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#### ABSTRACT

This pamphlet provides information concerning published mathematics tests in eight broad categories: arithmetic; junior high school; batteries and general listings, K-14; high school, general; algebra; geometry; trigonometry; and college-related. For each test listed, the document provides title, author, publisher, and dates of publication for original and revised forms, grade level, list of test forms, information on the availability of norms, and sources of additional information. A directory of test publishers is provided. Nine agencies offering evaluation services related to testing are listed, and the services offered by each are briefly described. A list of references is included. (SD)

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# mathematics tests available in the united states

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# Mathematics Tests Available in the United States

THIS PAMPHLET is a revision of a publication of the same name that was first published by the Council in 1959 and revised in 1968 and 1972. In 1972 the mathematics curriculum was fairfy stable, the issue of accountability was beginning to assume a prominent role in many school districts, and a number of elementary school programs had been developed with rather detailed behavioral objectives. Today, as we celebrate our 200th birthday, the elementary mathematics curriculum is less stable, accountability remains a very real issue, and interest in behavioral objectives has declined to the point where they are rarely a topic of discussion. In addition, declining test scores in the basic skill areas are making almost daily headlines, and most public and Private educational institutions have found it necessary to do some fiscal beltinghtening.

The primary purpose of this Pamphlet is to provide a comprehensive listing of mathematics tests available in the United States that may assist educators in meeting their evaluation needs. The types of tests included in this pamphlet are listed in the Contents. Tests covering mathematics from the primary school through the first two years of college are included. A special effort was made to identify tests that might be useful for junior college placement. Publishers should be aware that tew tests are available that are sensitive to such placement needs. The section on college-related listings contains a few possibilities, and two programs designed specifically for junior colleges are described under

"Related Evaluation Services" on page 28

No attempt has been made in this edition to include either tests that are designed for a particular text series or tests published outside the United States, although the next edition of this pamphlet is likely to be entitled "Mathematics Tests Available in the United States and Canada" Several new tests have been added to the 1972 listings, and a number of the 1972 listings that are now out of print have been removed. Publishers whose tests appear in this pamphlet were given the opportunity to verify their listings for accuracy and completeness. Although the current listing is intended to be complete, new tests are always being developed. The "Directory of Publishers" on page 27 should be useful in getting information on newly developed tests.

The listing of a test does not constitute an endorsement by the National Council of Teachers of Mathematics. Teachers and curriculum specialists who are interested in a particular test should request a sample copy from the publisher and examine it carefully for relevance to the particular use in-

tended.

Although the primary purpose of the pamphlet is to provide a listing of mathematics tests, the pamphlet also contains a number of descriptions of related evaluation services



that may be useful to educators. These descriptions and addresses, follow the test listings, and the "Directory of Publishers."

Information on the selection and use of tests is available in the references cited in the final section of this pamphlet included in these are the seven volumes of the Mental Measurements Yearbook series, constituting the major reference work on tests with comprehensive lists and reviews. When a reference is made to this source in the test listing, it appears' immediately below the publisher's name with a roman numeral identifying the volume and an arabic numeral identifying the entry (not the page). Under American School Authmetic Readiness Tests, for example. "V. 456" is given after the name of the Publisher. This means that a review of, or a reference to, these tests is found in the fifth Yearbook under entry 456.

Information for each test is given in the following order

Title
Authorship
Grade levels and forms
Availability of norms
Publisher
Reference to additional information
Original date of publication
Date of latest revision



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#### **TESTS**

#### **Arithmetic**

#### American School Arithmetic Batteries

Willis E Pratt and Robert V Young

Primary, grades 2-3, intermediate, grades 4-6, advanced, grades 7-9, Forms X and Y

Norms

**Bobbs-Mernil Company** 

Not listed

1975

None

#### American School Arithmetic Readiness Test

Willis E. Pratt, Robert V. Young, and Gilbert L. Betts

Kindergarten and grade 1

Norms
Bobbs-Merrill Compans

V. 456

t94 1

1955

#### The APELL Test (Premath; Available in Spanish)

Fleanor V. Cochran and James L. Shannon

Ages 3-7

Criterion-referenced and norm-referenced

Edcodyne

VII. 740

1969

1972

#### Arithmetic (Fundamentals and Reasoning)

Robert K. Speer and Samuel Smith

Grades 3-6. Forms A and B

Norms

Psychometric Afbhates

Not listed

1939

1958

#### Arithmetic (Fundamentals and Reasoning)

Robert K. Speer and Samuel Smith

Grades 6-8. Forms A and B

Norms

Psychometric Athliates

VI, 613

1938

1960

#### Basic Arithmetic Skill Evaluation

Lola J May and Vernon R Hood

Grades 1-9

Not given

Media Research Associates

Not given

1972

None

#### Basic Skills in Arithmetic

William E. Wrinkle, luanita Saunders, and Elizabeth H.

Kendel

Grades 6- 12, Forms A and B



Norms Science Research Associates 111, 335 1945 Nome

#### **Bobbs-Merrill Arithmetic Achievement Tests**

William E. Kline and Harfy J. Baker Grades 1-8, Forms A and B. Norms Bobbs-Merrill Company VI. 615, VII. 513 1963 None

# Buswell-John Diagnostic Test for the Fundamental Processes in Arithmetic

G.T. Buswell and Lenore John Grades 2-8, detailed test, individually administered No norms Bobbs-Merritt ComPany II, 1456, IV, 413 1925 None

#### California Achievement Tests, 1957 Edition - Arithmetic

Ernest W. Tiegs and Willis W. Clark Lower primary, grades 1-2, and upper primary, grades H2-E4, elementary grades 4-6, and Junior high, grades 7-9. Forms W. X. Y. and Z.

