

DOCUMENT RESUME

ED 287 662

SE 048 612

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TITLE Secondary Textbook Review: General Mathematics. Grades Nine through Twelve.
INSTITUTION California State Dept. of Education, Sacramento.
REPORT NO ISBN-0-8011-0677-X
PUB DATE 87
NOTE 303p.
AVAILABLE FROM Publications Sales, California State Dept. of Education, P.O. Box 271, Sacramento, CA 95802-0271 (\$6.50).
PUB TYPE Guides - Non-Classroom Use (055)
EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS High Schools; Mathematical Applications; Mathematics Curriculum; *Mathematics Instruction; Number Concepts; *Secondary School Mathematics; *Textbook Content; *Textbook Selection
IDENTIFIERS *California

ABSTRACT

This publication is intended to serve as a resource for teachers who are responsible for selecting textbooks for general mathematics courses in high school. Contained are 18 factual textbook reviews. (The reviews do not contain assessments about the quality of the books). Each review includes four parts. Part 1 contains information furnished by the publisher to describe the textbook and its intended audience. Part 2 provides two kinds of information about each textbook in chart format: the first is the emphasis given to each of 25 mathematical topics; the second is the level of the textbook's content compared with levels established as goals or targets in the State of California's "Model Curriculum Standards: Mathematics" and the "Mathematics Framework." Part 3 indicates the extent to which each textbook stresses six "framework focuses" described in the "Mathematics Framework." Part 4 indicates materials that are furnished by the publisher when student textbooks are purchased. Textbooks are included from: (1) Addison-Wesley Publishing Company; (2) Allyn and Bacon, Inc.; (3) Amsco School Publications, Inc.; (4) EDITS; (5) Glencoe Publishing Company; (6) Hammond, Inc.; (7) Harcourt Brace Jovanovich, Inc.; (8) D. C. Heath and Company; (9) Holt, Rinehart and Winston; (10) Houghton Mifflin Company; (11) Laidlaw Educational Publishers; (12) Media Materials, Inc.; (13) Scott, Foresman and Company; (14) University of Chicago Mathematics Project; and (15) West Educational Publishing. (RH)

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SECONDARY
TEXTBOOK
REVIEW:

*General
Mathematics*

Grades Nine Through Twelve



Publishing Information

Secondary Textbook Review: General Mathematics was prepared by the Office of Curriculum Framework and Textbook Development, California State Department of Education. This publication was edited by Janet Lundin, working in cooperation with Mae McCarthy and Linda Crayne. This publication was designed and prepared for photo-offset production by the staff of the Bureau of Publications, with the design for the cover and interior design created and prepared by Cheryl Shawver McDonald. Typesetting was done by Anna Boyd and Lea Shimabukuro.

The document was published by the California State Department of Education, 721 Capitol Mall, Sacramento, California (mailing address: P.O. Box 944272, Sacramento, CA 94244-2720). It was distributed under the provisions of the Library Distribution Act and *Government Code* Section 11096.

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Copies of this publication are available for \$6.50 per copy, plus sales tax for California residents, from Publications Sales, California State Department of Education, P.O. Box 271, Sacramento, CA 95802-0271.

A list of other publications that are available from the Department may be found on the last page of this publication

ISBN 0-8011-0677-X

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PREFACE

The impetus for California to provide a resource to improve secondary textbook selection procedures was accelerated by the passage of Senate Bill 813 in 1983. According to this legislation, "the Superintendent shall review currently available textbooks in conjunction with the curriculum standards." Consequently, in keeping with the spirit of the reform effort, the purposes of this document, *Secondary Textbook Review: General Mathematics*, are to (1) assist school districts in the selection of textbooks; and (2) influence positively the quality of textbooks by focusing on the *Model Curriculum Standards: Grades Nine Through Twelve, Mathematics* and the *Mathematics Framework for California Public Schools, Kindergarten Through Grade Twelve*.

This document is a trailblazer. Not only were new procedures called for, but also a factual review instrument had to be developed. These tasks were the result of the collaborative efforts of many professionals. Members of the steering committee generously contributed their professional knowledge and advice. The textbook reviewers, in addition to giving us the benefits of their professional expertise, also gave many hours of their time as they reviewed the textbooks. The names of these individuals are identified in the acknowledgments. We in the California State Department of Education are grateful for the commitment demonstrated by all of these professionals.

