

University of Mississippi

eGrove

AICPA Committees

American Institute of Certified Public
Accountants (AICPA) Historical Collection

1950

College accounting testing program bulletin no. 9; The College and professional accounting testing programs: Results of tests in 208 colleges and 175 public accounting firms, Spring, 1950

American Institute of Accountants. Committee on Selection of Personnel

Follow this and additional works at: https://egrove.olemiss.edu/aicpa_comm



Part of the [Accounting Commons](#), and the [Taxation Commons](#)

THE AMERICAN INSTITUTE OF ACCOUNTANTS
ACCOUNTING TESTING PROGRAM

Bulletin No. 9

THE COLLEGE AND PROFESSIONAL ACCOUNTING TESTING PROGRAMS:
RESULTS OF TESTS IN 208 COLLEGES AND
175 PUBLIC ACCOUNTING FIRMS

Spring, 1950

Prepared by
Committee on Selection of Personnel
21 Audubon Avenue
New York 32, N. Y.

THE AMERICAN INSTITUTE OF ACCOUNTANTS
ACCOUNTING TESTING PROGRAM

Bulletin No. 9

THE COLLEGE AND PROFESSIONAL ACCOUNTING TESTING PROGRAMS:
RESULTS OF TESTS IN 208 COLLEGES AND
175 PUBLIC ACCOUNTING FIRMS

Spring, 1950

Prepared by
Committee on Selection of Personnel
21 Audubon Avenue
New York 32, N. Y.

Committee on Selection of Personnel

Harold R. Caffyn, Chairman
Raymond G. Ankers
Samuel J. Duboff
William B. Franke

S. Wesley Marcus
Leo A. Schmidt
James W. Strudwick
John L. Carey, Executive Director

Project Staff

Ben D. Wood, Director
Arthur E. Traxler, Assistant Director
Robert Jacobs, Administrative Assistant
Jean D. Judson, Program Supervisor

Cooperating Colleges and Universities

Adelphi College
University of Akron
University of Alabama
Alabama Polytechnic Institute
Albright College

Clarkson College
Colorado College
Columbia Institute
Columbia University
Concord College

American University
University of Arizona
Arizona State College
Arkansas State College
Armstrong College

Cornell University
Dana College
University of Dayton
Dearborn Junior College
University of Delaware

Atlanta University
Austin Peay State College
Babson Institute
Balboa University
Bentley School of Accounting & Finance

University of Denver
DePaul University
University of Detroit
Detroit Institute of Technology
Drake University

Bloomsburg State Teachers College
Boston College
Bowling Green State University
Bradley University
Brigham Young University

Drexel Institute of Technology
Duke University
Duquesne University
Elizabethtown College
Fairfield University

Bryant College
Bucknell University
University of Buffalo
Butler University
University of California, Los Angeles

Ferris Institute
Flint Junior College
University of Florida
Fordham University
Franklin and Marshall College

California College of Commerce
Calvin College
Catawba College
Central Michigan State College
Central Missouri State College

Gannon College
George Peabody College for Teachers
George Washington University
Golden Gate College
Grand Rapids Junior College

Chaffey College
University of Chattanooga
University of Chicago
University of Cincinnati
City College of New York

Hartford Institute of Accounting
Harvard Business School
Heidelberg College
Hill College
Hillsdale College

Hillyer College
Hofstra College
College of the Holy Cross
Hope College
University of Houston

Howard University
Hunter College
University of Idaho
University of Illinois
Illinois Institute of Technology

Indiana University
Iona College
Ithaca College
Jackson Junior College
Kent State University

University of Kentucky
Lafayette College
La Salle College
Lehigh University
Lewis and Clark College

Louisiana Polytechnic Institute
University of Louisville
Luther College
Lycoming College
Madison College

University of Maine
Marquette University
University of Maryland
University of Massachusetts
Memphis State College

Miami University
University of Miami
Miami-Jacobs College
University of Michigan
Michigan State College

Millsaps College
University of Minnesota
University of Mississippi
Mississippi State College
Monmouth College

Montana State College
Montana State University
Morse College
Muhlenberg College
Multnomah College

University of Nevada
New Haven YMCA Junior College
University of New Mexico
Niagara University
North Dakota Agricultural College

Northern Michigan College of Education
Northern Montana College
North Texas State Colleges
Northwestern University
Oberlin College

Ohio University
Ohio Wesleyan University
Olympic Junior College
University of Omaha
University of Oregon

University of Pennsylvania
Pennsylvania Military College
Pennsylvania State College
Phillips University
Pierce School of Business Administration

University of Pittsburgh
Providence College
Queens College
Regis College (Colorado)
Regis College (Massachusetts)

Rhode Island State College
Richmond Professional Institute
Rider College
Roanoke College
University of Rochester

Rutgers University
St. Ambrose College
St. Edward's University
St. Francis College
St. John's College (Kansas)

St. John's University (New York)
St. Joseph's College (Indiana)
St. Joseph's College (Pennsylvania)
St. Louis University
St. Mary's College (Minnesota)

St. Mary's University (Texas)
St. Peter's College
Salmon P. Chase College
San Diego State College
University of San Francisco

University of Santa Clara
Sawyer School of Business
University of Scranton
Seton Hall College
Siena College