Norms California Test Bureau 'McGraw-Hill V. 468, VI. 616 1957 1963 Renorming

#### Concept Assessment Kit - Conservation

Marcel E. Goldschimid and Peter M. Bentler Ages 4-8 Norms Educational and Industrial Testing Service

Reviewed in Journal of Educational Measurement 6 (Winter 1969) 263-69 and in Professional Psychology 1 (Fall 1970) 491-93

None

·

#### Cooperative Primary Tests: Mathematics

Not given
Grades 1 5-2 5, Forms 12A and 12B, grades 1 5-3 9, Forms
23A and 23B
Spring norms for grade 1, Spring and fall norms for grades 2

Spring norms for grade 1, spring and fall norms for grades 2 and 3

Educational Testing Service Not listed

Not listed 1965

None

#### Diagnosis: An Instructional Aid, Mathematics

Developed by SRA Grades 1-4, Level A, grades 4-6, Level B Criterion-referenced, diagnostic tests Science Research Associates



Not listed Level A, 1973 Level B. 1972 None

#### Diagnostic Tests and Self-Helps in Arithmetic

Leo i Brueckner

Grades 3-12 (twenty-three tests for screening basic facts. whole numbers, fractions, decimals, percent, measurement)

No norms

California Test Bureau McGraw-Hill

V 472

1955 None

**Emporia Primary Arithmetic Test** 

Patricia Pease and Merritt W. Sanders

Grade 1, Forms IA and iB, first semester, Forms IIA and IIB, second semester

Norms

Emporia Kansas State College

VII. 5 19 1964

None

Emporia Arithmetic Tests, Elementary

Patricia Pease and Merritt W. Sanders

Grades 2-3, Forms IA and IB, first semester, Forms IIA

and IIB. second semester

Norms

Emporia Kansas State College

VII. 519

1964 None

Emporia Arithmetic Tests, Intermediate

Ruth Otterstrom and Merritt W. Sanders

Grades 4-6, Forms IA and IB, first semester, Foams IIA and 118, second semester

Norms

Emporia Kansas State College

VII. 519 1964

None

**ERB Modern Arithmetic Test** 

Frederic Bonan et al

Grades 5~6, Form B

No norms

Educational Records Bureau VII, 518

1969, 1970

None

Iowa Test of Basic Skills: Test A, Arithmetic Skills

E. F. LindQuist and A. N. Hieronymus, eds.

Grades 3-9. Forms 1-4 Norms

Houghton Mifflin Company

V, 16, VI, 13

Forms 1 and 2, 1955, forms 3 and 4, 1971 None



#### lowa Tests of Basic Skills Primary Ballery, Test M. Mathematics Skills

A N Hieronymus, E f Lindquist, and H D Hoover

Grades 17-35, Forms 5 and 6

Norms

Houghton Mittlin Company

Not listed

1972

None

#### **KeyMath Diagnostic Arithmetic Test**

Austin J. Connolly, William Nachtman, and E. Milo Pritchett

Preschool through seith grade, no upper limit for individual remedial use. One form

American Guidance Service

Not listed

1971

None

#### Mastery: An Evaluation Tool, Mathematics

Developed by SRA

Grades 1-8

Criterion-referenced, objective-based, machine-scorable, customized, and catalog tests

Science Research Associates

Not listed

1974 and 1975

None

#### A Mathematics Test for Grades Four, Five, and Six

Stanley | Le Jeune

Grades 4-6

Norms

Psychometric Attiliates

VII. 476 1969

None

#### MetroPolitan Achievement Tests: Primary Land Primary II\*

Walter N. Durost, Harold H. Bixler, J. Wayne Wrightstone. George A. Prescott, and Irving H. Balow

Primary 1, grades 15-24, Primary II, grades 25-34

Harcourt Brace Jovanovich

VII. 14 1970

None

\*Note: The mathematics test is not available as a separate

#### Metropolitan Arithmetic Tests

Walter N. Durost, Harold H. Bixler, Gertrude H. Hildreth, Kenneth W. Lund, and J. Wavne Wrightstone

Elementary, grades 3-4, Forms A and B, intermediate. grades 5-6. Form A. advanced, grades 7-9, Forms A and Cm

Norms

Harcourt Brace lovanovich

V1, 627

1958

None

#### Prescriptive Malhematics Inventory

John K. Gessel

Orange Level (grades 4.5), Aqua Level (Brades 5.6), Purple Level (grades 6,7), Level C (grades 7-9)

Norms (criterion-referenced diagnostic tests)

California Test Bureau, McGraw-Hill

Not listed

1971

1975

#### Public School Achievement Tests: Arithmetic Computation and Arithmetic Reasoning

Jacob 5 Orleans

Grades 3 and 8

Norms

Bobbs-Mernil ComPany

VI, 606, 612

1928. Manual. 1959

None

#### SRA Achievement Series: Arithmetic Subtest

Louis P. Thorpe, D. Welty Letever, and Robert A. Naslund Crades Primary 1, Primary 11, and 4-9 (multilevel), Forms E and F

Norms

Science Research Associates

VI. 632, VII. 526

Forms E and F 4-9 (multilevel), Fall 1971, 1-4 (primary).

