Reprinted from Notices of the American Mathematical Society Volume 21, Number 6, October 1974, pages 255-259

The results of the Eighteenth Annual AMS Survey were published in two parts in the October and November issues of the *Cholica* of the American Mathematical Society. A copy of the other part, "Doctorates and Jobs, 1974 Report" by R. D. Anderson, is available upon request.

EIGHTEENTH ANNUAL AMS SURVEY

This Survey is the eighteenth in an annual series begun in 1957 by the Society's Committee on the Economic Status of Teachers. The present Survey is under the direction of the Committee on Employment and Educational Policy.

As has been the practice for several years, questionnaires were sent to departments in the mathematical sciences, asking for information on salaries. The two-year colleges were sent a form which allowed them to report salaries without regard to academic rank, because many of the junior colleges do not rank their teaching staffs. For the reports on salaries, the departments are divided into groups according to the highest degree offered in the mathematical sciences.

The Doctorate granting departments are in six groups as follows:

Group I and Group II include the leading departments of mathematics according to the findings of the American Council of Education in 1969* in which departments were ranked according to the quality of their graduate faculty. Group I is composed of the 27 departments ranked highest; Group II is made up of the other 38 leading departments listed in that report.

Group III contains all other U.S.A. departments of mathematics.

Group IV includes departments of statistics, biostastistics and biometrics.

Group V includes all other departments in the mathematics sciences.

Group VI consists of all departments in the mathematical sciences from Canadian universities.

The total number of departments in the mathematical sciences in the various groups are given below. Only doctorate granting Canadian departments are grouped separately, the two-year colleges and those granting bachelor and master degrees are included with U. S. departments.

Type of Department	Number of Departments	Percentage Responding
Doctorate Granting		
Group I	27	63
Group II	38	68
Group III	91	64
Group IV	65	49
Group V	106	28
Group VI	30	50
Total Doctorate Grantin	ıg 357	50
Master Degree Grantin	g 325	39
Bachelor Degree Granti	ng 1014	27
Two-Year Colleges	855	25
Total, All Departments	2551	

Faculty Salaries

Departments submitted a minimum, median, and maximum salary figure for each of four academic ranks, both for staff members with and without doctorates, creating forty-eight categories of salary figures. In some categories, relatively few departments reported and, inasmuch as there were no significant figures available, salaries

are not listed.

The 1974 Survey is based on returns from 791 departments in the mathematical sciences. The number of faculty positions in these departments are reported in the following table. The numbers are slightly higher than would be found by adding positions from the following three pages because all faculty positions are included in the figures including categories which had too few returns to be used in the salary compilation, for example, two doctoral granting Group I departments which had instructors without a doctorate.

NUMBER OF FACULTY POSITIONS IN DEPARTMENTS SUBMITTING USABLE RETURNS

	1973-1974	1974-1975
Doctorate, 1	Master and Backing Departments	nelor
Total Faculty With Tenure	9,484 5,729	9,275 6,000
Women With Tenure	867 452	838 452
Two-	Year Colleges	
Total Faculty With Tenure	1,418 880	1,439 920
Women With Tenure	264 125	266 133

^{*}The findings were published in "A Rating of Graduate Programs" by Kenneth D. Roose and Charles J. Anderson, American Council of Education, Washington, D. C. 1969, 115 pp. The information on mathematics was reprinted by the Society and can be found on pages 338-340 of the February 1971 issue of these Notices.