Simpson College
University of South Carolina
University of South Dakota
University of Southern California
Southern Idaho College of Education

Southern Illinois University
Southern Methodist University
Spencerian College
Spring Hill College
Strayer College of Accounting

Susquehanna University
Syracuse University
Tabbutt-Hubbard School
Tampa Business College
Temple University

University of Tennessee
University of Texas
A and M College of Texas
Texas Christian University
Texas Technological College

Triple Cities College
Union Junior College
Upsala College
University of Utah
University of Vermont

Villanova College
University of Virginia
Virginia Polytechnic Institute
Walla Walla College
Washington and Jefferson College

Washington and Lee University
Washington State College
Wayne University
Waynesburg College Uniontown Center
West Virginia State College

West Virginia University
Western Michigan College of Education
Western Reserve University
Wheaton College
University of Wichita

Wilkes College
College of William and Mary
University of Wisconsin

CONTENTS

	Page
I. INTRODUCTION.	1
II. SUMMARY OF RESULTS OF COLLEGE TESTING PROGRAM	3
III. SUMMARY OF RESULTS OF STAFF TESTING PROGRAM	9
IV. RESULTS OF ACHIEVEMENT TESTS AND ORIENTATION TESTS IN INDIVIDUAL COLLEGES	15

INTRODUCTION

Testing programs were carried on under the direction of the Committee on Selection of Personnel of the American Institute of Accountants for both college students and employed accountants during the spring of 1950.

College Accounting Testing Program. The fourth spring college testing program was carried on between February 15 and June 30, 1950. During this period, colleges and universities administered a total of approximately 25,000 tests to students of accounting. This number was about 5,000 larger than the number in the spring of 1949. The number of colleges and universities participating in the program was 208 as compared with 159 institutions during the corresponding period of 1949.

The tests used as the basis of the spring program were the Achievement Test, Level I, form B, the Achievement Test, Level II, forms B and D, the Orientation Test, form A, and the Strong Vocational Interest Blank. As in preceding spring testing programs, the use of the Achievement Tests was stressed but there was considerable use of the other tests as well.

The Achievement Test, Level I, was taken by approximately 8,200 students this spring. Its most extensive use was with first-year students, but it was taken also by some students in the second and third years of study. Norms based on the use of this test in the spring of 1948 were available at the beginning of the program. The 1948 and 1950 test results will be combined to provide a highly stable set of norms for the Level I, form B, test.

In conformity with the practice begun in 1949, a two-hour form of the Achievement Test, Level II, was prepared and made available for use with accounting seniors during the last part of February and in March. Many colleges had expressed a desire for a Level II Achievement Test that would require less time than the four-hour forms A and B. This two-hour form of the Level II test, known as form D, was based on certain sections of form A. Form D was taken by 1902 seniors distributed among 45 colleges.

Achievement Test, Level II, form B, requiring four hours of working time, was made available for use after April 1. This form was administered by 90 colleges to 2515 seniors.

Since it is designed to measure ability or aptitude for the field of business, the Orientation Test is stressed in the fall program rather than in the spring. Nevertheless, this test was taken by approximately 6,200 students in the spring of 1950 distributed among 99 colleges. Form A, which had been used extensively in the fall but which had not previously been employed in a spring program, served as the basis of testing. As a result of the use of this form, spring norms were established for form A.

The Strong Vocational Interest Blank was filled out by a total of 1612 students in 43 colleges. It was not feasible to summarize the results of this test in the present bulletin.

The results of the Achievement Tests and the Orientation Test in all participating colleges considered as a group are presented in the second section of this bulletin. Comparative charts showing the distributions of scores for the individual colleges, designated by code numbers, are shown in the fourth section.

Staff Testing Program. An accounting testing program for persons outside college, known as the Professional Accounting Testing Program, has been made available continuously since the spring of 1947. A well-defined routine has been developed for this program, including the certification of examiners to give the tests in firms and in a number of testing centers throughout the United States.

A special staff testing program was carried on in April, 1950. The purposes of this program were (1) to encourage wider use of the tests among employed men, (2) to provide more adequate norms for employed accountants, and (3) to provide data for research on the value of the tests in predicting success of individuals in positions as accountants.

The tests used in the staff testing program were the Orientation Test, form A, the Achievement Test, Level II, form C, and the Strong Vocational Interest Blank.

The tests were given to a total of 971 staff members distributed among 175 firms. The results were reported to the firms in the form of distributions and lists of scores and on individual IBM cards.

The cooperation of fifteen firms was secured in rating their employees. All but two of these firms used a special Rating Scale for Employed Accountants, which was designed for this project. This form provided for the rating of seven aspects of the ability and work of each employee: (1) quantity of work, (2) quality of work, (3) knowledge of accounting, (4) ability to learn, (5) dependability and integrity, (6) initiative and responsibility, (7) cooperation - ability to get along with others, and (8) overall value to the organization. A study of the correlation of scores on the tests with these ratings has been undertaken, and the results will be reported elsewhere.

The distributions of the scores of the employed accountants on the Orientation and Achievement Tests are summarized in Section III of this bulletin.