Fall 1972

#### Stanford Arithmetic Tests: Intermediate I, Intermediate II, and Advanced

Truman L Kelley, Richard Madden, Eric F Gardner, and Herbert C Rudman

Grades 4 0-5 4, 5 5-6 9, 7 0-9 9, Forms W and X for all Norms

Harcourt Brace Jovanovich VI, 637, VII, 527

1964-1965

None

#### Stanford Diagnostic Arithmetic Test, Levels I and II

Leslie 5 Beatty, Richard Madden, and Eric F. Gardner Grades 2 5-4 5, 4 5-8 5, Forms W and X

Norms

Harcourt Brace Jovanovich

VII, 528

1966

None

#### Stanford Early School Achievement Test: Levels I and II\*

Richard Madden and Eric F. Gardner

Level I, grades K 1-11, Level II, grades 11-18

Norms

Harcourt Brace lovanovich

VII. 28

1969, 1970

None

\*Note: The mathematics test is not available as a seParate test



#### Tests of Achievement in Basic Skills, TABS-MATH, Level K

James C Young

Grade Kindergarten, Forms 1 and 2

Educational #nd Industrial Testing Service

Not Inted

1974

None

#### Tests of Achievement in Basic Skills, TABS-MATH, Level 1

lames C Young

Grade 1, Forms 1 and 2

Norms

Educational and Industrial Testing Service

Not Listed

1974 None

Tests of Achievement in Basic Skills, TABS-MATH, Level 2

lames C. Young

Grade 2, Forms 1 and 2

Norms

**Educational and Industrial Testing Service** 

Not listed

1974

None

#### Tests of Achievement in Basic Skills, TAB3-MATH, Level A

James C Young

Grades 3-4, Forms 1 and 2

Norms

**Educational and Industrial Testing Service** 

Not listed

1973

None

#### Tests of Achievement in Basic Skills, TABS.MATH, Level &

lames C Young

Grades 4-5. Forms A and B

Norms

**Educational and Industrial Testing Service** 

Not listed 1971

None

#### Tests of Adult <u>Basic</u> Education (adapted from CAT.57)— Arithmetic Test

CTB. McGraw-Hill staff

Forms 1 and 2, Levels D (adapted from junior high level of CAT). M (from the elementary level), and E (from the

upper primary (evel)

Norms

California Test Bureau/McGraw-Hill

VII, 60

1967

None

#### A Test of Arithmetic Principles, Elementary Form

Ronald C Welch and Charles W Edwards, Jr.

Grades 3-6

Indiana University

Ronald C. Welch at Indiana University

1965

None



# **Junior High School**

#### California Survey Series: Survey of Arithmetic Achievement

Ernest W. Tiegs and Willis W. Clark

Grades 7-9

Norms

California Test Bureau/McGraw-Hill

VI, 638

1959

None

#### Cooperative Mathematics Tests: Arithmetic

Not given

Grades 7-9. Forms A. B. and C

Norms

**Educational Testing Service** 

VI, 607; VII. 515

1962, 1963

None

#### Cooperative Mathematics Tests: Structure of the Number System

Not given

Grades 7-8, Forms A and B

Norms

**Educational Testing Service** 

VI, 655, VII, 466

1962, 1963

None

#### Emporia Arithmetic Tests, Junior High

Teleen Engleson and Merritt W. Sanders

Grades 7-8, Forms IA and IB, first semester; Forms IIA

and IIB, second semester

Norms

Emporia Kansas State College

VII, \$19 1964

1704

None

#### Mathematics Test (Content Evaluation Series)

Gilbert Ulmer

Junior high school (grades 7-9)

Norms

Houghton Mifflin Company

VII, 475

1969

None

#### Minimum Essentials for Modern Mathematics

Ernest Haves

Grades 6-8; Forms P and Q

Norms

Hayes Educational Test Laboratory

VI, 587 1963

1971

1971

# Minnesota High School Achievement Examinations: Mathematics

V. L. Lohmann, ed.

Grades 7-9; three forms, one revised each year



Norms American Guidance Service VI, 577, 582 1962, 1963 1970, 1971, 1972

#### National Achievement Tests: General Mathematics

Harfy Eisner Grades 7-9, Forms A and B Norms Psychometric Affiliates Not listed 1942 1960

#### Portland Prognostic Tests for Mathematics

Ernest Haives
Grades 6 S-8.0 and 8 5-9 0, Forms Alland B
Norms
Haives Educational Test Laboratory
VI, 588
1960
1971

#### Tests of Achievement in Basic Skills, TABS-MATH Level C

James C. Young Grades 7-9, Forms A and B Norms Educational and Industrial Testing Service VII, 492 1971 None

#### Tests of Achievement in Basic Skills (Mathematics)

lames C. Young and Robert R. Knapp Grades 7-9, Forms 1 and 2 Criterion referenced Educational and Industrial Testing Service Not listed 1971 None

#### Traxler Brief Survey Test for Arithmetic Skills

Arthur Traxler Grades 7- 12, Forms A and B Norms Bobbs-Merrill Company III, 336, IV, 409, V, 467 1947 1953

## Batteries and General Listings, K-14

Academic Promise Tests: Numerical
G. K. Bennett, M. G. Bennett, D. M. Clendenen, J. E. Doppelt, J. H. Ricks, Jr., H. G. Seashore, and A. G. Wesman. Grades 6–9, Forms A and B. Norms
The Psychological Corporation
VI, 766, VII. 672
1959
1965



14

#### **American Numerical Test**

John J. McCarty

Junior high through college

Norms

**Psychometric Attiliates** 

VI, 604 1962

None

# **Beckmann-Bell Mathematical Competency Test for Enlight- ened Citizens**

Milton Beckmann and Jack Bell

None specified

None

Mathematical Testing Service

Lincoln, Nebraska

Not listed

1973

None

#### California Achievement Tests, 1970 Edition - Mathematics

Ernest W. Tiegs and Willis W. Clark

Forms A and B, Levels 1, 2, 3, 4, 5 (grades 1 5-12)

