of four-year colleges, or universities without a Ph. D. program in mathematics, who wish to spend their sabbatical leaves at the University of Massachusetts. Lecturers must have a Master's degree in mathematics, but not a Ph. D.; will be required to teach one course per semester; and will be expected to enroll in two courses and one seminar. Stipends up to \$6,000 are available; tuition will be waived. For further information write to Professor Murray Eisenberg, Acting Head, Department of Mathematics and Statistics, University of Massachusetts, Amherst, Massachusetts 01002.

Mathematics Research Center. For support of mathematical research of interest to the U. S. Army. Predoctoral fellowships for U. S. citizens for graduate study in any of the Department of Mathematics, Computer Sciences, Statistics, or School of Business and College of Engineering, at the University of Wisconsin. The University of Wisconsin is an equal opportunity employer. For information write to J. Barkley Rosser, Director, Mathematics Research Center, University of Wisconsin, Madison, Wisconsin 53706.

National Defense Student Loan Program. Fields unrestricted. Student must be carrying at least one half the normal full-time academic workload as determined by the institution where he is or will be enrolled. Funds are administered by participating institutions, and applications should be made through the Director of Admissions or officer in charge of student financial aid. Other inquiries may be addressed to Division of Student Assistance, Bureau of Higher Education, U. S. Office of Education, Washington, D. C. 20202.

National Science Foundation. Graduate Fellowships. Available to citizens or nationals of the U. S. for full-time study leading to the master's or doctor's degree in science (including mathematics). Awards made only to students who have completed not more than one year of graduate studies. Stipends of \$3,600 for a twelve-month tenure, or \$300 per month, regardless of years of study; no dependency allowances. Deadline November 27, 1972. Further information and application materials may be obtained from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W. , Washington, D. C. 20418.

National Science Foundation. Graduate Traineeships are being phased out and only continuation traineeships are budgeted for 1972-1973. Information may be obtained from Deans of Graduate Schools of doctoral-granting institutions. Summer Traineeships for Graduate Teaching Assistants have been suspended.

Population Council. Fellowships in demography. Citizenship unrestricted. Fields associated with demography, statistics, economics, and sociology. Approximately sixty fellowships are awarded. Forms available from Fellowship Secretary, Population Council, 245 Park Avenue, New York, New York 10017.

RCA Fellowships. Grants are for graduate study in electrical engineering, electronics, and physics. (RCA-NBC Fellowships are available in journalism and telecommunications.) Candidates are selected by appropriate officials in designated universities. Although appointments are for one year, RCA Fellows are eligible for reappointment. For further information write to the Educational Aid Committee, RCA David Sarnoff Research Center, Princeton, New Jersey 08540.

Smithsonian Institution. Predoctoral Fellowships. Appointments to students recommended by universities where they have substantially completed formal course requirements for the doctorate, or its equivalent, to conduct research upon completion of which the award of the degree is anticipated. Offered annually in the history of mathematics, usually for a period of twelve months, but never for less than six months. \$5,000 stipend, plus research expense allowance. The proposed project must be approved in advance by appointee's advisor and must be related to research and interests of the Institution. Deadline for application is January 15, 1973, for 1973-1974 academic year. Further information and application forms may be obtained from the Office of Academic Studies, Smithsonian Institution, Washington, D. C. 20560.

U. S. Steel Foundation. Fellowships. A bachelor's degree and U. S. citizenship are required. Applicant must usually be a candidate for a doctor's degree, but master's degree candidates may also be eligible. Forty-nine two-year awards are made through forty-nine participating colleges and universities for study in the natural and physical sciences, engineering, business administration, humanities, and social sciences. General information may be obtained from the Executive Director, United States Steel Foundation, Inc., 600 Grant Street, Pittsburgh, Pennsylvania 15230.

Zonta International. Amelia Earhart Fellowships. For women holding a bachelor's degree in science and interested in graduate work in aero-space science. Recipients will be granted \$3,000, and past recipients may apply for renewed grants. Applications must be filed by January 1, 1973. Write to Zonta International, 59 East Van Buren Street, Chicago, Illinois 60605.

Postdoctoral Support

Air Force Office of Scientific Research. Research Contracts and Grants. AFOSR supports research in the mathematical and information sciences under contracts and grants with educational and nonprofit institutions, and under contracts with industrial laboratories. Interested mathematicians and other scientists are encouraged to submit proposals, through their organizations, for research in mathematical and information science fields in which they specialize. It is helpful if proposals to be considered under a given fiscal year, which begins on July 1, are submitted prior to that date. Recipients of support are not required to be U. S. citizens. Research areas of interest include physical mathematics, probability and statistics, numerical analysis, mathematical aspects of system science, control theory, and information science. Research proposals should be forwarded to the Directorate of Mathematical and Information Sciences, Air Force Office of Scientific Research, 1400 Wilson Boulevard, Arlington, Virginia 22209.

Air Force Systems Command. Postdoctoral and Senior Postdoctoral Research Associateships. Awards made in several fields, including mathematics. Tenable at several laboratories in the United States. Applicants should state in some detail their field of specialization. Annual stipend for these appointments is \$13,500 for the recent recipient of the doctorate with an adjustment made for the senior candidate. More details regarding this program may be obtained from the Associateship Office, JH 606, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is January 15, 1973. Inquiries cannot be processed after January 5, 1973.