This is our first effort in developing a secondary textbook review. We have learned many lessons which we are now applying to the review in another content area. Your constructive suggestions are welcome. We encourage you to let us know whether you find the information in this publication helpful in selecting secondary mathematics textbooks and instructional materials. Please direct your responses to the Office of Curriculum Framework and Textbook Development, California State Department of Education, P.O. Box 944272, Sacramento, CA 94244-2720.

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ACKNOWLEDGMENTS

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INTRODUCTION

Secondary Textbook Review: *General Mathematics* is intended to serve as a resource for teachers who are responsible for selecting textbooks for general mathematics courses in high school. This document provides teachers with a compilation of factual textbook reviews that can be used as a screening device to reduce the number of textbooks to be reviewed and pilot studies to be conducted. As a result, educators can have more time to analyze a few textbooks in depth. Teachers may also consider using this process, or adapting it, to review textbooks not included in this document.

What This Document Contains

This document contains 18 factual textbook reviews that are to be used as a resource by secondary mathematics teachers. Each review includes four parts, which are described below:

Part I

This section contains information furnished by the publisher to describe the textbook and its intended audience.

Part II

This section provides two kinds of information about each textbook in chart format. The first is a depiction of the emphasis given to each of 25 mathematical topics that were extracted from the *Model Curriculum Standards: Mathematics* and the *Mathematics Framework for California Public Schools, Kindergarten Through Grade Twelve*. For each topic the "Degree of Emphasis" was identified by applying the following definitions:

H *High emphasis* means a chapter or more or lessons throughout the book.

M *Moderate emphasis* means less than a chapter but more than one lesson.

L *Limited emphasis* means one lesson.

N *Little or no emphasis* means an occasional exercise or mention.

Please note the following:

In cases where the topic has more than one element, the "Degree of Emphasis" that is indicated does not mean that each element is covered to that degree. For example, the topic "Evaluating expressions with roots, powers, and absolute value" may have received an *M* meaning "moderate emphasis"; that is, the elements to be studied appear in "less than a chapter but [in] more than one lesson." This *M* could mean that all three elements were present in the textbook to a moderate degree. On the other hand, an *M* may mean that only one element such as "roots" was covered to a moderate degree.

The second kind of information is an indication of the level of the textbook's content compared with the level established as a goal or target in the *Model Curriculum Standards: Mathematics* and the *Mathematics Framework*. In the *Framework*, the areas of mathematics content are presented by grade level spans—kindergarten through three, three through six, six through eight, and nine through twelve. Each review includes estimates of how much of the treatment of a topic is at the high school core curriculum level (grades nine through twelve) rather than at the earlier levels. The estimations are based on the following definitions:

**** Means all or virtually all match the *Mathematics Framework's* description for high school core content

*** Means mainly high school core content but some from other levels

** Means mainly content from other levels but some from high school core content

* Means little or no match with high school core content

Blank Means there is no material that matches the high school core curriculum

Part III

This section highlights six "Framework Focuses" described in the *Mathematics Framework*. Each review gives an indication of the extent to which the "Focuses" are included in the publisher's instructional material. The findings are shown by symbols in the appropriate column on the basis of the following definitions:

- *Substantially* means integrated throughout the book.
- *Somewhat* means taught at least occasionally.
- *Little or none* means little or none.

The location of the "Framework Focuses" within the materials is also identified; for example, whether the "Focuses" appear in the student's or teacher's editions or in the teacher's resource manual is indicated. In addition, information is made available about how the material is presented in the student's edition.

Part IV

"Information from the Publisher" is found in this section. In Part A the materials identified are furnished without cost when students' textbooks are purchased. Information about ancillary materials which are for sale is also given. Part B contains the "Table of Contents" for each textbook.

Considerations in Using This Document

Those who are using this document need to keep three considerations in mind. First, this review process was applied only to the portions of each textbook that deal with the curriculum content of the

Mathematics Framework and Model Curriculum Standards: Mathematics. These documents do not address computer literacy, computer programming, computer science, or applications such as consumer mathematics. Therefore, this review process does not include reviews of this material that may be in the textbooks. If these topics are of interest, the readers should refer to Section IV, Part B, of this document, which contains the table of contents for each textbook that was reviewed.