Norms

California Test Bureau, McGraw-Hill

V. 468, VII. 455

1957

1970

#### Career Planning Program

American College Testing Program Staff

Grades 8-11

Norms

Houghton Mitflin Company (see P. 28)

Not listed

1974

None

#### Christofferson-Guiller Analytical Survey

H S Christofterson and W S Guiler

Grades 7-12, Forms 3 and 4

Norms

Bobbs-Merrill Company V, 457

1930

1957

#### Comprehensive Testing Program

Committee

Grades K-12, form A, Levels 1-5

Norms

Educational Records Bureau

Not listed

1974

None

#### Comprehensive Tests of Basic Skills - Mathematics Test

CTB/McGraw-Hilf staff

Forms Q and R, Levels 1 (grades 25-4), 2 (grades 4-6),

3 (grades 6–8), and 4 (grades 8–12)

Norms

California Test Bureau/McGraw-Hill

VII, 5 14



1968 1973 Form S

#### Contemporary Mathematics Test

CTB/McGraw-Hill staff

Lower elementary (grades 3-4), upper elementary (grades 5-6), junior high (grades 7-9), advanced (grades 9-12), algebra (end of first Year of study, grades 8-9)

Norms

California Test Bureau/McGraw-Hilli

VII, 462, 463, 464, 499

1965

None

#### **Cornell Class Reasoning Test**

Robert H. Ennis, William L. Gardiner, Richard Morrow, Dieter Paulus, and Lucille Ringel

Grades 4-12, Form X

In Coop Research Project Report 1680, ERIC ED003818

Critical Thinking Project, Education Building, University of Illinois, Urbana, Illinois 6 1801

Not listed

1964 None

#### **Cornell Conditional Reasoning Test**

Robert H. Ennis, William L. Gardiner, John Guzzetta, Richard Morrow, Dieter Paulus, and Lucille Ringel

Grades 4-12, Form X

In Coop Research Protect Report 1680, ERIC ED003818

Critical Thinking Protect, Education Building, University of Illinois, Urbana, Illinois 61801

Not listed

1964

None

#### Cornell Critical Thinking Test, Level X

Robert H. Ennis and Jason Millman

Grades 7-12

Norms

Critical Thinking Project, Education Building, University of

Illinois, Urbana, Illinois 61801

VII 729 1961

1971

#### Cornell Critical Thinking Test, Level Z

Robert H. Ennis and Jason Millman

Grades 11-12, College

Norms

Critical Thinking Project, Education Building, University of

Illinois, Urbana, Illinois 6 1801

VII, 779

1961

1971

#### Differential Aptitude Tests: Numerical Ability

G. K. Bennett, H. G. Seashore, and A. G. Wesman

Grades 8-12 and adult. Forms 5 and T

The Psychological Corporation

Norms VII. 673

1947 1972

#### Iowa Fests of Basic Skills: Test M, Mathematics Skills

A N Hieronymus E F Lindquist, and H D Hoover Grades 3-9. Forms 5 and 6

Norms

Houghton Mifflin Company

Not listed

1971

None

#### Metropolitan Achievement Tests: High School Battery\*

Walter N. Durost, William H. Evans, James D. Leake.

Howard A. Bowman, Clarke Cosgrove, John G. Read

Grades 9-13, Form Am

Norms

Harcourt Brace Iovanovich

Vt. 15, Vtl. 15

1962

None

\*Note. The mathematics test is not published as a separate test

#### 1970 Metropolitan Mathematics Tests

Walter N. Durost, Harold H. Bixler, J. Wayne Wrightstone,

George A. Prescott, and Irving H. Balow

Elementary, grades 35-49, intermediate, grades 50-6.9, advanced, grades 7.0-9.5, Forms F. G. and H.

Norms

Harcourt Brace Jovanovich

VIt 14

1970 None

#### Modern Mathematics Supplement to the Iowa Tests of Basic Skills

E. F. Lindquist, A. N. Hieronymus, and H. D. Hoover

Grades 3-9, 1 Form

Norms

Houghton Mifflin Company

VII, 481

1968

None

#### Peabody Individual Achievement Test: Mathematics Subtest

Lloyd M. Dunn and Frederick C. Markwardt, Jr.

Kindergarten through adult. One form

Norms

American Guidance Service

Not listed

1970

None

#### Sanders-Schrader General Mathematics Test

H Eugene Schrader and Merritt W Sanders

High school and college. Forms 1A and 1B, first semester.

Forms IIA and IIB, second semester

Norms

Emporia Kansas State College

VII, 486

1964

None



17

#### Scholastic Testing Service Educational Development Series: Mathematics

Oliver F. Anderhalter

Grade 2, Form A, grade 3, Form B, grades 4-6, Forms A and B, grades 6-9, Forms A, B, and C, grades 9-12, Forms A, B, C, and R

Norms

Scholastic Testing Service

V. 484

1963, 1965, 1972

1973, 1975

#### 1973 Stanford Mathematics Tests

Richard Madden, Eric F. Gardner, Herbert C. Rudman, Bjorn Karlsen, Jack C. Merwin

Primary Level I, grades 15-24, Primary Level II, grades 25-34, Primary Level III, grades 35-44, Intermediate Level I, grades 45-54, Intermediate Level II, grades 55-69, Advanced, grades 70-95, Forms A and B