American Philosophical Society. Postdoctoral research grants of small amounts according to need for candidates with Ph. D. or equivalent to aid specific research projects. Tenable abroad and in U. S. Awards made in October, December, February, April, and June. An application must reach the Society's office at least eight weeks in advance of the meeting at which it is to be considered. The Committee on Research meets on the first Friday of February, April, June, October, and December. For information write to the American Philosophical Society, 104 South Fifth Street, Philadelphia, Pennsylvania 19106.

Argonne National Laboratory. Limited number of postdoctoral appointments and temporary appointments for faculty members in many fields of applied mathematics and the computer sciences. Write to Ronald A. Johns, Professional Placement, MGR, Argonne National Laboratory, Department A, 9700 South Cass Avenue, Argonne, Illinois 60439.

Army Research Office—Durham. Research grants and contracts for basic research in mathematics, engineering, and physical and environmental sciences. Write to Chief Scientist, U. S. Army Research Office—Durham, Box CM, Duke Station, Durham, North Carolina 27706.

Atomic Energy Commission. Supports research in applied mathematics, numerical methods, computer science research, and related topics at universities and other institutions. Submit proposals to the Division of Research, U. S. Atomic Energy Commission, Washington, D. C. 20545.

Australian Institute of Nuclear Science and Engineering. Research fellowships. Fellowships are intended for scientists and engineers who have qualifications equivalent to the Ph. D. and are at a relatively early stage of an independent research career. Stipends are in the range of \$6,304 to \$8,984 per year (Australian currency), and the institute may contribute to travel costs to and from Australia. A research project within the field of nuclear science and engineering of interest to the institute must be proposed in the nomination after agreement between the candidate and the nominating organization. Further information can be obtained from Executive Officer, Australian Institute of Nuclear Science and Engineering, Private Mail Bag, Post Office, Sutherland N. S. W. 2232, Australia. Candidates must be nominated by an Australian university or the Australian Atomic Energy Commission. Closing dates are February 28 and August 31 each year, and all nominations received after one closing date will be considered together after the next closing date.

Courant Institute. Instructorships in Mathematics. Open to young mathematicians with doctor's degrees who show strong promise in research. The teaching duty will consist of one course each term, of which one term will be related to the field of interest of the instructor. Appointments are for two years. The academic salary for nine months will be \$10,500. In addition, the Courant Institute may be able to offer support for research in residence during two summer months. Inquiries or requests for application forms should be addressed to the Committee on Instructorships, Courant Institute of Mathematical Sciences, New York University, 251 Mercer Street, New York, New York 10012. Applications should be filed no later than January 11, 1973.

Courant Institute. Postdoctoral Visiting Memberships. The Courant Institute of Mathematical Sciences of New York University offers postdoctoral Visiting Memberships to mathematicians, scientists, and engineers who are interested in its program of training and research in a broad range of pure and applied mathematics. Applications for the academic year 1973-1974 must be submitted before January 1, 1973. Inquiries should be addressed to the Visiting Membership Committee, Courant Institute of Mathematical Sciences, New York University, 251 Mercer Street, New York, New York 10012.

*Department of State, Agency for International Development. Research grants for research projects and analytical studies in systems and operations dealing with socio-economic development problems. Research groups are encouraged to investigate problems of their own devising within the above areas. For further information write to Mr. John Welty, Economic Research Support Staff, Bureau for Program and Policy Coordination, Agency for International Development, Department of State, Washington, D. C. 20523.

G. C. Evans Instructorships at Rice University. For promising young mathematicians with the doctorate, primarily for new Ph. D.'s. Appointments are for two years at a salary of at least \$11,000 for the regular academic year. Inquiries and applications should be addressed to Professor Salomon Bochner, Chairman, Department of Mathematics, Rice University, Houston, Texas 77001.

J. Willard Gibbs Instructorships. Offered by Yale University to young men and women with the doctorate who show definite promise in research in pure mathematics. Appointments are for two years at a salary of \$11,500 for the academic year. Each recipient will be given an allowance of up to \$200 toward the actual expense of moving his household possessions to the New Haven area. The teaching load is kept light, so as to allow ample time for research. If desired, part of the teaching duties may consist of a one-semester course at the graduate level in the general area of the instructor's research. Inquiries and applications should be addressed to the Chairman, Department of Mathematics, Yale University, Box 2155 Yale Station, New Haven, Connecticut 06520. Preference will be given to applications received before February 1, 1973. Yale University is an equal opportunity employer.

John Simon Guggenheim Memorial Foundation Fellowships. Applicant should be between 30 and 45 years of age (exceptions are made) and engaged in scientific research. No academic degree is required, but the fellowships are on the advanced postdoctoral level. U. S. citizenship or permanent residence is required. Fellowships are also offered to citizens or permanent residents of all coun-

*No current information.

tries and territories of the Western Hemisphere and of the Philippines. Nominations are made by the Committee of Selection. Approximately 350 awards are made, averaging \$10,000 in 1972. For more information write to President, John Simon Guggenheim Memorial Foundation, 90 Park Avenue, New York, New York 10016.

The Hebrew University of Jerusalem. Postdoctoral Fellowships. Fellowships in the fields of mathematics and computer science. Provides for tax-free salary of 10,000 Israeli pounds, and usually allows for round-trip passage. No financial assistance to accompanying dependents. The applicant is required to submit his application (in letter form) together with a detailed curriculum vitae and a list of publications, and two letters of recommendation from persons well-acquainted with the applicant's academic and research records. Fellowships are intended for persons who received their Ph. D. 's during the years of 1971-1972, and for those who will complete all requirements for the Ph. D. before the autumn of 1973. Application letters and letters of recommendation should be sent to the Dean, Faculty of Science, The Hebrew University of Jerusalem, Jerusalem, Israel. Deadline is December 1, 1972.