II

SUMMARY OF RESULTS OF COLLEGE TESTING PROGRAM

The distributions of the scores of the college students on the Achievement Tests and the Orientation Test obtained during the spring of 1950 are shown in Tables I through V. The medians, quartiles, tenth and nintieth percentile scores, and ranges of the scores are reported at the bottom of the table. The medians and the inter-quartile ranges are also shown graphically.

Achievement Tests. Achievement Test, Level I, form B was used with the undergraduate students this spring and forms B and D of the Achievement Test, Level II was used with senior students.

Table I shows the distributions of total scores on the Achievement Test, Level I, form B. The scores are distributed separately by year of study. The possible range of scores for this test is 0 to 178. Each distribution covers all but a few points of the possible range. Some individuals know almost no accounting as measured by these tests, while others were able to answer nearly every question.

Although the ranges for the three years are fairly similar, there is a marked difference in the medians. The second-year median of 99.1 is almost 20 score points higher than the first-year median of 79.2. The difference between the second-year median and the third-year median is fairly small by comparison. The dotted lines across the distributions indicate the medians for this test when it was used during the spring program of 1948. It is curious to note that the 1948 median for first-year students is exactly the same as the 1950 median. However, the 1950 second-year median is slightly higher than the 1948 second-year median while the 1950 third-year median is slightly lower than the 1948 median.

Following the custom begun last year, a two-hour form of the Level II Achievement Test was used again. This year form D, adapted from form A, was used for the first time. The distribution of scores obtained from the administration of this form is shown in Table II. The total possible raw score on this test is 100. The range obtained during the March use of this test was 0 to 99. Since this is the first administration of this form, no comparison with previous use is possible.

For colleges preferring to use the four-hour form of the Achievement Test, form B was made available this spring. The distribution of scores for this test is shown in Table III. 2515 seniors took this form of the Achievement Test and the median obtained from the administration this year is just slightly lower than the median obtained during the spring of 1949.

Orientation Test. The Orientation Test was used again this spring although, of course, not as extensively as the Achievement Tests. The results for the administration of form A of this test are shown in Tables IV and V. The dotted lines across these distributions indicate the medians obtained from the combined administrations of this form during the fall programs of 1946, 1947 and 1948. Contrary to expectations, the fall medians are somewhat higher than the medians obtained on the test this spring.

TABLE I
DISTRIBUTIONS OF TOTAL SCORES ON ACHIEVEMENT TEST,
LEVEL I, FORM B

Score	1st year	2nd year	3rd year
177-178			
176			
172			
168			
164		1	
160	1	2	
156	9	2	2
152	10	6	2
148	17	12	2
144	16	15	2
140	29	22	4
136	41	12	7
132	72	21	9
128	70	33	8
124	85	38	12
120	110	42	15
116	135	39	12
112	190	33	13
108	221	50	13
104	286	39	23
100	300	41	17
96	317	42	18
92	363	51	17
88	380	39	12
84	404	32	13
80	428	44	13
76	412	28	6
72	324	34	13
68	370	31	3
64	357	17	5
60	354	18	2
56	294	22	4
52	282	11	5
48	258	14	3
44	227	8	
40	174	10	1
36	150	5	1
32	144	5	
28	90	6	
24	79	2	
20	53	3	
16	30	2	
12	28	2	
8	11	1	
4	8		
0-3	6		
Total	7135	835	257
Q3	97.6	119.7	119.6
Md	79.2	99.1	102.9
Q1	59.2	78.5	86.5
Range	0-162	10-164	36-157
10%ile	42.6	58.6	72.5
90%ile	113.5	133.8	133.0

----- Medians, spring, 1948

TABLE II

DISTRIBUTION OF TOTAL SCORES ON ACHIEVEMENT TEST,
LEVEL II, FORM D

Score	Seniors
100	
98	3
96	11
94	7
92	12
90	26
88	13
86	31
84	48
82	31
80	31
78	66
76	36
74	49
72	78
70	46
68	62
66	67
64	57
62	54
60	84
58	60
56	59
54	69
52	54
50	69
48	64
46	70
44	54
42	54
40	48
38	44
36	69
34	44
32	44
30	40
28	35
26	36
24	35
22	26
20	23
18	20
16	11
14	13
12	12
10	10
8	4
6	7
4	6
2	2
0-1	5
Total	1902
Q3	70.7
Md	55.8
Q1	39.5
Range	0-99
10%ile	26.9
90%ile	81.7

TABLE III

DISTRIBUTION OF TOTAL SCORES ON ACHIEVEMENT TEST,
LEVEL II, FORM B

Score	Seniors
150	
147	
144	
141	2
138	5
135	1
132	5
129	16
126	20
123	19
120	30
117	37
114	50
111	58
108	65
105	78
102	84
99	95
96	104
93	115
90	103
87	116
84	118
81	136
78	127
75	130
72	114
69	128
66	131
63	126
60	84
57	85
54	81
51	56
48	53
45	39
42	30
39	29
36	15
33	16
30	7
27	2
24	1
21	2
18	2
15	
12	
9	
6	
3	
0-2	
Total	2515
Q3	97.2
Md	81.0
Q1	66.0
Range	19-142
10%ile	54.0
90%ile	110.6