Next, ninth and tenth grade general mathematics course descriptions may range from junior high remediation to those resembling Math A and B as presented in the *Mathematics Framework*. Therefore, the first priority for teachers who are selecting general mathematics textbooks is to determine the match between their own course requirements and the level of mathematics content in a specific textbook. Determining that match should be the focus of teachers' attention rather than giving undue weight to how closely a textbook matches the *Framework's* description for high school core content.

Finally, the intent of this review process is to present factual information about the general mathematics textbooks reviewed rather than to make assessments about the quality of those books. Teachers must determine the quality of textbooks because they are the ones who work with course requirements and who must attend to the skill levels and motivation of specific groups of students. All of this information and more are to be considered in making quality judgments about specific textbooks during the selection process.

If the information in this publication can serve as a resource in the textbook selection process, then the time and effort invested by the educators and publishers will have been repaid in full.

PUBLISHER	TITLE	COPYRIGHT
Addison-Wesley Publishing Company	<i>General Mathematics: A Fundamental Approach</i>	1986

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

GENERAL MATHEMATICS serves ninth and tenth grade students who need a review of arithmetic skills as their final mathematics course or as preparation for more advanced courses. The textbook features clear skill development through a presentation of an algorithm on a flowchart; specific examples; "Try This" exercises, with answers for immediate reinforcement; and abundant practice problems. Problem-

solving lessons *teach* problem-solving skills, and "Problem Corners" (at the end of most skills lessons) provide further practice. Real-life applications of mathematics are shown in lessons on careers and consumer applications. Pretests, chapter reviews, and cumulative tests, keyed to skills and applications lessons, provide for diagnostic and prescriptive procedures.

Addison-Wesley Publishing Company

General Mathematics: A Fundamental Approach

1986

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	*
Using rational numbers	H	*
Using irrational numbers	N	
Evaluating expressions with roots, powers, and absolute value	N	
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	H	**

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	N	
Determining measures of central tendency	M	*
Interpreting data and making inferences	N	*
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
<u>Using formulas to determine measures</u>	H	*
C. Geometry		
<u>Using geometric properties of plane and solid figures to determine measures</u>	M	*
<u>Constructing standard straightedge compass figures</u>	N	
<u>Making models, scale drawings, orthographic projections</u>	N	
<u>Establishing congruence, similarity, symmetry</u>	M	*
<u>Using coordinate geometry</u>	M	*
D. Patterns and Functions		
<u>Determining and extending patterns</u>	L	*
<u>Graphing functions and investigating their properties</u>	L	*

Logic—Continued		
<u>Using deductive reasoning to reach conclusions</u>	N	
<u>Distinguishing between necessary and sufficient conditions</u>	N	
G. Algebra		
<u>Creating mathematical models to represent situations</u>	H	*
<u>Evaluating algebraic expressions</u>	L	*
<u>Solving equations and inequalities</u>	M	*
<u>Solving problems involving direct and inverse variation, including percents</u>	L	*

Addison-Wesley Publishing Company

General Mathematics: A Fundamental Approach

1986

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Somewhat</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
	X		X	X					X	
		X	X	X					X	
	X		X	X		X	X			
	X		X	X		X	X			X
		X								
X			X	X		X	X		X	X
	X		X	X					X	

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:
With computational problems?

With calculator problems?

C. Use of Calculators										
Are they used: To illustrate and/or develop concepts?		X		X	X					X
In lessons designed to teach how to use calculators?			X							
In "calculator" problems?		X		X	X					X
D. Use of Concrete Materials										
Are they used: When new concepts are introduced or when difficult problems are encountered?			X							
Continuously as ideas are developed?			X							
Do students work with pictures, drawings, and other representations?	X			X	X		X	X		X
E. Situational Lessons										
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X							
Do the lessons provide for: Several problems to be identified?			X							
A variety of approaches to be used?			X							
Study over several class periods?			X							
F. Cooperative Learning Groups										
Are students: Taught cooperative learning technique.?			X							
Given problems which are specifically designed to be solved in groups?		X								X

PUBLISHER	TITLE	COPYRIGHT
Addison-Wesley Publishing Company	<i>General Mathematics: A Fundamental Approach</i>	1986

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

One teacher's edition for each order of 25 students' editions is provided without cost.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answer placement

The teacher's edition consists of a student's edition annotated with answers, teaching notes, and references to supplemental booklets. Also, the front matter contains additional answers, an explanation of the program, and sequential lists of lessons correlated to objectives and to additional practice and skills reviews.