E. R. Hedrick Assistant Professorships. The Department of Mathematics of the University of California, Los Angeles, has established two assistant professorships for the year 1973-1974. These awards will be made to young mathematicians with doctor's degrees who show strong promise in research. Appointment will be for two years at an annual salary of \$12,500, plus a summer research supplement of \$2,500. The teaching load is three hours per week for two quarters and six hours per week for one quarter. One course may be an advanced course in the candidate's research area. Requests for application forms should be sent to the Chairman, Department of Mathematics, University of California, Los Angeles, 405 Hilgard Avenue, Los Angeles, California 90024. Deadline for applications is January 15, 1973.

T. H. Hildebrandt Research Instructorships. These instructorships in mathematics at The University of Michigan are designed to provide promising young mathematicians with favorable circumstances for the development of their research talents. Preference will be given to those having their Ph. D. for less than two years. Several of these research instructorships are expected to be available for the coming academic year. The teaching load averages one and one-half courses per semester and part of the teaching load consists of an advanced course. The stipend will be at least \$11,000 for the academic year 1973-1974, with a good possibility of additional income during the summer. Research Instructors will be appointed for two years, and may then be considered for regular faculty appointments. Applicants must have completed all requirements for the Ph. D. degree when the term of appointment begins. Each applicant must submit a curriculum vitae which includes his educational background and a brief outline of the research problems of interest to him, plus three letters of recommendation which should contain comments on the applicant's mathematical promise, teaching ability, and personality. First preference will be given to applications completed by January 15, 1973. Appointments will be announced early in February. Applications should be made to the Chairman, Department of Mathematics, The University of Michigan, Ann Arbor, Michigan 48104.

Václav Hlavatý Research Assistant Professorships. Offered by the Department of Mathematics at Indiana University to young mathematicians with doctorates who show definite promise in research. The appointment is for three years with an academic-year salary of at least \$11,300. The teaching duties during the first academic year will involve three hours per week and during the next two academic years will involve six hours per week. The salary may be supplemented by either teaching or research contracts during the summer months. There will also be an annual amount of \$400 available for professional expenses, such as travel to meetings, supplies, publication costs, etc. Inquiries or requests for application forms should be addressed to Professor William P. Ziemer, Chairman, Department of Mathematics, Swain Hall East, Indiana University, Bloomington, Indiana 47401. Preference will be given to applications received before January 31, 1973.

IBM Thomas J. Watson Research Center. Postdoctoral fellowships. These fellowships provide for young scientists of outstanding ability an opportunity to pursue and broaden their scholarship while in residence at the Research Center. A candidate is normally expected to have received his doctorate within the five years before the start of his fellowship. The duration of each fellowship will be eleven months. The stipend will generally be in the range of \$18,000-\$22,000, depending on qualifications. Completed applications must be received by January 15, 1973. At most, two fellowships will be awarded. Notification will be made by March 15, 1973.

Institute for Advanced Study. The School of Mathematics will grant a limited number of memberships, some with financial support, for research in mathematics at the Institute during the academic year 1973-1974. Candidates must have given evidence of ability in research comparable at least with that expected for the Ph. D. degree. Application blanks may be obtained from the secretary of the School of Mathematics, Institute for Advanced Study, Princeton, New Jersey 08540 and should be returned (whether or not funds are expected from some other source) by January 15, 1973, or as soon thereafter as possible.

Los Alamos Scientific Laboratory. Offered to U. S. citizens holding the Ph. D. , with research opportunities in computer science, numerical science, and applied mathematics. A limited number of postdoctoral appointments are available for one year, subject to renewal for a second year. Write to Recruiting Department, Los Alamos Scientific Laboratory, University of California, P. O. Box 1663, Los Alamos, New Mexico 87544.

Mathematics Research Center. For support of mathematical research of interest to the U. S. Army. Visiting research member appointments at all levels from postdoctoral up. The University of Wisconsin is an equal opportunity employer. For information write to J. Barkley Rosser, Director, Mathematics Research Center, University of Wisconsin, Madison, Wisconsin 53706.

C. L. E. Moore Instructorships in Mathematics. Offered by the Department of Mathematics at the Massachusetts Institute of Technology. Open to young mathematicians with doctorates who show definite promise in research. The base salary will be at least \$12,000, and the teaching loan is six hours per week in one semester and three hours per week in the other. The appointments are annual but renewable for one additional year. Applications should be filed not later than January 7 on forms obtained from the Department, 2-236, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139.

National Academy of Sciences. Postdoctoral fellowships. Under a grant from the Alfred P. Sloan Foundation, approximately eight scientists will be selected to study aspects of science and public policy while participating in staff work of their choosing within the complex of the National Academy of Sciences, the National Academy of Engineering, the Institute of Medicine, and the National Research Council. Four fellowships will be awarded for the 1972-1973 academic year, and eight each year thereafter. Fellows will be chosen by a committee of the Academies upon recommendation by designated individuals. Further information can be obtained from the National Academy of Sciences.