----- Median, 1949

TABLE IV

DISTRIBUTIONS OF SCORES ON PART I, VERBAL, AND PART II, QUANTITATIVE
ON ORIENTATION TEST, FORM A

Score	V E R B A L				Score	Q U A N T I T A T I V E			
	1st yr.	2nd yr.	3rd yr.	Senior		1st yr.	2nd yr.	3rd yr.	Senior
99-100				2					
96				7					
93		2		5	30		2		7
90		1	1	20	29	3	2		19
87	4	1	1	27	28	9	4	2	43
84	4	3	3	50	27	6	6	2	37
81	12	5	7	56	26	23	10	3	44
78	25	5	3	65	25	27	18	2	76
75	25	7	6	70	24	41	12	14	84
72	41	17	12	98	23	53	17	16	105
69	66	19	15	101	22	75	18	5	110
66	64	15	13	120	21	92	24	18	123
63	95	25	7	96	20	105	22	18	140
60	82	31	11	130	19	125	46	11	142
57	107	28	18	141	18	144	28	22	145
54	116	30	17	135	17	178	36	16	148
51	161	33	15	152	16	238	41	19	125
48	182	46	21	118	15	220	50	28	102
45	200	33	26	128	14	235	39	21	109
42	221	37	26	88	13	251	44	14	87
39	254	38	19	90	12	264	32	16	80
36	274	34	7	66	11	230	24	11	45
33	247	40	12	57	10	220	20	9	58
30	278	32	13	38	9	206	15	2	26
27	265	22	6	19	8	192	12	6	13
24	211	14	1	18	7	160	8	7	12
21	170	15	2	6	6	102	5	2	8
18	158	5		2	5	90	1		8
15	101	1	3		4	73			2
12	64	1			3	45	2		3
9	30				2	34	2	1	1
6	19	1			1	28			2
3	7	1			0	19	2		1
0-2	5								
Total	3488	542	265	1905	Total	3488	542	265	1905
Q3	49.8	56.5	60.8	66.7	Q3	17.1	20.0	20.8	22.4
Md	38.1	44.7	47.5	54.8	Md	13.3	16.4	16.8	18.8
Q1	28.2	33.3	39.4	44.2	Q1	9.6	13.3	13.9	15.2
Range	0-89	0-91	12-88	15-97	Range	0-29	0-30	2-28	0-30
10%ile	20.3	26.2	30.4	35.3	10%ile	6.5	10.4	10.9	12.1
90%ile	62.5	66.9	70.6	76.9	90%ile	20.8	24.0	23.8	25.5

----- Medians, combined fall programs, 1946, 1947 and 1948.

TABLE V

DISTRIBUTIONS OF TOTAL SCORES ON ORIENTATION TEST, FORM A

Scores	1st year	2nd year	3rd year	Seniors
128-130				3
124				8
120				6
116	1	2		16
112		1		30
108	3	2	1	42
104	10	2	4	49
100	8	4	4	84
96	26	8	6	120
92	47	11	5	114
88	66	16	16	98
84	81	23	17	130
80	88	28	10	141
76	102	26	14	157
72	145	35	21	145
68	156	43	14	166
64	188	41	31	137
60	227	37	16	126
56	259	44	27	90
52	290	41	16	85
48	266	40	18	57
44	319	34	17	48
40	273	30	16	25
36	250	30	6	17
32	211	23	1	9
28	173	14	2	1
24	133	2		
20	73	2	1	
16	52	1	1	
12	25	1	1	
8	13	1		
4	1			
0-3	2			
Total	3488	542	265	1905
Q3	65.0	74.6	79.1	87.8
Md	51.3	60.9	65.4	73.2
Q1	39.0	47.7	52.8	60.5
Range	2-117	9-117	15-109	23-125
10%ile	29.2	37.4	43.6	49.5
90%ile	79.7	86.6	90.4	98.3

----- Medians, combined fall programs, 1946, 1947 and 1948

III

SUMMARY OF RESULTS OF STAFF TESTING PROGRAM

The distributions of the scores made on the Orientation Test and the Achievement Test, Level II, by the staff members in 175 firms who participated in the April, 1950, staff testing program are shown in Tables VI through IX. Separate distributions are shown for junior accountants, semi-seniors, senior accountants, and a fourth group including owners, partners, and superintendents, as well as distributions for the entire group of participants.

The median score is indicated in each instance by the short horizontal line adjacent to the distribution; the range of the middle 50 per cent of the scores is shown by the vertical line parallel to the distribution. For comparative purposes, the median for college seniors has been shown by a broken line across the distribution column.

It is interesting to see that the median scores on both the Orientation Test and the Achievement Test go upward with rise in employment level. In all four kinds of scores reported, the junior accountants have the lowest medians, the semi-seniors the next to the lowest, the senior accountants the next to the highest, and the small group of owners, partners, and superintendents the highest medians. This relationship holds true notwithstanding the fact that the junior accountants are in all probability the closest to college where much experience with the objective type of test is likely to be obtained, and the owners and partners are probably furthest removed from colleges in point of time.

The difference between the median scores at the different levels may be due to two factors. One of these is experience on the job, and the other is the selection that takes place from one level to the next higher one.

