Franklen Lundquest - Central Lefe
M.A.A. COMMITTEE ON HIGH SCHOOL CONTESTS

ANNUAL HIGH SCHOOL MATHEMATICS EXAMINATION

OFFICE OF THE EXECUTIVE DIRECTOR OLDFATHER HALL (UN-L) LINCOLN, NEBRASKA 68588 U.S.A. (TELEPHONE 402-472-2257)

SPONSORED JOINTLY BY THE
MATHEMATICAL ASSOCIATION OF AMERICA
SOCIETY OF ACTUARIES-MU ALPHA THETA
NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS
CASUALTY ACTUARIAL SOCIETY

HONOR ROLL STUDENTS, 1974 and 1975

More than two-thirds of the Honor Roll Contestants on both the 1974 and the 1975 Examination were high school seniors but each of the other classes were represented in significant numbers. Notably for each year there were at least ten or twelve freshmen on the honor roll, a circumstance of long standing as attested to by the number of gold medal recipients (contestants who were high scorers in their school for four consecutive years).

Anecdotal data on Honor Roll Contestants demonstrates the degrees of mathematical sophistication and of general academic ability. For example, a 17-year old senior who wrote the examination three times is reported to have SAT Verbal Aptitude 680, Mathematical Aptitude 800, CEEB Mathematics Achievement 800, Advanced Placement in Mathematics 5, Advanced Placement in Chemistry 5, and to be the recipient of an extracurricular activity award for development of a war games club, a member of the National Honor Society, and a National Merit Scholarship winner. For another 17 year old senior, it is reported that in his sophomore year, in addition to geometry, he completed the 11th grade full year trigonometry course independently and then elected the 12th grade probability and statistics course. It is remarked that this student "despite his formidable mental capacity is . . . warm, unassuming, and funny."

For the other side of the coin, it is to be remarked that high school mathematics teachers play an important role both in the identification and in the encouragement of students of academic abilities. For example, one School Contest Manager writes, "This student is 13-years old, he is currently reading books on calculus -- score 125." Another School Contest Manager identified a sixth grader -- score 94, currently enrolled in an accelerated junior class in mathematics.

Some statistical data was included in a report which I made last April to the National Council of Teachers of Mathematics (Note A). Two new tables are presented in this report. Table 1 shows the comparison between scores on CEEB Achievement Tests in mathematics and scores on the 1975 Examination for 296 contestants. Table 2 shows the comparison of scores between the 1974 and 1975 Examinations for 329 contestants, 118 of whom were on both the 1974 and 1975 Honor Rolls.

The whole art of teaching is only the art of awakening the natural curiosity of young minds. -- Anatole France

Note A: Copies of the report "Mathematics Contest-Honor Roll Students" are available upon request from Committee on High School Contests, 1029 Oldfather Hall (University of Nebraska-Lincoln), Lincoln, Ne. 68588.

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Henry M. Cox Executive Director

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Table 1. COMPARISON BETWEEN SCORES ON CEEB ACHIEVEMENT TEST IN MATHEMATICS AND ON THE 1975 EXAMINATION (HONOR ROLL CONTESTANTS)

| CEEB Test | | Score on 1975 Examination | | | | | | | | | | | | | | | Number of | |
|--------------------|-----|---------------------------|-------|---------------------------------------|----------|-------|-------|-------|-------------|----|-------------------------|---------|---------|---------|---------|---------|-----------|--|
| | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | | | 110-119 | 120-129 | 130-139 | 140-149 | Contest | ants | |
| 800 | | | | | | | | | 129 | 70 | 23 | 8 | 7 | | | 237 | | |
| 750-790 | | | | | | | | | 31 | 4 | 3 | 1 | 1 | | | 39 | | |
| 700-740 | | | | | | | | | 7 0, | 5 | 1 | | | | | 12 | | |
| 650-690 | | | | ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; | | | | | 4 | | | • | | | | 4 | | |
| 600-640 | | | | | <u>.</u> | | | | 1 | 3 | | | | | | 4 | | |
| N. mb as a | · c | | | | | | | | | | The party of the second | 1 | | | | | | |
| Number of Contesta | | . : | | | | | | | 172 | 82 | 27 | 9 | 8 | | | 296 | | |
| | | | | | | | | | | | | • | | | | | | |

Table 2. COMPARISON BETWEEN SCORES ON THE 1974 and THE 1975 EXAMINATIONS (HONOR ROLL CONTESTANTS)

| 1974 | Score on 1975 Examination | | | | | | | | | | | | | | | |
|--------|---------------------------|-------|-------|-------|-------|-------|-------|-------|--------------------------|-------|------------|---------|---------|---------|---------|--|
| core | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-99 | 100-109 | 110-119 | 120-129 | 130-139 | 140-149 | |
| 40-150 | <u></u> | | | | - | | | | 21- 21- 21- 21- | | 1 | 1 | 1 | | | |
| 20-139 | | | | | | | | | | 1. | - <u>1</u> | 2 | 3 | . 1 | | |
| 00-119 | | | | | | | | | 6 | 18 | 5 | 6 | 3 | . 1 | 1 | |
| 80-99 | | | | | | | | | 22 | 26 | 17 | 2 | 1 | | | |
| 60-79 | | | | | | | | | 67 | 35 | 12 | 2 | | | | |
| 40-59 | | | | | | | | | 46 | 20 | 9 | 2 | | | | |
| 20-39 | | | | | | | | | 11 | 3 | 3 | | | | | |
| 0-19 | | | | | | | | | , | 1 | | | <u></u> | | · | |

Area Contest Chairman

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Nevada: (See Northern California)

New Brunswick: (See Atlantic Provinces)

New Hampshire: Mr. Owen R. Koppang, Department of Mathematics, Concord High School, Warren Street, Concord, New Hampshire 03301 New Jersey: Professor Francis Masat, Department of Mathematics, Glassboro State College, Glassboro, New Jersey 08028 New Mexico: (See Arizona) New York

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Newfoundland: (See Atlantic Provinces)

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Samoa: (See Guam)

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Tennessee: Mr. Sherwood Z. Smith The National Life & Accident Ins. Co., National Life Center, Nashville, Tennessee 37250 Texas: Professor James R. Boone, Department of Mathematics, Texas A & M University, College Station, Texas 77843 United Kingdom: Mr. R. W. Payne, Third Master, Dulwich College, London SE 21 7LD, England

Utah: (See Colorado)

Vermont: (See Massachusetts)

Virginia: (See District of Columbia)

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Washington: Professor Roy A. Johnson, Department of Mathematics, Washington State University, Pullman, Washington 99163 West Virginia: Prof. I. Dee Peters, Department of Mathematics, University of West Virginia, Morgantown, West Virginia 26506 Wisconsin: (Note A)

Wyoming: (See Colorado)

Yukon: (See British Columbia)

Note A: No Regional Contest Chairman for 1976; correspondence should be addressed to Professor Henry M. Cox, 1029 Oldfather Hall, The University of Nebraska, Lincoln, Nebraska 68588