National Aeronautics and Space Administration. Postdoctoral and Senior Postdoctoral Resident Research Associateships. Open to individuals at the postdoctoral level who have the Ph. D. , Sc. D. degree, or its training equivalent, or who have completed the requirements for one of these degrees. Open to U. S. citizens and, in some cases, to foreign nationals. Tenable at Ames Research Center, Moffett Field, California; Goddard Space Flight Center, Greenbelt, Maryland; Goddard Institute for Space Studies, New York City; Jet Propulsion Laboratory, Pasadena, California; Langley Research Center, Hampton, Virginia; Lewis Research Center, Cleveland, Ohio; Manned Spacecraft Center, Houston, Texas; Marshall Space Flight Center, Huntsville, Alabama; and Wallops Station, Wallops Island, Virginia. Forms are available from the Associateship Office, JH 606, National Research Council, 2101 Constitution Avenue, N. W. , Washington, D. C. 20418. Annual stipend begins at \$13,500. Senior stipend variable. Deadlines for receipt of completed applications in 1973 are January 15, May 15, September 15, with announcement of awards in March, July, and November.

National Aeronautics and Space Administration. Research Grants. Through grants and contracts to educational and nonprofit institutions and industries, NASA sponsors research in fundamental and applied mathematics related to space science and engineering problems. Unsolicited proposals should be submitted to the Office of University Affairs, Code PY, National Aeronautics and Space Administration, Washington, D. C. 20546.

National Bureau of Standards. Postdoctoral Research Associateships. Awards are made in several fields, including mathematics. Tenable in the Gaithersburg, Maryland area and Boulder, Colorado. Applicants should state, in some detail, their field of specialization and should indicate area of interest. Annual stipend for these appointments is not less than \$13,000. More details regarding this program may be obtained from the Associateship Office, JH 606, National Research Council, 2101 Constitution Avenue, N. W. , Washington, D. C. 20418. Deadline for submission of applications is January 15, 1973. No materials will be distributed after January 5, 1973.

National Research Council. Research Associateships Programs. These programs afford qualified scientists and engineers opportunities for postdoctoral research on problems of their own choice in a variety of scientific disciplines and fields of specialization. The programs are conducted on behalf of and in cooperation with certain Federal organizations with laboratories at more than eighty geographic locations in the United States. Applications for these competitive awards will be received by the National Research Council until January 15, 1973. Appointments will be made in April for tenure to begin on or before July 1, 1973. Stipends, which are subject to income tax, will vary according to the type of appointment, but will not be less than \$13,000. Further information and application materials can be obtained from the Associateship Office, JH 606, National Research Council, 2101 Constitution Avenue, N. W. , Washington, D. C. 20418.

National Science Foundation. Research Grants. Proposals are accepted at any time, but those which contain request(s) for support during a given summer should be received by the Foundation at least six months in advance of the expected starting date of support, and, ideally, by November 1 of the

preceding year. Instructions for the preparation of proposals, contained in a booklet entitled "Grants for Scientific Research", may be obtained upon request from the Mathematical Sciences Section, National Science Foundation, Washington, D. C. 20550.

Naval Ordnance Laboratory. Postdoctoral Research Associateships. Awards are made in several fields, including mathematics. Tenable in Silver Spring, Maryland. Applicants should state, in some detail, their field of specialization. Annual stipend for these appointments is not less than \$13,000. More details regarding this program may be obtained from the Associateship Office, JH 606, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is January 15, 1973. No application material will be distributed after January 5, 1973.

Naval Research Laboratory. Postdoctoral and Senior Postdoctoral Research Associateships. Awards are made in several fields, including mathematics. Applicants should state in some detail their field of specialization. Annual stipend for these appointments is \$13,500 for the recent recipient of the doctorate with an adjustment made for the senior candidates. Applications must be postmarked not later than January 15, 1973. More details regarding this program may be obtained from the Associateship Office, JH 606, National Research Council, 2101 Constitution Avenue, N. W., Washington D. C. 20418.

Naval Undersea Center. Postdoctoral Research Associateships. Awards are made in several fields including mathematics. Tenable in San Diego and Pasadena, California. Applicants should state in some detail their field of specialization. Annual stipend for these appointments is not less than \$13,000. More details regarding this program may be obtained from the Associateship Office, JH 606, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for submission of applications is January 15, 1973. No application materials will be distributed after January 5, 1973.

Benjamin Pierce Lectureships. Rank of Assistant Professor. The appointments are for three years with a starting salary of \$10,000 (for the nine-month academic year) and annual increments of \$500. This salary can be augmented during the summer by teaching at summer school or by work on a research contract if funds are available. The teaching commitment is six hours a week, including a graduate course on a subject of the lecturer's choice, if desired. Application forms may be obtained by writing to the Department of Mathematics, Harvard University, 1 Oxford Street, Cambridge, Massachusetts 02138, and should be filed by January 20, 1973.

Sloan Foundation. Unrestricted grants made to selected young university scientists in the physical sciences (including mathematics) and in neuroscience. Candidates in the physical sciences must be members of the regular faculty, though not necessarily in a tenured position, at a recognized college or university in the United States or Canada. In neuroscience postdoctoral fellows as well as those in junior faculty positions will be considered. Candidates do not apply but are nominated by their department chairmen or other scientists. For information write to the Alfred P. Sloan Foundation, 630 Fifth Avenue, New York, New York 10020.

Smithsonian Institution. Fellowships. Appointments to those wishing to pursue postdoctoral research at the Smithsonian in association with a member of the Institution's professional staff. Offered annually in the history of mathematics, usually for a period of twelve months, but never less than six months. \$10,000 stipend, plus research expense allowance. Generally limited to those having received the Ph. D., or its equivalent, within five years of commencing tenure at Smithsonian. Deadline for application is January 15, 1973, for 1973-1974 academic year. Further information and application forms may be obtained from the Office of Academic Studies, Smithsonian Institution, Washington, D. C. 20560.