Norms

Harcourt Brace Jovanovich

Not listed

1973

None

#### Stanford Modern Mathematics Concepts Test

Truman L Kelley, Richard Madden, Eric F Gardner, and Herbert C Rudman

Intermediate II, grades 5-5-6-9, Advanced, grades 7-0-9-5 Norms

Harcourt Brace Jovanovich

VII 490

1965

None

#### STEP Series II Mathematics Computation

Not given

Grades 4-12, Forms 4A, 4B, 3A, 3B, 2A, 2B, 1A, 1B

Norms

Educational Testing Service

Not listed

1969

None

#### STEP Series II M athematics Basic ConcePts

Not given

Grades 4- 14, Forms 4A, 4B, 3A, 3B, 2A, 2B, 1A, 1B

Norms

Educational Testing Service

Not listed

1969

None

#### A Test of Understanding of Selected Properties of a Number System

Robert A. Ashlock and Ronald C. Welch

K-3

Not available

Buteau of Educational Studies and Testing, Indiana University

Ronald Welch at Indiana University

1966

1975



# High School, General

#### California Achievement Tests, 1957 Edition - Mathematics

Ernest W. Tiegs and Willis W. Clark

Grades 9-14. Advanced. Forms X and Y

Norms

California Test Bureau McGraw-Hill

VI, 564

1957

1963 Renorming

# California Survey Series: Survey of Mathematics Achieve-

Ernest W. Tiegs and Willis W. Clark

Grades 9-12

Norm5

California Test Bureau/McGraw-Hill

VI, 591

1959

None

#### Cardall lunior Math Reasoning Test

Alfred | Cardall

Grades 10-12, Forms X and Y

Norms

Cardall Associates

VI, 580

1943

None

#### lowa Tests of Educational Development

E F Lindquist and Leonard S Feldt

Test 4. Ability to Do Quantitative Thinking, grades 9-12,

Forms X-4 and Y-4

Norms

Science Research Associates

V1, 14 (Total 1TED Battery)

1960

(For revised edition, see next entry )

#### low a Tests of Educational Development

E F Lindquist and Leonard 5 Feldt

Part 3 Mathematics, grades 9- 12, Forms X-5 and Y-5

Norms

Science Research Associates Not listed

1971

None

#### Metropolitan High School Mathematics Test\*

Walter N. Durost, William H. Evans, lames D. Leake, Howard A. Bowman, Clarke Cosgrove, and John D. Read

Grades 9-13, Forms Am and Bm

Norms

Harcourt Brace Jovanovich

VI, 586, VII, 479

1962

None

\*Note Separate test booklets are no longer available, but certain accessories are



#### Minnesota High School Achievement Examination: Advanced **Mathematics**

V. L. Lohmann, ed. Three forms, one revised each year Norms American Guidance Service VI, 593 1952

1970, 1971, 1972

#### 1973 Stanford Test of Academic Skills\*

Eric F. Gardner, Robert Callis, Jack C. Merwin, and Richard Madden

Level 1, grades 8-10, Level II, grades 11, 12, and 13, Forms A and B

Harcourt Brace Jovanovich

Not listed 1973

None

\*Note: The mathematics test is not available as a separate test

#### Tests of Achievement in Basic Skills, TABS-MATH, Level D

James C. Young

Grades 10-12, Forms 1 and 2

Norms

**Education at and Industrial Testing Service** 

1972

None

# Algebra

#### Algebra Test for Engineering and Science

A B Lonski High school and college Norms Psychometric Affiliates Not listed 1958 1961

#### Blyth Second-Year Algebra Test

M Isobel Blyth Grades 9- 12, Form F Norms Harcourt Brace Jovanovich V. 443; VII. 497 1953 1966

#### **Breslich Algebra Survey Test**

E R Breslich First and second semesters, Forms A and B Norms Bobbs-Merrill Company II. 1435 1930, 1931 None

18



California Algebra Aptitude Test

Noel Kevs and Muriel McCrum
One form

Norms

American Guidance Service

1V, 385

1941

#### Cooperative Mathematics Tests: Algebra I, II, and III

Not given

1, grades 8-9, 1f, high school, fff, high school and college.

Forms A and B at each level

Norms

Norms
Educational Testing Service

V1, 594, VII, 500, 501

1, 11, 1962, 111, 1963

None

#### Emporia State Algebra II Test

Stanley | Laughlin and Howard P Schwartz

High school

Criterion referenced norms

Emporia Kansas State College

Not listed

1974

None

#### ERB Modern Elementary Algebra Tesi

Frederic Bonan et al

Crades 8-9. Forms L and M

Norms

Educational Records Bureau

VII, 502 1965, 1966

None

#### ERB Modern Second-Year Algebra Test

Frederic Bonan et al

High school. Forms X and Y

Norms Educational Records Bureau

VII, 503

1968, 1969

None

#### First-Year Algebra Test

Ray Webb and Julius H Hlavaty

Secondary school

Psychometric Afriliates

VI, 600

Norms

1958 1962

#### Illinois Algebra Tests

Charles H. Shutter

Test 1, first-semester final, 11, second-semester midterm;

III, second-semester final

Norms

Bobbs-Merrill Company

V. 540

l, 1955. H. III. 1958

None



#### Jowa Algebra Aptitude Test

H. A. Greene and Darrell Sabers

Grade 8, Prealgebra

Norms

Bureau of Educational Research and Service, University of

lowa

11, 1441, 111, 327, IV, 393, VII, 505

1931, 1942

1967

#### Kepner Mid-Year Algebra Achievement Test

Henry S. Kepner, Jr., and Darrell Sabers

First-year algebra

Item norms

Bureau of Educational Research and Service, University of

lowa

VII. 506

1969

None

#### Lankton First-Year Algebra Test

Robert S Lankton

Grades 8-12, Forms E and F

Norms :