On the Orientation Test, the median verbal, quantitative, and total scores of the junior accountants are very close to the medians for college seniors. The medians made on this test by the semi-seniors are somewhat above the college senior medians, while the group of senior accountants surpasses the college seniors by a rather wide margin. In the owner-partner group, three-fourths or more of the men have scores above the college senior median on the Orientation Test.

The superiority of the employed men to the college seniors is even greater in the Achievement Test than in the Orientation Test. The medians for all four levels of employed men are well above the college senior median. So far as the entire group is concerned, a little more than three-fourths of the employed men have scores which reach or surpass the median for seniors in college.

On both the Orientation Test and the Achievement Test, part of the difference, but not all of it, is no doubt due to the fact that the employed men recorded their answers in the booklets, whereas the seniors used separate answer sheets. Individuals tend to work at a slightly slower rate when they record their responses on answer sheets.

One of the most interesting and challenging characteristics of the distributions on both tests is that, notwithstanding the selection that had presumably taken place in the employment and promotion procedures of the firms, the test scores are very widely distributed. The range in total scores on the Orientation Test is from 0 to 124 out of a possible 130 raw score points. While extremely low scores are an exception, it is to be noted that even when these unusually low scores are disregarded the distribution is still spread over a very wide range.

On the Achievement Test, the raw scores range from 0 to 55, out of a possible total of 57 points. Thus, nearly the entire possible range of scores is covered by the scores of these employed men.

It should not be inferred that if the scores of an employed man fall in the lowest part of these distributions his value to his employer is limited or that very high scores of a man necessarily mean that he will be an exceptionally valuable employee. Many factors other than those measured by these tests enter into success on the job. Moreover, because of chance factors in a testing situation the test results for an occasional man may not correctly indicate his actual ability or achievement. These results should be used only as one kind of evidence along with much other information about each individual.

TABLE VI

DISTRIBUTIONS OF SCORES ON PART I, VERBAL, AND PART II, QUANTITATIVE
ON ORIENTATION TEST, FORM A

Score	V E R B A L				Score	Q U A N T I T A T I V E			
	Juniors	S-Seniors	Seniors	Owners		Juniors	S-Seniors	Seniors	Owners
99-100									
96			2						
93		1	4	1					
90	2	3	10	4	30	5	2	3	
87	9	4	14	6	29	2	4	4	2
84	13	11	15	5	28	6	9	11	2
81	8	9	18	1	27	11	5	10	3
78	18	20	12	6	26	15	11	17	7
75	13	13	12	7	25	17	11	12	6
72	17	12	10	9	24	11	16	17	6
69	17	16	13	3	23	18	12	22	7
66	24	11	15	4	22	20	13	8	5
63	11	15	15	3	21	19	16	11	4
60	18	15	13	5	20	38	24	18	3
57	22	11	14	4	19	21	12	11	4
54	29	12	10	3	18	21	12	11	4
51	21	19	12	3	17	28	11	24	3
48	14	10	12	2	16	24	13	13	1
45	17	11	8		15	16	14	11	3
42	23	8	4		14	22	14	11	3
39	17	4	9		13	14	10	6	1
36	17	5	4		12	12	7	6	1
33	16	6	5		11	3	2	2	
30	9	3	1		10	9	6	3	
27	3	1	2		9	3	1	2	1
24	2	5			8	1	1	2	
21	2	1	1		7	5			
18	3	1			6	3	1		
15	1				5	2			
12	1				4				
9	1				3	3			
6	1				2				
3					1				
0-2	1				0	1			
Total	350	227	235	66	Total	350	227	235	66
Q3	70.7	76.0	81.7	82.5	Q3	22.9	24.1	24.9	25.6
Md	56.7	63.3	67.5	74.0	Md	19.4	20.4	20.9	23.0
Q1	43.8	51.3	54.2	62.7	Q1	15.6	16.1	17.1	18.9
Range	0-91	20-93	23-98	49-93	Range	0-30	7-30	8-30	9-29
10%ile	35.1	39.5	43.1	55.6	10%ile	12.4	13.5	14.2	15.2
90%ile	80.5	82.8	88.4	89.2	90%ile	26.3	26.8	27.5	27.1

--- Medians, college seniors, spring, 1950

TABLE VII

DISTRIBUTIONS OF TOTAL SCORES ON ORIENTATION TEST, FORM A

Scores	Juniors	Semi-Seniors	Seniors	Owners
128-130			2	
124			3	1
120	1	2	10	3
116	3	1	11	6
112	4	7	16	4
108	13	10	16	2
104	6	12	14	10
100	18	12	19	8
96	24	17	8	2
92	18	12	25	6
88	29	19	14	7
84	16	17	11	5
80	19	20	15	3
76	16	12	11	4
72	30	13	14	4
68	25	19	14	1
64	23	14	11	
60	27	10	4	
56	15	8	7	
52	17	6	5	
48	19	3	1	
44	9	4	3	
40	3	5	1	
36	4	2		
32	2	2		
28	3			
24	1			
20	1			
16				
12	3			
8				
4				
0-3	1			
Total	350	227	235	66
Q3	91.9	97.0	103.8	103.8
Md	74.9	83.1	89.0	96.5
Q1	61.4	68.6	71.6	83.6
Range	0-120	32-120	33-124	64-121
10%ile	49.7	56.4	60.9	73.6
90%ile	102.2	107.1	112.9	114.3