State University of New York at Buffalo. The Department of Mathematics will award George William Hill and Emmy Noether Research Instructorships to young mathematicians who have received their Ph. D. degree since, but no earlier than December 1, 1971, thereby enabling them to carry forward a research program. All requirements for the Ph. D. must be completed by September 1, 1973. At least one and not more than two Research Instructorships will be awarded for 1973-1974 with each appointment being for two years. The twelve-month stipend, beginning September 1973, is \$15,600 including generous staff benefits. Teaching load will total two one-semester courses during the twelve-month period. Upon expiration of the two-year appointment, priority consideration for a three-year appointment as assistant professor will be given and will be based upon success and potential in both research and teaching. Each applicant should prepare a summary of his or her post-high school educational background, as well as a sketch of past and projected research activity, and should request three mathematicians to send letters of recommendation. Application forms are available upon request. Applications and supporting letters should be sent to Professor N. D. Kazarinoff, Chairman, Department of Mathematics, SUNY at Buffalo, 4246 Ridge Lea Road, Amherst, New York 14226, so as to arrive by January 22, 1973. Appointments will be made early in February.

Jacob David Tamarkin Instructorships. Offered by Brown University to promising young mathematicians. Appointments are for two years, with a salary of \$10,000 for the academic year. Additional summer support can be arranged. Teaching load is usually light and consists of courses of more than routine interest. An applicant should have completed his doctorate by the time his appointment is to begin. In addition to a letter expressing his interest in a Tamarkin Instructorship, the applicant should have three letters of recommendation submitted for him to the Department of Mathematics by January 15, 1973. Applicants should write to the Chairman, Department of Mathematics, Brown University, Providence, Rhode Island 02912.

University of Tennessee. Postdoctoral Intern-Fellowships. Program designed to aid new doctoral graduates who have not found a permanent position for fall 1973, and to strengthen university's temporary teaching staff. Campuses at Chattanooga, Knoxville, Martin, Nashville, and Memphis Medical Units participate in program. Applicants advised to consult announcements being sent to graduate schools. Fellows will teach three-fourths of their time; university will consider them for permanent faculty at end of contract, or assist in job search. Eligibility restricted to those completing doctorate between September 1, 1972, and August 31, 1973. Letter of application, curriculum vitae, complete dossier should be sent after February 1, 1973, and no later than June 15, 1973, to Dr. Kenneth L. Knickerbocker, Vice-president for Academic Affairs, University of Tennessee, Knoxville, Tennessee 37916.

U. S. Army Natick Laboratories. Postdoctoral and Senior Postdoctoral Visiting Scientists Research Associateships. Awards made in several fields, including mathematics. Tenable in Natick, Massachusetts. Applicants should state, in some detail, their field of specialization and should indicate area of interest. Annual stipends for these appointments begin at \$13,000. Senior stipend variable. More details regarding this program may be obtained from the Associateship Office, JH 606, Office of Scientific Personnel, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Deadline for receipt of completed applications in 1973 is January 15, with announcement of awards in April.

U. S. Department of Health, Education, and Welfare, National Institutes of Health. Supports postdoctoral and special fellows. Research in biostatistics, especially as related to health and disease. Applicant must have earned an appropriate degree and show that his goal is a research career in the health related sciences. U. S. citizenship or lawful admittance to the U. S. for permanent residence is required. Announcements and application kits available from Fellowships Section, Career Development Review Branch, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.

John Wesley Young Research Instructorships. Two instructorships are awarded by Dartmouth College each year. Teaching duties average six hours per week and are of a varied and nonroutine nature. The academic-year stipend may be supplemented by a summer research fellowship. The appointments are for two years and are not renewable. Applicants should write to J. Laurie Snell, Chairman, Department of Mathematics, Dartmouth College, Hanover, New Hampshire 03755.

Travel and Study Abroad

Alliance Française de New York. For study in France, a limited number of scholarships for all fields of study at the graduate level. Each scholarship is in the amount of \$1,100. Applicants must be between the ages of 20 and 30 and have a working knowledge of French. Students currently enrolled in an American university should see the Fulbright Program Advisor on campus; students not currently enrolled in an American university should communicate with the Information and Reference Division, Institute of International Education, 809 United Nations Plaza, New York, New York 10017, or IIE regional offices in Atlanta, Chicago, Denver, Houston, Los Angeles, San Francisco, and Washington, D. C. Deadline for submission of applications is November 1.

American-Scandinavian Foundation. Graduate fellowships to be used in Scandinavia. Applicants must be U. S. citizens who have completed their college education and must be under 40 years old. Completed application deadline is December 1 (November 1 for Marshall Fellowships for Denmark) Write to The American-Scandinavian Foundation, 127 East 73rd Street, New York, New York 10021.

Foreign Area Fellowship Program. The program provides support to advanced doctoral candidates at U. S. and Canadian universities for dissertation research in Africa; the Near East; East, South, and Southeast Asia; Western Europe; Latin America; and the Caribbean. Full information on this program may be obtained by writing to the Foreign Area Fellowship Program, 110 East 59th Street, New York, New York 10022.

Fulbright-Hays Program. Grants for study abroad. For graduate study or research in any field in which the project can be profitably undertaken abroad. Applicant must be a U. S. citizen and have language proficiency sufficient to carry out the proposed study and to communicate with the host country. If an applicant is already enrolled in a U. S. university, he must apply directly to the Fulbright Program Advisor on his campus. Unenrolled students may apply to the Institute of International Education. Further details may be obtained from the Information and Reference Services Division, Institute of International Education, 809 United Nations Plaza, New York, New York 10017.