Harcourt Brace lovanovich

IV, 394, V, 451, VII, 507

1950

1965

#### Lee Test of Algebraic Ability

1 Murray Lee

Grades 7-8

Norms

Bobbs-Merrill Company

11, 1443, VII. 508

1930

1964

#### Mid-Year Algebra Test

Not given

Grades 8-12, Form A

Norms

Harcourt Brace Jovanovich

VII, 509

1968

None

#### Minnesota High School Achievement Examination: Elementary Algebra

V. L. Lohmann, ed.

Three forms, one revised each year

Norms

American Guidance Service

VI. 597, VII. 504

1955, 1963

1970, 1971, 1972

#### Modern Algebra Test (Content Evaluation Series)

Gerald's Hanna

Grades 9-12

Norms

Houghton Mifflin Company

Not listed

20



1972 None

#### Orleans-Hanna Algebra Prognosis Test

Joseph B. Orleans and Gerald S. Hanna

Grades 7- 11 Norms

Harcourt Brace Jovanovich

II. 1444. IV. 396, VII. 510

1928 (Orleans only)

1968

1

#### Survey Test of Algebraic Aptitude

Robert E Dinkel

Grades 7-9

Norms

California Test Bureau/McGraw-Hill VI, 602

1959

None

#### Tucker-Sanders First-Year Algebra Test

Charles B. Tucker and Merritt W. Sanders

Grades 9-12, Forms IA and IB, first semester. Forms IIA

and IIB, second semester

Norms

Emporia Kansas State College

VII, 511

1964 None

## Geometry

### Cooperative Mathematics Tests: Geometry

Not given

High school. Forms A and B

Norms

Educational Testing Service

VI. 645, VII. 533

1962, 1963

None

#### Cooperative Mathematics Tests: Analytic Geometry

Not given

High school and college, Forms A and B

Norms

Educational Testing Service

VI, 643, VII. 532

1963

None

#### **Howell Geometry Test**

EdgarN Howell

Grades 9–12, Forms A and B Norms

Harcourt Brace Jovanovich

VII, 536

1969

None

#### towa Geometry Aptitude Test

James MaxeY and Darrell Sabers

Grades 9- 10, pregeometry



Tentative norms
Bureau of Educational Research and Service, University of Iowa
II, 1469, III, 360, VII, 537
1931, 1942
1969

# Minnesota High School Achievement Examinations: Geometry

V E Lohmann, ed Three forms, one revised each year Norms American Guidance Service VI. 649, VII, 534 1955 1970, 1971, 1972

#### Modern Geometry Test (Content Evaluation Series)

Gerald S. Hanna Grades 9- 12 Norms Houghton Mifflin Company Not listed 1971 None

#### Orleans-Hanna Geometry Prognosis Test

Joseph B Orleans and Gerald S Hanna Grades 8- 13 Norms Harcourt Brace Jovanovich VII, 539 1968 None

#### Plane Geometry

Ray Webb and Julius Hlavaty Secondary school Norms Psychometric Affiliates Vtt, 540 1958 None

#### Solid Geometry

Ray Webb and Julius Hlavaty Secondary school Norms Psychometric Affiliates VI, 653 1960 None

#### Tucker-Sanders Plane Geometry Test

Charles B Tucker and Merritt W Sanders
Grades 9-12, college freshmen, Forms IA and IB, first
semester, Forms IIA and IIB, second semester
Norms
Emporia Kansas State College
VII, 541
1964
None



# **Trigonometry**

#### Cooperative Mathematics Tests: Trigonometry

Not given

High school and college, forms A and B

Norms

**Educational Testing Service** 

VI, 657, VII, 543

1962, 1963

None

#### Minnesota High School Achievement Examinations: Trigonometry

V. L. Lohmann, ed

High school, three forms, one revised each year

American Guidance Service

VI, 658

196 1

1970, 1971, 1972

#### Plane Trigonometry

Ray Webb and Julius H. Hlavaty

Secondary school

Norms

**Psychometric Affiliates** 

VI, 656

1960

None

#### Rasmussen Trigonometry Test

Otho M. Rasmussen and O. J. Peterson

Forms A and B

Norms

Emporia Kansas State College

V. 501, Tests in Print, 1134

1951

None

# College-related

#### Advanced Placement Program -- Calculus AB, Calculus BC

Committee

College level Most recent form offered for local administration to college students. Not available to high schools

Norms

Educational Testing Service

VI, 570. VII. 45 1, 662

1954

1976

#### Arithmetic Test for Prospective Nurses

Thelma Hunt

High school graduates

Norm s

The Center for Psychological Service

IV. 818

1949

None



#### Cardall Arithmetic Reasoning Test

Alfred J. Cardall

Grades 12-13, Forms A and B Norms (college freshmen)

Cardall Associates

VI. 617

1947. Manual, 1942

None

#### Career Planning Program

American College Testing Program Staff

Grades 12-13, Form H

Norms

American College Testing Program (see p. 28)

Not listed

1970

1976

#### **CLEP General Examination in Mathematics**

Committee

College accreditation or placement, 2 forms

Educational Testing Service

Not listed

1972

None

#### CLEP Subject Examination in College Algebra

Committee

College accreditation or placement, 2 forms

Educational Testing Service

VII. 498, 664

1968 None

#### CLEP Subject Examination in Trigonometry

Committee

College accreditation of placement, 2 forms

Educational Testing Service VII. 542, 664

1968

None

#### CLEP Subject Examination in College Algebra and Trigonometry

Committee

College accreditation or placement. 1 form

Educational Testing Service

VII. 454, 664

1968

1970

#### CLEP Subject Examination in Calculus with Analytic Geometry

Committee

College accreditation or Placement, 1 form

**Educational Testing Service** 

VII. 530, 664

1964

1974



#### **CLEP Subject Examination in Statistics**

Committee College accreditation or Placement; 2 forms

Norms

**Educational Testing Service** 

VII. 545, 664 1967

None

#### Comparative Guidance and Placement (see p. 29)

Committee

Designed for entering tunior college students

Norms by modules

Educational Testing Service VII. 666

1969

1972

#### Cooperative Mathematics Tests: Calculus

Not given

High school and college, forms A and B Norm<sup>§</sup>

Educational Testing Service

VI. 6\$4, VII, \$31 1963

None

#### Doppelt Mathematical Reasoning Test

| E Doppelt

Graduate student and personnel selection (high-level measure of numerical reasoning ability)