3. Description of teacher's resource materials

See related teacher's resource material below. A separate teacher's resource binder is not available with this textbook.

4. Description of related materials available for sale

The *Quiz and Test Booklet* (76 blackline masters) contains two quizzes and one chapter test per chapter, four cumulative tests, and a final cumulative review test keyed to skills and applications lessons in the student's textbook.

The *Making Practice Fun Booklet* (122 blackline masters) provides skills drill in the form of games, puzzles, and riddles keyed to lessons in the student's textbook.

The *Projects Booklet* (62 blackline masters) contains approximately two projects per chapter, providing consumer applications such as reading utility meters, making budgets, and using maps and charts.

Addison-Wesley Publishing Company

General Mathematics: A Fundamental Approach

1986

IV. INFORMATION FROM THE PUBLISHER—Continued

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Place Value to Billions	12		Three-Digit Divisors	104		Adding with Mixed Numbers	202	
Adding Whole Numbers	14		Dividing a Decimal by a Whole Number	108		Subtracting	206	
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Subtracting Larger Numbers	42		Fractions Mean Division	138		Solving Problems Using Proportions	232	
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Estimating Differences	54		Writing Fractions as Decimals	146		Converting Percents to Fractions	250	
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3. Multiplying Whole Numbers and Decimals			6. Multiplying and Dividing Fractions					
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Special Products and Estimating	76		Multiplying and Simplifying	174		Finding a Number Given a Percent	262	
More on Estimating Products	78		Multiplying with Mixed Numbers	176		Finding Percent of Increase or Decrease	264	
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Addison-Wesley Publishing Company

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Using the Principles Together	430
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In addition to the topics listed previously, each chapter contains:

- Two application features based on topics in the chapter
- A career feature that emphasizes skills from the chapter
- A "More Practice" page
- A "Chapter Review" and "Test"

There are 11 calculator features and three cumulative skills reviews throughout the textbook.

PUBLISHER	TITLE	COPYRIGHT
Allyn and Bacon, Inc.	<i>Refresher Mathematics</i>	1986

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

REFRESHER MATHEMATICS is a comprehensive program in general mathematics designed to meet the needs of students in grades nine through twelve who are either not yet able to take, or elect not to take, the college preparatory sequence. The thorough coverage of mathematics and problem-solving skills and their applications to everyday life found in *Refresher Mathematics* prepares all students, particularly

those for whom general mathematics is a terminal course, for important real-life experiences that lie ahead. The comprehensive coverage of other important topics, including algebra, provides students with the foundation they will need to succeed, both in subsequent mathematics courses and in the future.

PUBLISHER	TITLE	COPYRIGHT
Allyn and Bacon, Inc.	<i>Refresher Mathematics</i>	1986

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	***
Using rational numbers	H	**
Using irrational numbers	M	**
Evaluating expressions with roots, powers, and absolute value	M	**
B. Measurement		
Taking into account measurement precision	M	**
Converting within a measurement system	H	***

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	L	**
Determining measures of central tendency	L	*
Interpreting data and making inferences	L	*
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	H	***
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	H	***
Constructing standard straightedge compass figure*	H	***
Making models, scale drawings, orthographic projections	L	**
Establishing congruence, similarity, symmetry	M	**
Using coordinate geometry	M	**
D. Patterns and Functions		
Determining and extending patterns	L	*
Graphing functions and investigating their properties	L	*

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	L	*
Evaluating algebraic expressions	M	**
Solving equations and inequalities	M	**
Solving problems involving direct and inverse variation, including percents	N	

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Refresher Mathematics

1986

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Somewhat</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
	X			X	X				X	X
	X		X	X	X			X		X
X			X	X	X	X	X			X
	X		X			X	X			
	X			X		X				
X			X		X	X	X			X
		X		X						

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

C. Use of Calculators										
Are they used: To illustrate and/or develop concepts?	X				X	X		X	(work-book) X	
In lessons designed to teach how to use calculators?	X				X	X		X	(work-book) X	
In "calculator" problems?	X			1	X	X		X	(work-book) X ¹	
D. Use of Concrete Materials										
Are they used: When new concepts are introduced or when difficult problems are encountered?			X							
Continuously as ideas are developed?			X							
Do students work with pictures, drawings, and other representations?	X			X	X	X	X	X		X
E. Situational Lessons										
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?		X			X					
Do the lessons provide for: Several problems to be identified?		X			X					
A variety of approaches to be used?			X		X					
Study over several class periods?	X				X					
F. Cooperative Learning Groups										
Are students: Taught cooperative learning techniques?			X							
Given problems which are specifically designed to be solved in groups?		X			X				X	

¹Refers to content on pages 62 and 131 in the student's edition. Calculator work sheets featuring calculator problems are also found in the workbook.