Fulbright-Hays Program. Postdoctoral Awards. United States Government grants available annually in all fields for university lecturing and postdoctoral research abroad. Eligibility requirements include U. S. citizenship; for lecturing, college teaching experience; for research, a doctoral degree or recognized professional standing at the time of application. In certain cases a knowledge of the language of the host country is required. Grants are generally tenable for one academic year in one designated country and include round-trip transportation for the grantee, maintenance allowance to cover living expenses of grantee and family, and a small incidental allowance to cover supplies and services essential to the project. Subject to the availability of funds, a supplemental dollar grant for lecturers in most non-European countries may be given. Write to Committee on International Exchange of Persons, Senior Fulbright-Hays Program, 2101 Constitution Avenue, N. W., Washington, D. C. 20418.

International Research and Exchanges Board (IREX). This board administers academic exchange programs, open to advanced graduate students, postdoctoral scholars, and faculty members in all fields of study who are United States citizens, and who are affiliated with a North American college or university. Exchange agreements are in effect with Bulgaria, Czechoslovakia, Hungary, Poland, Romania, Yugoslavia, and the USSR. Placements are usually made for a semester or an academic year, but longer or shorter stays are possible by special arrangements. In addition to exchange fellowships, IREX offers ad hoc grants to promote new exchanges; grants for collaborative projects involving American scholars and their counterparts in Eastern Europe and the USSR; short-term travel grants to the USSR for scholars in the contemporary social sciences; and fellowships for preparatory area studies in the United States and Canada. For more detailed information, write to the International Research and Exchanges Board, 110 East 59th Street, New York, New York 10022.

Italian National Research Council. Fellowships. Twenty fellowships awarded to citizens of other countries for research in mathematics at Italian universities during the academic year 1973-1974. Monthly stipend of 180,000 Italian lire (approximately \$300) for a maximum of twelve months; also reimbursement of travel expenses. Applications including date and place of birth, citizenship, residence; nature of proposed research; names of Italian mathematicians with whom the applicant would like to work; knowledge of Italian (if any) or other foreign languages; address, should be sent to Consiglio Nazionale delle Ricerche, Servizio Affari Scientifici e Tecnologici, Ufficio Attività di Ricerca, Sezione Borse di Studio, Piazzale delle Scienze 7, Rome, Italy. Deadline January 31, 1973. Further information may be obtained from Alessandro Figa-Talamanca, Istituto Matematico, Università di Genova, Via L. B. Alberti, 4, 16132-Genova, Italy.

Latin American Teaching Fellowships. Applications for teaching positions in Latin American universities are now being accepted from natural and physical scientists and engineers with advanced degrees, or who are Ph. D. candidates. Placement possibilities now exist for the 1973-1974 academic year. These teaching fellowships are part of a service program designed to assist Latin American universities to develop more advanced technical and scientific programs. Salaries are thus geared to a moderate subsistence level rather than being competitive with North American salaries. Inquiries should be addressed to Latin American Teaching Fellowships, Fletcher School of Law and Diplomacy, Tufts University, Medford, Massachusetts 02155.

Marshall Scholarships. Offered by the British Government to U. S. graduates; tenable at any university in the United Kingdom. Recipients of awards are required to take a degree at their British university. Fields unrestricted. Apply through British Consulates-General in the following regions (1) Northeast: Suite 4740 Prudential Tower, Prudential Center, Boston, Massachusetts 02199; (2) Mideast: 12 South 12th Street, Philadelphia, Pennsylvania 19107; (3) South: Suite 912, 225 Peachtree Street, N. E. Atlanta, Georgia 30303; (4) Midwest: 33 North Dearborn Street, Chicago, Illinois 60602; (5) Pacific: 9th Floor, 120 Montgomery Street, San Francisco, California 94104.

Netherland-America Foundation. Graduate Study Grants. Small supplementary grants toward study in The Netherlands. Apply to the Netherland-America Foundation, Inc., One Rockefeller Plaza, New York, New York 10020.

North Atlantic Treaty Organization. Postdoctoral Fellowships. Awarded for nine- or twelve-month period, for scientific study or work at appropriate nonprofit institutions in NATO countries, other than the U. S., or countries that cooperate with NATO. This program, for citizens or nationals of the U. S., is designed primarily for individuals who have received their doctorates within the past

five years. Fellows receive a stipend of \$7,500 for a twelve-month tenure, \$5,625 for a nine-month tenure, plus a dependency and travel allowance. Application deadline is October 23, 1972. For information and application material, write to NATO Postdoctoral Fellowship Program, Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550.

North Atlantic Treaty Organization. Senior Fellowships in Science. Enable universities and non-profit research institutions in the U. S. to send senior staff members to study new scientific techniques and developments at research and educational institutions in other NATO nations, or in countries cooperating with NATO, for tenures of one to three months. An institution may nominate an individual who has full professional standing in his field; at least five years' experience in research, teaching or other relevant professional work; and appropriate linguistic abilities. Work undertaken should offer direct benefits to the nominating institution. A per diem allowance and one round-trip jet economy air fare are provided. Application materials are available from August through January from the Division of Graduate Education in Science, National Science Foundation, Washington, D. C. 20550. Deadline for receipt of applications is January 21, 1973.