WITH DOCTORATE

September Sept	1973—1974 FACULTY WOMEN With Mith Iotal Tenure Iotal Iotal Tenure Iotal Io	1973 FACULTY With Mith Total Tenure 6 0 169 3 195 177 406 836 586 11NG DEPAR TING DEPAR 11 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1973—1974 1974 1974 1974 1974 1974 1977 19	1974 WOMEN With With With With MENTS. Grammen 5 10 7 7 6 10 7 7 6 10 7 7 6 10 10 10 10 10 10 10	SIZE OF FACULTY 74 19 74 17 74 17 75 10 61 7 6 182 7 6 61 7 6 182 6 6 413 7 6 182 7 7 6 182 7 7 6 182 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825 7 825	COULTY 197 FACULTY With With Total Jenus 161 169 182 164 413 413 413 413 30 25 25 25 30 30 30 30 30 30 30 30 30 3	774-	WOMEN With With	MEN With 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Minimum 40 (84-115) 110(113-125) 132(137-155) 160(179-207) 160(179-207) 170 (84-125) 10(137-152) 110(137-152) 140(171-200)	1973—1974 Median 98-115 (125-136) (154-174) (239-283) (124-125) (125-136) (125-136) (125-136) (155-171)	(100- (133- (173- (174- (184- (140-	(in hundreds of dollars) Salania Minimum Nu	1974—1975 Maximum Median Maximum Mumber of usable Returns: (115–124) (118–125) (161–185) (241–294) (37–381) (37–381) (100–129) (100–129) (100–129) (128–140) (128–140) (128–140) (128–140) (160–133) (160–178) (160–178) (160–178) (160–178) (179–203) (160–178) (179–203) (160–178) (179–203) (160–178) (179–203)	Maximum Le Returns: 17 (118-125)129 (142-157)160 (179-205)223 (337-381)409 Le Returns: 26 (92-140)156 (100-133)133 (140-164)195 (140-1
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	DOCTORATE GRANTING WITHOUT DOCTORATE Instructor 88 Asst. Prof. 68 Asso. Prof. 54 Professor 19 Professor 19	11	PARTM 222 445 54 115 136		Group II 13 19 36	ω ω	$ \begin{array}{c} 15 \\ 52 \\ \hline 136 \\ \hline 136 \\ \hline \end{array} $	25 25 25 21	20 23 31	67(80-103) 91(108-132) 123(135-161)	(83-106) (113-137) (142-165)	(118-135)150 (146-172)195	67(84-115) 93(109-137) 132(143-167)	(86-115) (119-139) (149-172)	E R
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		$\begin{array}{c} 5 \\ 132 \\ 117 \\ 174 \\ \hline 428 \\ \end{array}$	$\begin{array}{c} 0 \\ 2 \\ 108 \\ \hline 283 \end{array}$	13 2 2 2 3 3 3	00224	$\begin{array}{c} 3 \\ 123 \\ 172 \\ \hline 435 \end{array}$	$\begin{array}{c} 0 \\ 5 \\ 99 \\ \hline 268 \\ \end{array}$	11 11 11 11 11 11 11 11 11 11 11 11 11	3 5 7 0 0	100(120-136) 121(148-171) 152(194-240)	(130-145) (160-186) (225-275)	(133-156)200 (168-210)250 (282-342)385	110 (122–144) 135 (157–178) 159 (203–255)	(130–155) (167–200) (235–276)	(140–168)208 (171–208)25((290–360)438