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Allyn and Bacon, Inc.	<i>Refresher Mathematics</i>	1986

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

One teacher's edition and one *Alternate Tests, Consumer Forms, and Performance Record Blackline Masters* will be furnished with every 25 students' textbooks purchased.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

In the teacher's edition, complete teaching suggestions appear alongside the student's textbook pages that are shown. Answers are also printed in place on the student's textbook pages.

3. Description of teacher's resource materials

Alternate Tests, Consumer Forms, and Performance Record Blackline Masters

4. Description of related materials available for sale

Refresher Mathematics Workbook
Teacher's edition of the workbook

One teacher's edition workbook will be furnished without cost with every 25 students' workbooks purchased.

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1986

IV. INFORMATION FROM THE PUBLISHER—Continued

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PUBLISHER	TITLE	COPYRIGHT
Amsco School Publications, Inc.	<i>Preliminary Mathematics</i>	1981

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

PRELIMINARY MATHEMATICS is intended primarily for a pre-algebra ninth-grade audience. The book is organized logically and practically, beginning with a comprehensive review of basic arithmetic concepts and skills (chapters 1 through 4); continuing with the application of these concepts in a series of chapters dealing with measurement and personal and business finance (chapters 5 through 10); and then introducing advanced topics that prepare the student for later mathematics courses (chapters 11 through 17).

Lessons typically begin with a concrete and familiar situation that illustrates a new concept to be taught, move through a series of verbal and symbolic representations of the concept, and end with a procedure or formula that generalizes the particular instances for the student.

Structured learning units promote self-teaching, important for both slow and rapid learners.

Supplementary topics can be included as desired.

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II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	**
Using rational numbers	H	**
Using irrational numbers	M	*
Evaluating expressions with roots, powers, and absolute value	L	*
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	H	**

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	N	
Determining measures of central tendency	L	*
Interpreting data and making inferences	L	*
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	M	*
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	M	**
Constructing standard straightedge compass figures	L	**
Making models, scale drawings, orthographic projections	M	**
Establishing congruence, similarity, symmetry	M	**
Using coordinate geometry	N	
D. Patterns and Functions		
Determining and extending patterns	L	*
Graphing functions and investigating their properties	L	*

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	L	**
Evaluating algebraic expressions	L	**
Solving equations and inequalities	L	*
Solving problems involving direct and inverse variation, including percents	N	*

Amsco School Publications, Inc.

Preliminary Mathematics

1981

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Somewhat</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
		X								
		X								
		X								
		X								
		X								
		X								
		X								

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

C. Use of Calculators											
Are they used: To illustrate and/or develop concepts?			X								
In lessons designed to teach how to use calculators?			X								
In "calculator" problems?			X								
D. Use of Concrete Materials											
Are they used: When new concepts are introduced or when difficult problems are encountered?			X								
Continuously as ideas are developed?			X								
Do students work with pictures, drawings, and other representations?			X	X			X				
E. Situational Lessons											
A. lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X								
Do the lessons provide for: Several problems to be identified?			X								
A variety of approaches to be used?			X								
Study over several class periods?			X								
F. Cooperative Learning Groups											
Are students: Taught cooperative learning techniques?			X								
Given problems which are specifically designed to be solved in groups?			X								

PUBLISHER	TITLE	COPYRIGHT
Amsco School Publications, Inc.	<i>Preliminary Mathematics</i>	1981

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

The textbook is available in a hardbound or paperback edition. An answer key accompanies the textbook.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

No teacher's edition is available.

3. Description of teacher's resource materials

No teacher's resource materials are available.

4. Description of related materials available for sale

Not available.