North Atlantic Treaty Organization. The NATO Science Committee makes a number of awards each year for training and education in operational research and related sciences: (1) Graduate Apprenticeships in Operational Research. To enable young scientists to receive practical training in operational research at one of a number of NATO or national centers. Normal assignment is for two years, subject to satisfactory completion of the first year. Applicants need not have previous experience in operational research, but they should have a scientific background with a sound basic training in mathematics. The award is \$4,500 per year, plus certain other expenses. (2) Study Visits. These awards are made to operational research scientists in NATO countries, who wish to make a "study visit" to a foreign country in order to receive advice and to discuss specific problems of immediate concern to them. (3) Visiting Experts. Provides support for a scientist who will act in an advisory capacity to a newly formed or developing operational research group in one of the NATO countries. (4) Science Fellowships. Awards are made for postgraduate academic training at overseas universities. Application forms and further details about these awards, together with information about the Science Committee's program of conferences in operational research, can be obtained from the Scientific Affairs Division (Operational Research), NATO, 1110 Brussels, Belgium.

Rotary Foundation. Graduate Fellowships and Undergraduate Scholarships. One academic year of study abroad for the 1973-1974 year is available to outstanding young men and women who are interested in world affairs and who can fulfill a dual role of scholar and "ambassador of good will." Graduate fellowships and undergraduate scholarships cover full transportation, education, living, and miscellaneous expenses for one academic year, plus, in certain cases, a period of intensive language training in the study country prior to the commencement of the regular academic year. Awards are made for study in any field and are tenable in more than 149 countries in which there are Rotary Clubs. An applicant for a graduate fellowship must be between the ages of 20 and 28 inclusive as of March 15, 1973, married or single, and have obtained a bachelor's degree or equivalent prior to the beginning of his fellowship year. An applicant for an undergraduate scholarship must be between the ages of 18 and 24 inclusive as of March 15, 1973, must be single, and have completed two years of university level work but not have obtained a bachelor's degree prior to the beginning of his scholarship year. Application must be made through the Rotary Club nearest to the applicant's permanent residence not later than March 15, 1973.

*Royal Norwegian Council for Scientific and Industrial Research. Postdoctorate Fellowships. Fields: engineering and applied sciences. Candidates should not be more than 35 years of age. Studies can be carried out at the Universities of Oslo and Bergen, the Technical University of Norway, and at different institutes for applied research in Oslo, Bergen, and Trondheim. English may be used at all institutes; German and French at some institutes. Deadline each year is February 1. Write to Royal Norwegian Council for Scientific and Industrial Research, Gaustadelleen 30, Oslo, Norway.

Alexander von Humboldt Foundation Fellowships. These fellowships of 6 to 12 months are offered in order to pursue advanced academic research projects at a German university or research institute. Fields of research and citizenship are unrestricted. Amount of stipend: 'Forschungsstipendium' DM 1600. -monthly, 'Dozentenstipendium' DM 1900. -monthly; supplementary family allowances, travel expenses. An extension of the original award period is possible. Applicants should furnish proof of independent teaching experience at university level or research work (of at least two years if interested in a 'Forschungsstipendium' and at least five years if interested in a 'Dozentenstipendium'). They should hold a Ph. D., have sufficient knowledge of German and, as a rule, not be older than 38. Applicants for a 'Dozentenstipendium' should have outstanding academic publications to their credit. For further information write to Alexander von Humboldt-Stiftung, 53 Bonn-Bad Godesberg, Schillerstrasse 12, Germany.

*No current information.

*William and Mildred Zelosky Scholarships. Open to American and Polish men at least 21 years of age. American candidates must have at least a master's degree and a knowledge of the Polish language. Polish candidates must have at least their master's degree and preferably their doctorate, plus sufficient knowledge of the English language. Polish citizenship is required for study in the United States; U. S. citizenship is required for study in Poland. Write to Kosciuszko Foundation, 15 East 65th Street, New York, New York 10021.

Study in the U.S. for Foreign Nationals

Alliance Francaise de New York. For French students, a limited number of scholarships for graduate study in the U. S. Fields unrestricted. Scholarships are in the amount of \$1,100. Applicants must be between the ages of 20 and 30 and have a working knowledge of English. For further information, write to Chairman of Scholarships Committee, Alliance Française de New York, 22 East 60th Street, New York, New York 10022 or Alliance Francaise, 101 Boulevard Raspail, Paris 6^e, France.

Fulbright-Hays Program. Grants under the Fulbright-Hays Act for study, research, teaching, and lecturing in the United States are available to nationals of many countries. Information regarding these opportunities may be secured from the Cultural Affairs Officer of the United States Embassy or from the binational Educational Commission or Foundation if there is one in the inquirer's own country. (U. S. address: Information and Reference Services Division, Institute of International Education, 809 United Nations Plaza, New York, New York 10017.) The number of grants for the academic year 1973-1974 will depend on funds available.

National Aeronautics and Space Administration. International University Fellowships in Space Science. Foreign nationals only. Level: graduate and postdoctoral. Candidates must be sponsored by their national or regional space research organization or national research councils, must have the equivalent of an earned Master of Science or Master of Engineering degree, and must intend to return to their own countries. Fields: all space sciences. Fellowships in the mathematical sciences tenable at 39 U. S. universities. Applications should be made to the national space research organization, national research council, or appropriate organization of the applicant's own country. Further information may be obtained from the Office of Scientific Personnel, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418.

