The Mathematical Association of America

(INCORPORATED)

THE ANNUAL HIGH SCHOOL MATHEMATICS EXAMINATION

Purpose: The aims of the examination are to create and to sustain interest in mathematics among secondary school students, and to develop sound scholarship in the subject.

The examination is conceived as an important adjunct to the classroom work in the high schools. It is an enrichment of the high school mathematics curriculum based on the firm belief that much mathematics can be learned through selective problem-solving.

The attempt is made to convey to the student some of the deeper implications and fascination of the mathematics they study.

Nature and Content: Not confined to a specific syllabus, the examination is based upon the concepts and skills associated with plane geometry and simple coordinate geometry, elementary and intermediate algebra, trigonometry, and upon informal space notions generally learned in elementary and high schools.

For some time extensive efforts have been made to modify the mathematics curricula in elementary and high schools. New subject matter or new points of view receiving general acceptance are reflected in the contest examination.

The 1974 edition of the examination will consist of thirty questions of equal weight, scored with a correction formula. The items will vary from relatively easy to very difficult, requiring the student to meet new situations. However, no advanced mathematics is needed to solve any of the problems posed.

To facilitate scoring, the questions are set in a multiple-choice pattern. The examination is proctored in the high schools.

Time and Duration: The examination is scheduled usually for the first two periods of a Tuesday early in March. Contestants are allotted eighty minutes of actual working time.

Uses: A printed summary of results is furnished to each registered school for the year of participation. No overall list of scores by school names is published. In place of an unwieldy single listing, a ten-division geographical grouping is used. Participants are cautioned not to make unjustified comparisons between smaller schools with limited course offerings and larger schools with better opportunities. No school should be deterred from participation for fear of embarrassment since the basis for judging performance is relative.

These examinations cannot, by their very nature, be "standardized". To attempt to set up "norms" would be inconsistent with our objectives. However, national and regional medians and quartiles are provided, and these may have suggestive value for judging performance.

Eligibility: Each school is permitted to make its own decision as to the number of participants. For official status the minimum number of participants within a school is three. In some schools only the superior students are permitted to enter; in others, the test is open to all with the necessary background.

We strongly recommend as wide a participation as possible. Talent is often hidden, and the opportunity for its discovery must be provided. Allow good students to enter regardless of grade level. Winners are on occasion lower-grade students.

History and Sponsorship: At a meeting of the Section Officers of the Mathematical Associantion of America (M.A.A.) in August 1955, Professor W. H. Fagerstrom, then chairman of the Contest Committee of the Metropolitan New York Section, suggested that, since the annual high school mathematics examination, initiated in 1950 by the Metropolitan New York Section, had, in effect become national in scope, it would be appropriate for the parent association, the M.A.A., to sponsor it. Started as an educational activity for a small number of New York City high schools, it had grown, by 1955, to 23,000 participants in 881 high schools, representing nearly every section of the United States and parts of Canada.

Just at that time, the Society of Actuaries had designated a committee to study means to counteract the decreasing numbers of college graduates seeking careers in mathematical fields. When it was determined that the long-term answer to the problem was stimulation of interest in mathematics at the high school level, contact between committee members of both organizations developed. Thereupon, the Society of Actuaries joined with the M.A.A. to provide the additional financial support needed to organize and promote the competition effectively on a full-scale international basis.

Additional sponsorships were granted to Mu Alpha Theta (1965), National High School and Junior College Mathematics Club, to the National Council of Teachers of Mathematics (1968) whose major goal is the improvement of mathematics instruction in elementary schools, secondary schools, and two-year colleges, and to the Casualty Actuarial Society (1971).

The Contest is financed primarily by the registration fees paid by the participating schools and by the sale of previous examination materials. Additional support is supplied by the sponsors.

Administration: A list of Regional Contest Chairmen is available upon request. Prior year examinations may be ordered from Henry M. Cox, Director, M.A.A. High School Mathematics Contest, Room 1026 Oldfather Hall, The University of Nebraska, Lincoln, Nebraska 68508.