PUBLISHER	TITLE	COPYRIGHT
Amsco School Publications, Inc.	<i>Preliminary Mathematics</i>	1981

IV. INFORMATION FROM THE PUBLISHER—Continued

Part B. Table of Contents

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What Percent One Number Is of Another	Savings	
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Amsco School Publications, Inc.	<i>Preliminary Mathematics</i>	1981

Part B. Table of Contents—Continued

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PUBLISHER	TITLE	COPYRIGHT
EDITS	<i>Individualized Mathematics Program (IMP) Levels C and D</i>	1977

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

INDIVIDUALIZED MATHEMATICS PROGRAM (IMP) is an individually prescribed program containing assessment and diagnostic devices with correlated teaching materials and methods. The kit provides for the wide ranges of achievement levels represented in classrooms, with continual assessment of progress, diagnosis of deficiencies, and prescription of instructional materials. Each IMP kit contains preassessment, diagnostic instruments; checklists of performance objec-

tives; and lesson units (MATH-PAK) that are correlated with the performance objectives.

In the IMP, each MATH-PAK is an eight-page individual instruction booklet, prefaced with a statement of the objective and containing a diagnostic pretest, a practice self-test, and a separate post-test covering the operation.

PUBLISHER	TITLE	COPYRIGHT
EDITS	<i>Individualized Mathematics Program (IMP) Levels C and D</i>	1977

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more of lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
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N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	*
Using rational numbers	H	*
Using irrational numbers	M	*
Evaluating expressions with roots, powers, and absolute value	M	*
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	M	*

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	M	***
Determining theoretical and empirical probability	M	**
Determining measures of central tendency	M	*
Interpreting data and making inference	M	*
F. Logic		
Using inductive reasoning to generate hypotheses	M	**

Measurement—Continued		
Using formulas to determine measures	H	*
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	M	*
Constructing standard straightedge compass figures	N	
Making models, scale drawings, orthographic projections	L	*
Establishing congruence, similarity, symmetry	N	
Using coordinate geometry	L	**
D. Patterns and Functions		
Determining and extending patterns	M	*
Graphing functions and investigating their properties	M	*

Logic—Continued		
Using deductive reasoning to reach conclusions	M	**
Distinguishing between necessary and sufficient conditions	M	**
G. Algebra		
Creating mathematical models to represent situations	M	*
Evaluating algebraic expressions	L	*
Solving equations and inequalities	M	*
Solving problems involving direct and inverse variation, including percentages	M	**

EDITS

**Individualized Mathematics Program (IMP)
Levels C and D**

1977

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Somewhat</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
		X								
		X								
		X								
		X								
		X								
		X								
		X								

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

C. Use of Calculators											
Are they used: To illustrate and/or develop concepts?			X								
In lessons designed to teach how to use calculators?			X								
In "calculator" problems?			X								
D. Use of Concrete Materials											
Are they used: When new concepts are introduced or when difficult problems are encountered?			X								
Continuously as ideas are developed?			X								
Do students work with pictures, drawings, and other representations?		X		X			X				
E. Situational Lessons											
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X								
Do the lessons provide for: Several problems to be identified?			X								
A variety of approaches to be used?			X								
Study over several class periods?			X								
F. Cooperative Learning Groups											
Are students: Taught cooperative learning techniques?			X								
Given problems which are specifically designed to be solved in groups?			X								

PUBLISHER	TITLE	COPYRIGHT
EDITS	<i>Individualized Mathematics Program (IMP) Levels C and D</i>	1977

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

The complete kit contains all the component parts for students' use and also teachers' evaluation materials.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

The teacher's manual is designed to acquaint the teacher with the use of these materials.

3. Description of teacher's resource materials

The technical manual is designed to be used by certificated school employees who have some technical knowledge of test construction and use.

The students' progress chart indicates achievement differences and growth for each student.

4. Description of related materials available for sale

The metric supplement kit is for sale.

PUBLISHER	TITLE	COPYRIGHT
EDITS	<i>Individualized Mathematics Program (IMP) Levels C and D</i>	1977