----- Median, college seniors, spring, 1950

TABLE VIII

DISTRIBUTION OF SCORES ON ALL PARTS OF THE ORIENTATION TEST
FOR THE TOTAL GROUP OF EMPLOYED ACCOUNTANTS

Score	Verbal	Score	Quantitative	Score	Total
99-100				128-130	
96	2			124	2
93	6			120	7
90	19	30	10	116	17
87	33	29	12	112	28
84	45	28	28	108	43
81	36	27	30	104	36
78	56	26	50	100	55
75	45	25	46	96	68
72	49	24	50	92	41
69	49	23	60	88	80
66	55	22	47	84	55
63	44	21	50	80	56
60	52	20	83	76	46
57	52	19	50	72	59
54	55	18	48	68	62
51	55	17	66	64	52
48	38	16	53	60	49
45	37	15	44	56	27
42	36	14	50	52	30
39	30	13	31	48	27
36	26	12	26	44	15
33	27	11	7	40	11
30	13	10	18	36	6
27	6	9	7	32	5
24	7	8	4	28	3
21	4	7	5	24	1
18	4	6	4	20	1
15	1	5	2	16	
12	1	4	1	12	3
9	1	3	3	8	
6	1	2		4	
3		1		0-3	1
0-2	1	0	1		
Total	886	Total	886	Total	886
Q3	76.4	Q3	24.1	Q3	98.0
Md	62.8	Md	20.3	Md	83.2
Q1	50.1	Q1	16.3	Q1	67.3
Range	0-98	Range	0-30	Range	0-124
10%ile	38.6	10%ile	13.3	10%ile	51.1
90%ile	85.1	90%ile	26.8	90%ile	108.8

--- Medians, college seniors, spring, 1950

TABLE IX

DISTRIBUTIONS OF TOTAL SCORES ON ACHIEVEMENT TEST, LEVEL II, FORM C

Score	Juniors	Semi-Seniors	Seniors	Owners	TOTAL
56					
54		1	1		2
52		1	1	1	3
50		1	3	1	5
48		1	4	2	7
46	6	5	9	6	26
44	1	5	13	1	20
42	5	3	8	5	21
40	19	15	18	10	62
38	11	15	16	4	46
36	21	12	25	7	65
34	20	15	16	1	52
32	29	25	18	6	78
30	25	20	18	3	66
28	22	14	14	4	54
26	34	21	19	6	80
24	22	19	9	3	56
22	17	16	15	4	54
20	18	10	9	2	40
18	15	5	6	1	27
16	24	9	5		38
14	13	5	3		21
12	14	2	2		19
10	8	3	3		15
8	4	1	1		6
6	7	2			9
4	5	2	2		9
2	3				3
0-1	5			1	6
Total	348	228	238	68	890
Q3	33.7	36.3	39.7	41.8	37.1
Md	27.1	30.5	33.4	36.9	30.2
Q1	18.5	24.2	26.5	28.0	23.1
Range	0-47	4-55	4-55	0-52	0-55
10%ile	12.4	17.7	20.4	23.4	16.1
90%ile	39.3	41.2	45.1	47.1	41.8

----- Median, college seniors, March, 1949

IV

RESULTS OF ACHIEVEMENT TESTS AND ORIENTATION TESTS IN INDIVIDUAL COLLEGES

The distributions of the total scores of the students in the participating colleges on the Achievement Tests and the Orientation Test are shown in Tables X through XVIII. Distributions are identified by code numbers at the top of each distribution and each college has been advised of its own code number. The same code number applies to that college throughout the tables in the bulletin.

The raw score scale is given at the left and right of each table. The broken lines running horizontally across the table indicate the seventy-fifth percentile, the fiftieth, and the twenty-fifth percentile for the distribution of scores for the entire group of participating students.

At the bottom of each column, data are shown concerning the total number of students in the group, the Q₃, the median, the Q₁, and the range of the scores in that particular college. The median and the inter-quartile range are also shown graphically beside each distribution.

Individual distributions of scores on the Achievement Test, Level I, form B are shown in Tables X, XI and XII, for the first-year, second-year and third-year students, respectively. Results for seniors using form D and B of the Achievement Test, Level II are shown in Tables XIII and XIV. Tables XV, XVI, XVII and XVIII present the results of the Orientation Test, form A.

The usual wide difference between the medians for college #1 and college #95 in Table X is noticeable again this year. The highest median for Achievement Test, Level I, form B is 112.0 and the lowest is 47.0. However, in considering individual students, it is important to keep in mind that many outstanding scores appear throughout the chart - irrespective of the college median. The same, of course, is true of the low scores. This range of college medians and individual variations is to be found throughout the charts.

The assistance of Mildred Brody in preparing the tables and charts for this bulletin is gratefully acknowledged.