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	III alici										
(146–165)192 (187–205)242 (260–318)470	Number of usable Returns: 15	(142–173)187 (195–229)275 (275–352)379	Number of usable Returns: 127	(100-127)188 (125-152)207 (151-169)241 (178-224)296	(138-156)230 (162-192)267 (196-252)355	Number of usable Returns: 285	(95-116)188 (108-135)179 (121-155)243 (147-190)292	(116–140)190 (133–161)247 (162–223)335	Number of usable Returns: 214	(120-176)300	(125-188)350
(136–152) (163–195) (231–283)	mber of usabl	(134-162) (165-201) (245-270)	mber of usabl	(97-122) (119-142) (145-161) (175-220)	(129–144) (152–172) (183–219)	mber of usabl	(95-115) (107-129) (120-150) (147-185)	(114-132) (130-158) (160-212)	mber of usabl	(110-151)	(120-183)
99 (120–145) 121 (152–176) 154 (200–245)	Nu	104(112-138) 125(144-178) 172(190-230)	Nu	74(92-120) 86(112-131) 107(138-152) 120(169-206)	87(117–135) 95(141–160) 99(171–202)	Nu	72(92-113) 77(102-125) 84(118-146) 100(140-184)	82(111–128) 80(130–153) 99(158–203)	Nu	67(100-130)	90(119-169)
(139–162)173 (176–199)232 (242–300)450		(128-162)166 (175-212)252 (250-303)352		(97-119)173 (118-141)218 (140-168)232 (168-210)281	(130–149)250 (155–182)277 (190–236)335		(90-110)173 (103-130)175 (122-147)243 (140-180)284	(110-132)175 (130-156)222 (155-213)314		(112-167)270	(120-183)350
(130–148) (157–181) (227–265)		(120–148) (148–186) (225–248)		(120-115) (112-133) (133-160) (166-202)	(123-138) (145-167) (175-210)		(90-108) (101-123) (116-141) (129-178)	(110-128) (128-154) (155-204)		(104-145)	(117–165)
90(122-137) 115(144-166) 147(195-243)		94(102–131) 119(128–162) 160(174–210)		70(86-105) 82(105-124) 106(126-149) 120(159-195)	95(113-130) 89(134-152) 92(164-195)		30(88-105) 70(99-119) 80(110-140) 100(129-178)	78(107-123) 76(125-150) 93(150-197)		63(92-120)	86(113-160)
00184		21 1 2 2 0		7 67 31 111	0 12 52 21 85		40 31 81	1 5 16 25 47		125	00
0 1 1 4 4		1 3 3 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1		71 83 31 6 191	3 54 55 133		39 67 34 9 149	5 46 23 27 101		248	18
0 75 155 235		$\begin{array}{c} 0\\32\\225\\\overline{412}\\ \end{array}$		34 194 79 590	$\begin{array}{c} 0 \\ 135 \\ 565 \\ 468 \\ \hline 1168 \end{array}$		13 175 55 429	$\begin{array}{c} 1 \\ 40 \\ 205 \\ 215 \\ \hline 461 \\ \end{array}$		842	78
$\frac{9}{117}$ $\frac{76}{158}$ $\frac{158}{360}$	-	$\begin{array}{c} 5\\ 162\\261\\156\\\overline{584}\end{array}$		$\begin{array}{c} 182 \\ 365 \\ 202 \\ 83 \\ \hline \end{array}$	$ \begin{array}{c} 15 \\ 628 \\ 675 \\ \hline 487 \\ \hline 1805 \end{array} $		101 330 194 58 683	$\begin{array}{c} 11\\ 369\\ 307\\ \underline{226}\\ \underline{913} \end{array}$		1289	150
3 1 5 0 0	Group VI	0 2 4 1 2	TS	16 65 29 $\frac{7}{117}$	0 12 44 78	ENTS	32 32 9	1 14 43		119	9
10 3 3 15 15		0 2 4 1 10	RTMEN	92 87 29 7	3 51 22 127	PARTM	45 74 38 9 166	37 20 29 90		. 246	18
$\begin{array}{c} 2 \\ 78 \\ \hline 229 \\ \end{array}$	PARTM	$\begin{array}{c} 1 \\ 206 \\ 143 \\ 389 \end{array}$	G DEPA	$\begin{array}{c} 46 \\ 271 \\ 189 \\ 82 \\ \hline 588 \end{array}$	$ \begin{array}{c} 2 \\ 134 \\ 495 \\ 426 \\ \hline 1057 \end{array} $	ING DE	$ \begin{array}{c} 10 \\ 178 \\ 181 \\ 53 \\ \hline 422 \end{array} $	$\begin{array}{c} 0 \\ 29 \\ 186 \\ \hline 220 \\ \hline 435 \end{array}$		812	89
$\begin{array}{c} 8\\ 160\\ 121\\ 149\\ 438 \end{array}$	NG DE	5 177 252 147 581	ANTIN	220 385 198 86 889	21 662 634 459 1778	SRANT	137 370 205 59 771	$\begin{array}{c} 12 \\ 373 \\ 284 \\ \hline 241 \\ \hline 910 \\ \end{array}$	s	ATE 1282	136
Instructor Asst. Prof. Asso. Prof. Professor	DOCTORATE GRANTING DEPARTMENTS.	WITH DOCTORATE Instructor Asst. Prof. Asso. Prof. Professor	MASTER DEGREE GRANTING DEPARTMENTS	WITHOUT DOCTORATE Instructor 22 Asst. Prof. 38 Asso, Prof. 19 Professor 8	WITH DOCTORATE Instructor Asst. Prof. Asso. Prof. Professor	BACHELOR DEGREE GRANTING DEPARTMENTS	WITHOUT DOCTORATE Instructor 13 Asst. Prof. 37 Asso. Prof. 20 Professor 5	WITH DOCTORATE Instructor Asst. Prof. Asso. Prof. Professor	TWO-YEAR COLLEGES	WITHOUT DOCTORATE	WITH DOCTORATE