ANNUAL HIGH SCHOOL MATHEMATICS EXAMINATION

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

Section	Zip Code	Sub-Section	Contest Chairman for 1974
Allegheny Mountain	15000-16800	Pennsylvania (part)	Prof. Frank Kocher
	24700-25499	West Virginia (part)	Prof. I. Dee Peters
	25800-26899	West Virginia (part)	Prof. I. Dee Peters
Florida	- - - - - -	Canal Zone	- - - - - - - - - - -
	32000-33999	Florida	Mr. William L. Hoop
	00600-07999	Puerto Rico	Prof. Eugene A. Francis
	00901-09999	Puerto Rico	Prof. Eugene A. Francis
	00801-00850	Virgin Islands	- - - - - - - - - -
Illinois	60000-62999	- - - - - - - -	Prof. Gary Tippett
Indiana	46000-47999	- - - - - - - -	Prof. Wollan/Mr. Allen Booth
Iowa	50000-52899	- - - - - - - -	Mr. James R. Hopson
Kansas	66000-67999	- - - - - - - -	Mr. Steven L. Cooper
Kentucky	40000-42799	- - - - - - - -	Dr. Amy King
Louisiana-Mississippi	70000-71499	Louisiana	Prof. Houston T. Karnes
	38600-39799	Mississippi	Prof. David E. Cook
Maryland-D.C.-Virginia	20000-24699	- - - - - - - -	Prof. Richard Molloy
Metropolitan New York	10000-11999	New York (part)	Prof. Morton Friedman
	12400-12799	New York (part)	Prof. Hector B. Foisy
Michigan	48000-49999	- - - - - - - -	- - - - - - - - - -
Missouri	63000-65899	- - - - - - - -	Prof. Kenneth S. Hirschel
Nebraska	68000-69399	Nebraska	Prof. Charles Warden
	57042-57078	South Dakota (part)	Prof. Charles Warden
New Jersey	07000-08999	- - - - - - - -	Mr. Brooks/Prof. Masat
North Central	- - - - - -	Manitoba	- - - - - - - - - - -
	55000-56799	Minnesota	Prof. Wayne Roberts
	58000-58899	North Dakota	Prof. John L. Whitcomb
	57000-57013	South Dakota (part)	Prof. Charles Warden
	57100-57699	South Dakota (part)	Prof. Charles Warden
	- - - - - -	Saskatchewan	- - - - - - - - - - -
	- - - - - -	Thunder Bay, Ontario	Mr. Roger A. Haslegrave
Northeastern	06000-06999	Connecticut	Mr. Leslie E. Korper
	03900-04999	Maine	Mr. Llewellyn Jensen
	01000-02799	Massachusetts	Prof. J.R.K. Stauffer
	- - - - - -	New Brunswick/Mar. Pr.	Prof. Wm.S.H. Crawford
	03000-03899	New Hampshire	Mr. Owen R. Koppang
	02800-02999	Rhode Island	Prof. J.R.K. Stauffer
	05000-05999	Vermont	Prof. J.R.K. Stauffer

Contest Chairmen Continued--Annual High School Mathematics Examination

Section	Zip Code	Sub-Section	Contest Chairman - 1974
Northern California	93600-96199	California (part)	Dr. Wm. H. Landis
	96700-96999	Hawaii & Pacific Islands	Prof. Richard A. Coburn
	89000-89899	Nevada	Dr. Wm. H. Landis
Ohio	43000-45899	Ohio	Prof. Leo Schneider
	25500-25799	West Virginia (Cabell Co)	Prof. I. Dee Peters
Oklahoma-Arkansas	71600-72999	Arkansas	Prof. Earl E. McGehee, Jr.
	73000-74999	Oklahoma	Prof. Raymond L. McKellips
Pacific Northwest	99500-99999	Alaska	Mr. Donval R. Simpson
	83200-83899	Idaho	Dr. David J. Ferguson
	59000-59999	Montana (except 59715)	Dr. Fred Springsteel
	97000-97999	Oregon	Prof. Alan R. Hoffer
	98000-99499	Washington	Prof. William Webb
	- - - - - -	Alberta	Dr. Stephen Willard
	- - - - - -	British Columbia	Prof. Don Miller
	- - - - - -	Northwest Territory	Prof. Don Miller
	- - - - - -	Yukon	Prof. Don Miller
Philadelphia	16900-19699	Pennsylvania (part)	Dr. Albert E. Filano
	19700-19999	Delaware	Mr. Jack Fink
Rocky Mountain	80000-81699	Colorado	Prof. Bob Vunovich
	57700-57799	South Dakota (part)	Prof. Charles Warden
	84000-84799	Utah	Prof. Bob Vunovich
	82000-83199	Wyoming	Prof. Bob Vunovich
	59715	Montana (part)	Dr. Fred Springsteel
Seaway	12000-12399	New York (part)	Prof. Hector B. Foisy
	12800-13999	New York (part)	Prof. Hector B. Foisy
	14000-14399	New York (part)	Dr. Louis Scholl
	14400-14999	New York (part)	Prof. Hector B. Foisy
	- - - - - -	Ontario (part)	Mr. Roger A. Haslegrave
	- - - - - -	Quebec	- - - - - - - - - - -
Southeastern	35000-36999	Alabama	Prof. Truman Baker
	30000-31999	Georgia	Prof. Robert W. Batten
	27000-28999	North Carolina	Mr. Sherrill G. Hall
	29000-29999	South Carolina	Dr. H. E. Scheiblich
	37000-38599	Tennessee	Mr. Joseph P. McAllister
Southern California	90000-93599	California (part)	Dr. Dwight O. Coblentz
Southwestern	85000-86599	Arizona	Prof. D. R. Arterburn
	87000-88499	New Mexico	Prof. D. R. Arterburn
	79900-79999	Texas (El Paso Co.)	Prof. William S. McCulley
Texas	75000-79899	Texas (part)	Prof. William S. McCulley
Wisconsin	53000-54999	Wisconsin	- - - - - - - - - - -