Norms

The Psychological Corporation

VI. 456, VII. 349

1954

196A

#### Educational Skills Test/College Edition — Mathematics Test

CTB/McGraw-Hill staff

Designed for entering college students

Norms

California Test Bureau/McGraw-Hill Not listed

1977

None

#### Junior College Placement Program (see p. 31)

Not given

Entering junior college students

Norms

Science Research Associates

VII. 669

1967 1969

Kansas Mathematics Test (Arithmetic and Algebra)

H E Schrammel High school and college freshmen, Forms A and B

Norms

Emporia Kansas State College

II, 1457, Tests in Print, 961 1939

1953-1955



Scholastic Testing Service ASK—Skills Analysis of Mathematics

Oliver F. Anderhalter and STS staff Form A, Levels 12; 23; 34; 45; 56; 67, 78

Criterion-referenced diagnostic test with local and national norms

Scholastic Testing Service

Not listed 1974

None

1973 Stanford Test of Academic Skills\*

Eric F. Gardner, Robert Callis, Jack C. Merwin, Richard Madden

Level II, College Edition, Grade 12; Forms A and B

Norms

Harcourt Brace Jovanovich

Not listed

1973

None

\*Note. The mathematics test is not available as a separate test



# DIRECTORY OF PUBLISHERS

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P.O. Box 168
Iowa City, Iowa 52240

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1835 Eye Street, NW
Washington, D.C. 20006

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Emporia Kansas State College Bureau of Educational Measurements 1200 Commercial Street Emporia, Kansas 66801



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Palo Alto, California 94304
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The Psychofogical Corporation 757 Third Avenue New York, New York 10017

Scholastic Testing Service. Inc 480 Meyer Road Bensenville. Illinois 60106

Science Research Associates, Inc 259 East Erie Street Chicago, Illinois 60611

# RELATED EVALUATION SERVICES The Career Planning Program (CPP)

The Career Planning Program is a guidance-oriented system designed to help students identify and explore personally relevant occupations and educational programs. The program is designed to function at two levels—grades 8-11



and grades 12-13. For grades 8-11, CPP was developed to assist schools in meeting many of the career guidance needs of their students, with the central goal of stimulating and facilitating both self-exploration and career exploration. The Numerical Skills scale (25 items, 15 minutes) was developed to test the student's ability to perform various kinds of basic arithmetic functions, such as addition, subtraction, multiplication, and division.

For grades 12-13, CPP collects, integrates, and reports information about the student's interests, experiences, and abilities and through an interpretive student rePort and student booklet helps the student relate this information to career planning. The Numerical Skills scale (36 items, 18 minutes), one of six CPP ability scales, is designed to assess basic arithmetic skills ranging from simple computation to the application of mathematical principles. The scale is designed to assess mathematical reasoning rather than previous coursework and is Particularly useful for identifying students needing remediation in mathematics.

#### Addresses For Grades 8-11

Mr. Dennis K. Palmer Editor-in-Chiet Career Education & Guidance Dept. of Measurement & Guidance Houghton Mitflin Company 1 Beacon Street Boston, MA 02107

For Grades 12-13

Dr. John D. Roth
Director. ACT Career Planning Programs
Research and Development Division
The American College Testing Program
Box 168
Jowa City, 1A 52240

# Comparative Guidance and Placement (CGP)

The CGP mathematics tests are designed primarily to assist two-year colleges and vocational-technical institutions in placing students with modest mathematical Preparation in an appropriate course offered by the collège Depending on their backgrounds, the students take one of three tests called C. D. and E. Each test consists of two twenty-minute parts as shown below.

Test	Part 1	Part 2
С	35 Computation Questions	25 Applied Arithmetic Questions
D	35 Computation Questions	35 Elementary Algebra Questions
E	35 Elementary Algebra Questions	35 Intermediate Algebra Questions



The tests can be administered with self-scoring answer sheets so that both students and institutions can obtain on-the-spot results

Address CCP Box 2603 Princeton, NJ 08540

# Comprehensive Achievement Monitoring

Comprehensive Achievement Monitoring (CAM) provides test results to teachers as information to help them make decisions about their students and their courses. CAM uses criterion referenced test items (for which behavioral objectives have been previously defined), item-examinee sampling, and frequent test administration. CAM provides information, analyzed and reported by computer, about individual students' achievement on each objective before instruction, immediately after instruction, and long after instruction, and about a group's achievement on all course objectives at each test administration.

As part of the process of working with school districts and state departments of education in developing criterion-referenced mathematics tests, a bank of objectives and test items has been compiled. These objectives and items are available in booklet form. Also, a "Minimum Competency Level" mathematics test has been developed.

Address Dr William P Gorth
National Evaluation Systems, Inc
P O Box 226
Amherst, Massachusetts 01002

# Educational Records Bureau (ERB)

Educational Records Bureau's Comprehensive Testing Program affords its members data that compare mathematics achievement in public schools, suburban schools, and independent schools. The ERB pupil profile projects mathematics performance against student aptitude and indicates whether the expected level of achievement is being reached. Item analysis permits the teacher to pinpoint areas of mathematics strengths and deficiencies.