DISTRIBUTIONS OF SCORES MADE ON ACHIEVEMENT TEST, LEVEL I, FORM B, BY SECOND-YEAR STUDENTS OF ACCOUNTING IN THIRTY-FOUR COLLEGES

	31	3	96	60	45	48	5	19	59	55	30	21	97	8	98	99	95	100	39	101	65	87	54	82	46	102	77	84	75	71	90	78	43	103		
177-178																																				177-178
176																																				176
172																																				172
168																																				168
164																																				164
160	1			1	1																															160
156			2																																	156
152								4																1												152
148	1	1	4	1	1				1				1										1													148
144	2	4	5					1					1										1													144
140		3	5				1	1				2	1	1	1			1						2								1			140	
136	1		1	1	1			1			1		1	1	1							1													136	
132	2		1	2	1			1			1		1	1	1							1													132	
128	3	3	2	2				1	2	2		3		2	2		2							2		1									128	
124	1	2	8					2	1			1	1	1	1									1		1									124	
120	4	2	4	3			1	1	4	2	2	1	1	1	1		1							2		1								1	120	
116		1	1					4	4	1	1	1	3				3						1		2		1								116	
112			4		1			4	1	1	1	1	3	3	3							1		2		1							1		112	
108			2	1	1			2	2		2		1	2	1		1					1		6		1								1	108	
104			2					4	2			3	1	1	1								4		3		1								104	
100			3					1	1	1		3	1	1	1								3		4		2								100	
96			1	1	1			3	7	1	1	1	4	1	2								2		2		1								96	
92			2					3	5			2	1	3	3		1						5		5		4								92	
88								3	1			1	1	2	2								4		2		4								88	
84		1						3	1		1	2	1	1	2								2		4		2								84	
80			2	1				2	1	3	1	1	3	1	1								1		5		3								80	
76		1						1	2	1	1	1	2				2						2		2		3								76	
72			1	1				1	2			1	2										1		5		1									72
68								1	1		1	1	1	1	1								2		2		3									68
64								1	1		1	1	1	1	1								1		2		1									64
60									1								1						1		2		1									60
56																	1						3		2		1									56
52								1	2														2		2		2									52
48							1	1					1											1		2		1								48
44																								1		1		1								44
40																								1		1		1								40
36																								2		2		1								36
32																								2		1		1								32
28																								2		2		1								28
24																								2		1		1								24
20																								2		1		1								20
16																								2		1		1								16
12																								2		1		1								12
8																								1		1		1								8
4																								1		1		1								4
0-3																								1		1		1								0-3
Total	15	18	54	14	6	6	29	69	25	10	13	21	26	16	23	22	10	48	30	12	39	9	5	69	19	28	37	13	17	9	12	15	38	35	Total	
Q3	144.5	144.5	142.0				127.5	125.2	122.8			129.0	118.0	114.7	121.0	118.0		116.0	116.7		118.5			110.5	102.5	96.0	97.8		103.0			85.0	79.0	76.3	Q3	
Md	131.3	130.7	126.5	126.0	126.0	116.0	115.3	111.7	111.0	110.0	109.0	104.7	104.0	104.0	102.0	102.0	102.0	101.3	100.0	96.0	95.6	95.0	93.0	92.4	85.0	84.0	82.8	82.0	70.0	69.0	66.7	66.0	62.7	62.0	Md	
Q1	123.8	123.0	112.5				99.0	100.1	93.0			94.5	87.3	72.0	91.5	91.5	80.0	80.0	89.0		87.5			80.2	71.5	68.0	70.6		45.0			55.0	50.0	45.0	Q1	
Range	120-162	79-150	73-158	73-164	99-162	88-142	49-141	52-155	57-150	79-128	70-137	73-148	72-145	56-143	50-140	73-138	60-135	34-143	26-143	51-131	40-154	53-114	81-117	28-142	32-145	20-129	46-111	49-129	28-125	31-104	49-104	36-98	10-142	17-121	Range	

Distributions of less than 5 cases were excluded.

-18-
TABLE XII

DISTRIBUTIONS OF SCORES MADE ON ACHIEVEMENT TEST, LEVEL I, FORM B, BY THIRD-YEAR STUDENTS OF ACCOUNTING IN FIFTEEN COLLEGES

	3	39	104	105	87	43	59	65	106	107	108	109	30	82	61	
177-178																177-178
176																176
172																172
168																168
164																164
160																160
156					1											156
152			1	1												152
148						1	1									148
144	1				1											144
140	1		1										1			140
136		2	1				1		1	1						136
132	1	1			1	1	1			2			1		1	132
128	1	1	2	1			1	1								128
124		3	4		1	2	1									124
120	1	1	3	1	1	1	1			2			1	1		120
116			1	2		2	4		1			1				116
112		2	1		1	3			1	2						112
108	1		1		1	1	3	1					1			108
104		2	2		1		4	1	1	4			4		1	104
100					1		2		2	1		4	2	2	1	100
96		1	1	1		3	3			3		2				96
92			2		1	3		1		4		1		1		92
88		2	1				1		1	2		2		1		88
84				1					2			6	1	1	1	84
80							1		1	2		2		1	1	80
76			2					1						1		76
72			2		1	3							1		2	72
68							1		1							68
64										1	1					64
60							1					1				60
56							1			1					1	56
52				1							1		1	1		52
48										1		1		1		48
44																44
40						1										40
36															1	36
32																32
28																28
24																24
20																20
16																16
12																12
8																8
4																4
0-3																0-3
Total	5	15	25	7	11	21	27	5	11	26	27	28	7	6	9	Total
Q3		129.0	126.8			119.5	119.3			113.0	105.7	104.0				Q3
Md	134.0	122.0	118.0	117.0	114.0	110.0	107.5	106.0	101.0	98.7	97.0	90.0	86.0	84.0	82.0	Md
Q1		105.5	94.5			93.7	98.3			91.0	85.8	74.7				Q1
Range	109-147	90-138	73-152	55-152	73-156	41-151	59-150	79-128	69-137	50-138	55-116	50-135	53-141	49-102	36-134	Range

Distributions of less than 5 cases were excluded.