Sources of Fellowship Information

Exchange Programs with Eastern Europe and the Soviet Union for 1972-1973. International Research and Exchanges Board (IREX), 110 East 59th Street, New York, New York 10022. Gives details on the programs administered by IREX which include exchanges for a semester or an academic year, short term travel grants, and awards for support of collaborative projects.

S. Norman Feingold Scholarships, Fellowships, and Loans. Volume V, 1972; Volumes III and IV, 1955, 1962. Bellman Publishing Company, P. O. Box 164, Arlington, Massachusetts 02174. Detailed list of financial aid sources. Volume V has a new and improved index that greatly facilitates finding awards.

Fellowship and Research Opportunities in Mathematical Sciences, 1972-1973. Division of Mathematical Sciences, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418. Lists fellowships and grants available from various U. S. Government agencies and bureaus.

Grants for Graduate Study Abroad. Institute of International Education, 809 United Nations Plaza, New York, New York 10017. List of fellowships and scholarships administered by the IIE for U. S. citizens.

Scholarships, Fellowships and Loans News Service. The Staff, Bellman Publishing Company, P. O. Box 164, Arlington, Massachusetts 02174, published quarterly, \$20 per year. Up-to-date information regarding student financial aid. Annotated bibliography of books and professional journals.

Selected List of Major Fellowship Opportunities and Aids to Advanced Education for United States Citizens. Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418, 1970. Contains a list of fellowships available on the undergraduate, graduate, and postdoctoral levels plus a bibliography giving other sources of information on fellowships, scholarships, and loans.

Selected List of Major Fellowship Opportunities and Aids to Advanced Education for Foreign Nationals. Fellowship Office, National Research Council, 2101 Constitution Avenue, N. W., Washington, D. C. 20418, 1970. Contains a list of financial aid sources plus a bibliography listing other sources of financial aid information.

*No current information.

TAX STATUS OF GRANTS

Under Section 117 of the Internal Revenue Service Code, assistantships, fellowships, and grants meeting certain conditions are excludable from gross income and therefore not subject to the Federal Income Tax. The Internal Revenue Service has given the following interpretation of Section 117.

"Section 117(a) of the Internal Revenue Code of 1954 permits an individual to exclude from his gross income amounts received as a scholarship or fellowship grant. Whether the amounts received are in fact a scholarship or fellowship grant, i. e., are paid for the primary purpose of furthering the recipient's education and training, is a conclusion reached by the Internal Revenue Service on the basis of the facts in a particular case.

"Section 117(b) (1) of the Code provides that in the case of individuals who are candidates for a degree the exclusion from gross income shall not apply to that portion of any amount received as payment for teaching, research, or other services in the nature of part-time employment required as a condition to receiving the scholarship or fellowship grant. However, if teaching, research, or other equivalent services are required of all candidates for a particular degree as a condition to receiving the degree, such teaching, research, or other services shall not be regarded as part-time employment.

"In situations where research is required of all degree candidates, but only those students who engage in teaching receive stipends, the Service would conclude that the stipend was not excludable under Section 117(a) of the Code, but was paid for services rendered in the nature of part-time employment.

"If research and teaching services are required of all degree candidates and such research and services are performed for the primary purpose of furthering the students' education and training, the Service would conclude that stipends paid for the research and teaching services, required of all degree candidates, are excludable from the recipients' gross income under Section 117(a) of the Code. However, amounts paid to a degree candidate for teaching services not strictly required as a condition to receiving the degree for which the recipient is a candidate, at the time he performs the service, represents compensation for services rendered which is includable in the recipients' gross income."

To help expedite the processing of returns, two forms are given below showing the types of information which should be provided by the graduate school for the Internal Revenue Service to help determine the validity of the claimed tax exclusion.

Application for total exclusion of stipend from gross income

TO WHOM IT MAY CONCERN:

During the calendar year 19____ served as a Research Assistant in the Department of _____ at _____ from _____ to _____.
(name of student) (university or college)
He was paid a stipend of \$_____ for his services. The funds were derived from _____.
(description of grant/contract)
At the same time, he was a candidate for the degree of _____. The research which he performed under this arrangement met, in part, the requirements for this degree.

Equivalent research is required of all students working for this same degree at _____, regardless of whether or not they are compensated for their services.
(university or college)

Application for partial exclusion from Federal Income Tax

TO WHOM IT MAY CONCERN:

During the calendar year 19____ served as a _____ in the Department of _____ at _____ from _____ to _____.
(name of student) (position) (university or college)
He was paid a stipend of \$_____. The funds were derived from _____.
(description of grant/contract)
At the same time he was a candidate for the degree of _____. During this period the candidate spent approximately (a) _____ percent of his working time _____, which is not required for the degree, and (b) _____ percent of his time on degree requirements. The research or study which he performed under (b) met in part the requirements for his degree. Equivalent research is required for all students working for this same degree at _____, regardless of whether or not they are compensated for their services.
(university or college)

Instead of paying one stipend to those students who are actually being paid for services on a part-time basis, and then requesting a partial exclusion for the time spent on degree requirements, it is suggested that the university make two awards to such students. One award would be computed on a straight salary basis for the time the student worked, and the student would then report his salary to the Internal Revenue Service in the usual way. A second award would be considered a fellowship, and on this a total exclusion could be requested.

The Department of the Treasury publishes a ten-page pamphlet entitled "Tax Information for American Scholars in the U. S. and Abroad," Publication 520 (10-71). This pamphlet is available at most Internal Revenue offices, and bulk orders may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402, for \$0.15 a copy; larger quantities are \$11.25 per one hundred copies.

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