Address Educational Records Bureau 160 Speen Street Framingham, Massachusetts 0 1002

# Instructional Objectives Exchange: Objectives Collection (Grades K-12) Criterion-Referenced Tests (Grades K-9)

Collections consist of instructional objectives and sample test items. Booklet titles are as follows.

Symbolism and Notation, K-9 Numbers and Their Operations, K-9



Figure and Object Characteristics, K-9 Data Relationships, K-9 Algebra, 8-12 Geometry, 10-12

Test sets consist of approximately forty tests in each area Each test (of five to ten items) is keyed to an amplified objective. Two content-parallel forms of each set are available (A and B) Test titles are as follows

Sets and Numbers, K-6 Operations and Properties, K-6 Numeration and Relations, K-6 Measurement, K-6 Geometry, K-6 Elements, Symbolism, and Measurement, 7-9

Geometry, Operations, and Relations, 7-9

Address Instructional Objectives Exchange Box 24095 Los Angeles, California 90024

# Junior College Placement Program (ICPP)

The mathematics component of the ICPP consists of three overlapping forty-item tests. Students are routed to one of the three tests based on a self-scoring device. Students routed to the lower-level test answer questions in conventional arithmetic, those routed to the middle-level test answer arithmetic and geometry questions; and those routed to the upper-level test answer questions in geometry and algebra

Address: Science Research Associates 259 East Erie Street Chicago, Illinois 60611

# Pennsylvania Retrieval of Information for Mathematics Education System (PRIMES)

PRIMES is a consulting service in mathematics for grades K-8 designed to assist educators in curriculum development. implementation, and evaluation. PRIMES has a comprehensive data base which consists of a lesson-by-lesson analysis of most basal programs, grades K-8. For each textbook, lessons have been analyzed according to mathematical content. expected puPil behavior, and problem type. The PRIMES Mathematics Content Authority List contains a list of concepts and skills currently taught in elementary schools. The mathematics subtests of many widely used standardized tests have been analyzed item by item and related to the PRIMES Mathematics Content Authority List.

Additional services available through PRIMES include -

- 1 the use of the computer to monitor pupil achievement;
- 2. a pupil test-scoring service.
- 3 criterion-referenced tests correlated to the Content Authority List.



4 instructional kits for remediation,

5 a teacher-training component,

6 assistance in the selection of instructional materials

Address Dr. Emanuel Berger
Educational Developmental Center
West Chester State College
110 West Rosedale Avenue
West Chester, PA 19380

#### Score

A criterion-relevenced testing system that combines behaviorally stated objectives with a computer-retrievable bank of related items. Available at three levels. Primary (K-3), intermediate (4-6), and Junior High School (7-8).

Address Westinghouse Learning Corporation P.O. Box 30 fowa City, Iowa 52440

# Test Collection— Educational Testing Service

The Test Collection at Educational Testing Service maintains an extensive file of published and unpublished tests and other assessment devices. Also included are files on American and foreign publishers, references to test reviews, and selected references on tests and test evaluations. Qualified persons, whether affiliated with ETS or not, may have on-site access to the materials in the collection. The American Psychological Association's guidelines for access to assessment devices and restrictions requested by individual publishers are observed closely. Those who find it impossible to visit the collection may direct specific questions to the collection by mail.

Address Test Collection Educational Testing Service Princeton, New Jersey 08540



#### REFERENCES

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- Buros, Oscar Krisen, ed. The Nineteen Thirty-Eight Mental Measurements Yearbook. New Brunswick. N.J. Rutgers University Press. 1938.
- The Nineteen Forty Mental Measurements Yearbook Highland Park, N.T. The Mental Measurements Yearbook, 3941
- Bronswick N | Rutgers University Press, 1949
- \_\_\_\_\_\_ The Fourth Mental Measurements Yearbook Highland Park, N.1. Gryphon Press, 1953
- The Fifth Mental Measurements Yearbook Highland Park, N.T. Gryphon Press, 1959
- \_\_\_\_\_\_ The Sixth Mental Measurements Yearbook Highland Park N | Gryphon Press, 1965
- \_\_\_\_\_\_ The Seventh Mental Measurements Yearbook Highland Park, N.E. Gryphon Press, 1972
- Tests in Print II. An Index to Tests, Test Reviews, and the Litereature on Specific Tests. Highland Park, N.J. Grybhon Press, 1974.
- Cronbach, Lee 1 "Evaluation for Course Improvement" Feachers College Record 64, no. 8, 1963
- Ferguson R. L. and E. I. Maxey. "Trends in the Academic Performance of High School and College Students." Mimeographed. Iowa City. Iowa. The American College Testing Program, 1975.
- Harnischteger A et al. Test Score Decline. A Review of Evidence and Possible Grounds for Interpretation. Chicago. CEMREL, forthcoming.
- McLaughlin Kenneth F. Interpretation of Test Results. ERIC no. ED 050-176. Washington, D.C., U.S. Department of Health, Education, and Welfare. 1964. (Available in microtiche for \$0.65 or hardback for \$3.29 from U.S. Office of Education. 400 Maryland Avenue, SW. Washington, D.C. 20202.)
- Tests and Measurements Kit Rev. ed. Includes "Making the Classroom Test. A Guide for Teachers". "Selecting an Achievement Test. Principles and Procedures". and "Short-Cut Statistics for Teacher-made Tests. Multiple-Choice Questions—a Close Look." Princeton, N.J. Educational Testing Service, 1973. 151.001