TABLE XVI

DISTRIBUTIONS OF SCORES MADE ON ORIENTATION TEST, FORM A, BY SECOND-YEAR STUDENTS OF ACCOUNTING IN TWENTY-ONE COLLEGES

	12	3	20	60	8	103	101	129	132	59	114	67	102	48	86	65	61	46	173	84	71		
128-130																						128-130	
124																							124
120																							120
116				1							1												116
112																	1						112
108			1									1											108
104				1							1												104
100				1	1					2													100
96		2		1		1					2	1		1									96
92	1			2						4	2	1											92
88		1				1		2	1	1	3				1	1	1					3	88
84	1	3				1	1	1	1	1	4	1		1	1	1	1			1			84
80	1	1	1	1	1	1	2	2	1	5	5	2		1	1	1							80
76		2	1	1	3	1		1	1	3	3	3	1		2	2	2		1			1	76
72	1	3	1	3	2	2	2	1	1	3	3	3	2		4	2	2		1	1	1		72
68			1	2	3		1	2		6	4	3	1	4	3	3		1		2	3		68
64		1		2	1	3	1	1	1	8	4	4	1	1	4	2		1	3		3		64
60	1			1	1	1	2	3		4	9	3	1		2		2	1	3	1	2		60
56		1		1	1	1		1	1	4	11	2	1	2	3	2	2	3	4		2		56
52		2	1	1				2		3	3	6	1	2	2	2	2	2	4		7		52
48						2	1	1	2	6	6	5	1	1	3	3	2	2	1	3	4		48
44				1			1	1	2	5	2	3			5	4	1		2	2	5		44
40					2			2	1	4	4	2			1	4			3	3	5		40
36						1		2		3			1	2	1	3	3	3	1	3	7		36
32				1						1			1		1	3	3	3	3	3	6		32
28					1					1	2		1		1	2	3	2	1	3	4		28
24											1				1			2	4		4		24
20																	1						20
16																			1				16
12																						1	12
8																	1						8
4																							4
0-3																							0-3
Total	5	16	5	18	16	14	12	19	9	60	75	39	1	14	34	31	21	17	33	14	53	Total	
Q3		86.7		95.0	77.3			80.5		80.8	80.3	73.7			71.3	69.7	61.5	58.3	59.8		57.5	Q3	
Md	82.0	78.0	78.0	73.3	70.7	70.0	68.0	66.0	66.0	64.0	63.8	62.0	62.0	62.0	60.0	51.3	51.0	51.0	50.0	49.3	46.8	Md	
Q1		70.0		65.0	60.0			55.5		49.3	56.3	51.8			47.6	42.8	36.3	36.3	36.3		37.3	Q1	
Range	62-94	53-97	55-110	34-116	28-102	50-99	39-85	42-90	42-90	35-102	30-117	43-109	35-80	38-97	31-90	32-91	9-113	29-69	18-81	34-84	14-89	Range	

Distributions of less than 5 cases were excluded.

TABLE XVII

DISTRIBUTIONS OF SCORES MADE ON ORIENTATION TEST, FORM A, BY THIRD-YEAR STUDENTS OF ACCOUNTING IN THIRTEEN COLLEGES

	175	132	167	107	120	86	59	109	164	61	71	84	106	
128-130														128-130
124														124
120														120
116														116
112														112
108														108
104			1	1			1							104
100				1		1	1		1					100
96				1	1	1	1			1		1		96
92		1				1	1			1				92
88		1	2	1		2	8							88
84	1		4	3			7		1	1				84
80	1		2			4	2							80
76	-----	-----	1	4	1	1	2	1	-----	2	-----	-----	1	76
72	4	1	2	3	3		6	1		1				72
68			1	2	1	1	5				1		2	68
64	-----	1	3	3	1	2	14	2	1	-----	1	1	-----	64
60			2	1		1	7				2		1	60
56	1	1	1	1	2	3	11	1	1		1			56
52	1		1	2			5				1	1	2	52
48			1	3		1	4	1	1	2		1		48
44						3	6	1	1	1	3	1		44
40			2		1	1	5			2		1	2	40
36					1					1			2	36
32											1			32
28											1		1	28
24														24
20										1				20
16													1	16
12												1		12
8														8
4														4
0-3														0-3
Total	8	5	23	26	11	22	85	7	6	13	10	7	12	Total
Q3			85.3	84.7		83.5	77.5							Q3
Md	74.0	74.0	73.0	73.3	70.0	68.0	65.3	65.0	62.0	51.0	50.0	50.0	48.0	Md
Q1			61.5	62.0		56.7	56.5							Q1
Range	55-85	56-93	41-104	50-105	36-96	43-103	40-105	45-78	45-102	21-97	28-68	15-96	19-97	Range

Distributions of less than 5 cases were excluded.