Starting Salary Survey for New Recipients of the Doctorate

The latest figures in this Survey were compiled from questionnaires sent to individuals who received a doctorate in the mathematical sciences during the 1973—1974 academic year from universities in the United States and Canada. This report includes summaries from previous years; more details for 1973 will be found on page 276 of the October 1973 issue of these Cotical.

Of the 1,148 questionnaires distributed there were 456 returns of which 379 (340 men and 39 women) were used in the tables below, 102 were returned to Providence for bad addresses. Of the unused returns 21 did not have sufficient information for use in the compilation, 18 persons (16 men and 2 women) were unemployed, 3 persons (2 men and 1 woman) were not seeking employment, and 35 men have accepted positions in foreign countries, in most cases these were foreign nationals who returned to their homeland after completion of studies in the United States.

The Teaching and Teaching and Research categories were combined in the 1974 questionnaire into one group because it is difficult to determine how much time has to be devoted to research in order to be included in the second of the above mentioned categories. The result is that there are no comparable figures before 1974. For the convenience of the reader we have repeated information published last year for each of the categories and then followed it by the new combined category. It should be noted that in 1973 there were nearly four times as

many individuals listed in the <u>Teaching</u> than in the <u>Teaching</u> and Research categories.

Eighty percent of the doctorates included in this report accepted academic positions, 16% accepted positions in business or industry and 4% in government. Of those reporting academic positions, 50% held positions in doctoral granting departments, 22% in departments granting master's as the highest degree, 23% in bachelor granting

departments, 3% in junior colleges and 1% in high schools.

Of all those reporting, including those not used in the salary compilations, 82% accepted jobs in the United States, 6% in Canada and 8% in other countries; 4% were not employed at the time of reporting.

KEY TO TABLE

Salaries are listed in hundreds of dollars. Dashes indicate that not enough returns were received to warrant including the figures. Years listed refer to the academic year ending in the listed year. M and F are Male and Female respectively. One year experience means that the persons had experience limited to one year or less in the same or a similar position to the one reported; some persons receiving a doctorate had been employed in their present position for several years. (X + Y) means there are X men and Y women in the sample. Quartile figures are given only in cases where the number of responses are large enough to make them meaningful.

	NINE-MONTH SALARIES							TWE	LVE-MOI	NTH SALAR	IES			
Year	Min.	Q_1	Median	Q_3	Max.		Year	Min.	Median	Max.	Year	Min.	Median	Max
TEACHI	NG*						TEACH	ING*			GOVER	NMENT	(14 + 1)	
1971	70	105	110	120	178		1971	80	126	190	1971	117	151	290
1972	61	105	115	125	192		1972	92	124	210	1972	70	155	315
1973	60	107	116	127	178		1973	104	127	270	1973	95	168	250
1972M	61	105	115	125	192		1972M	92	125	210	1974	120	197	287
1972F	94	105	110	125	192		1972F	103	104	120	1972M	70	155	315
1973M	60	108	116	128	178		1973M	104	133	270	1972F	110	156	160
1973F	60	105	115	124	150		1973F	105	116	127	1973M	95	169	250
TEACHI	NG AND	RESE	ARCH*				TEACH	ING AN	D RESEA	BCH*	1973F	120	140	173
- Secondary		Tellor									1974M	120	199	287
1971	88		110		156		1971	100	137	165	1974F		177	
1972	95		115		160		1972	100	125	205			ience (5	
1973	90		117		170		1973	85	159	172	1974M	120	142	197
1972M	100		116		160		1972M	100	127	185	1974F			
1972F	95		105		135		1972F	106		205				
1973M	90		117		170		1973M	85	159	172				
1973F	105		113		135		1973F							
1974 1974M	85 85	(215 - 115 115	121 124	135 137	200	,	1974 1974M	90 90	138 146	185 185	1971 1972	(58 - 99 118	170 181	252 296
1974F	90	108	115	120	145		1974F	106	126	145	1973	119	180	250
one year									ience (24		1974	140	190	251
1974M	85	113	120	130	156		1974M	90	134	185	1972M	118	181	296
1974F	90	106	115	120	141		1974F	106	126	145	1972F			
4										-	1973M	119	180	250
RESEAR	CH (9 +	1)					RESEA	RCH (1	1 + 2)		1973F	168	170	171
1971	90		110		153		1971	60	120	181	1974M	140	190	251
1972	60		111		155		1972	50	125	180	1974F	150	156	190
1973	30		110		120		1973	90	150	176			ience (45	
1974	50		80		130		1974	72	95	265	1974M	140	182	205
1973M	30		110		120		1972M	50	126	180	1974F	150	156	190
1973F							1972F	100		125				
1974M	50		81		130		1973M	90	150	176				
1974F			70				1973F	120		172				
one year	experie	nce (8	3 + 1)				1974M	72	95	265				
1974M	50		80		130		1974F	90		180				
1974F			70				one yea	r exper	ience (8	- 2)				
							1974M	72	89	145				

^{*}Figures in the Teaching and the Teaching and Research categories compiled in 1974 are not comparable to those for prior years; the two categories were combined in 1974.

SEX, RACE AND CITIZENSHIP OF NEW DOCTORATES,

Each October the American Mathematical Society publishes a list of recipients of doctoral degrees in mathematics and closely related fields in the Notices of the American Mathematical Society. This list is accompanied by an analysis of the recipients on the basis of sex, racial group, and citizenship. These analyses for the years 1973 and 1974 are reproduced below. They provide such information on people receiving doctorates from universities in the United States. Although not entirely complete, these figures provide an approximate analysis of each year's class of new doctorates. The racial categories used are those of the U. S. Department of Labor.

Degrees Conferred July 1972-June 1973 (Notices), Volume 20, Number 6, October 1973, Pages 278-301)

			MEN					WOME	EN		
RACIAL GROUP	CITIZ	ENSHIP	MILLI,		Sub-	CITIZ	ENSHIP			Sub-	TOTAL
Negro (Black) Spanish Surname Oriental None of those above	U. S. 10 8 6 651	Canada 21	Other 5 28 54 83	Unknown 5 13 26	Total 15 36 65 768 49	U. S. 3 1 1 72	Canada	Other 1 2 8 8 8	Unknown	Total 4 3 9 80 1	19 39 74 848 50
Unknown Total Number	696	21	172	44	933	78		19		97	1030

1115 Doctorates listed from U. S. Universities

Degrees Conferred July 1973-June 1974 (Notices), Volume 21, Number 6, October 1974, Pages 285-307)

		M	IEN			100	WO	MEN			
RACIAL GROUP	U.S.	CITIZ Canada	ENSHIP Other	Unknown	Total Men	u.s.	CITIZ Canada	ENSHIP Other	Unknown	Total Women	Total
Negro/Black Spanish Surname	12 2		6 18	1	18 21 2	1		1		2 1	20 22 2
American Indian Oriental None of those above Unknown	13 588 2	1 13 1	87 106	6 20 1	107 727 4	1 56 1		16 11	1	17 68 1	124 795 5
Total Number	618	15	217	29	879	59		29	1	89	968

1148 Doctorates listed from U. S. Universities