IV. INFORMATION FROM THE PUBLISHER—Continued

Part B. Table of Contents

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Arithmetic Skills				
Addition of Whole Numbers	1	Subtract Decimals	24	Modern Concepts
Subtraction of Whole Numbers	2	Multiply Decimals	25	Name Numbers in Sequence
Multiplication of Whole Numbers	3	Divide Decimals	26	Identify Ordered Pairs
Division of Whole Numbers	4	Find Percent of a Whole Number	27	Identify Functions
Combine Integers with Like Signs	5	Find Percent One Number Is of Another	28	Identify Union and Intersection of Sets
Combine Integers with Unlike Signs	6	Find a Number Given a Percent of the Number	29	Write a Number in Expanded Form
Subtract Two-Digit Integers with Like Signs	7	Find Square Root	30	Convert to Other Number Bases
Subtract Two-Digit Integers with Unlike Signs	8	Identify Real Number Definitions	31	Convert Base 2 to Base 5, 8, or 10
Multiplication of Integers	9	Identify Irrational Numbers	32	Add Base 2 Numbers
Division of Integers	10	Combining Literal Numbers	33	Multiply Base 2 Numbers
Reducing Fractions	11	Multiplication of Literal Numbers	34	Solve Inequalities
Change Mixed Number to Improper Fraction	12	Division of Literal Numbers	35	Identify and Write Inequality Statements
Change Improper Fraction to Mixed Number	13			Identify Number Properties
Find a Lowest Common Denominator	14	Geometry-Measurement-Application		Define Divisibility Rules
Identify Wholes, Integers, and Rationals	15	Identify Quadrilaterals	36	Identify Prime Numbers
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Divide Mixed Numbers	22	Calculate the Hypotenuse of a Triangle	43	Subtraction of Whole Numbers
Add Decimals	23	Add or Subtract Time	44	Multiplication of Whole Numbers
		Measure a Line Segment	45	Division of Whole Numbers
		Add or Subtract Length Measurements	46	Combining Integers
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		Solve Word Problems	48	Addition of Fractions
		Solve a Proportion	49	Subtraction of Fractions
				Multiplication of Fractions
				Division of Fractions

PUBLISHER	TITLE	COPYRIGHT
EDITS	<i>Individualized Mathematics Program (IMP) Levels C and D</i>	1977

IV. INFORMATION FROM THE PUBLISHER

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PUBLISHER	TITLE	COPYRIGHT
Glencoe Publishing Company	<i>Consumer Mathematics</i>	1986

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

CONSUMER MATHEMATICS develops an understanding of today's complex economy by presenting sound money-management practices and the computational skills needed to solve consumer problems. Carefully revised, this text combines completely up-to-date consumer information, with varied strategies for teaching and learning that have been extensively tested in classrooms. The material in chapters 1

through 3 is concentrated on basic computational skills. These skills are then applied and extended in chapters 4 through 11, which cover the full range of consumer concerns, from buying food, clothing, and housing to understanding credit and investing in stocks and bonds. The intended audience for *Consumer Mathematics* is average students in grades nine through twelve.

PUBLISHER	TITLE	COPYRIGHT
Glencoe Publishing Company	<i>Consumer Mathematics</i>	1986

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	N	-
Using rational numbers	M	**
Using irrational numbers	N	
Evaluating expressions with roots, powers, and absolute value	N	
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	N	

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	L	**
Determining measures of central tendency	L	**
Interpreting data and making inferences	L	*
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	N	
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	N	
Constructing standard straightedge compass figures	N	
Making models, scale drawings, orthographic projections	N	
Establishing congruence, similarity, symmetry	N	
Using coordinate geometry	N	
D. Patterns and Functions		
Determining and extending patterns	N	
Graphing functions and investigating their properties	N	

Logic—Continued		
Using deductive reasoning to reach conclusions	M	*
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	L	*
Evaluating algebraic expressions	N	
Solving equations and inequalities	L	*
Solving problems involving direct and inverse variation, including percents	H	***

Glencoe Publishing Company

Consumer Mathematics

1986

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Some/what</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Some-what	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
		X								
		X								
	X		X	X		X				
	X		X	X		X				
		X								
	X		X	X		X			X	
		X								

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:
With computational problems?

With calculator problems?

83

C. Use of Calculators										
Are they used: To illustrate and /or develop concepts?			X	X			X			
In lessons designed to teach how to use calculators?		X		X	X		X			X
In "calculator" problems?		X		X	X		X			X
D. Use of Concrete Materials										
Are they used: When new concepts are introduced or when difficult problems are encountered?			X							
Continuously as ideas are developed?			X							
Do students work with pictures, drawings, and other representations?	X			X	X		X			X
E. Situational Lessons										
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?	X			X	X		X			
Do the lessons provide for: Several problems to be identified?	X			X	X		X			
A variety of approaches to be used?		X		X	X		X			
Study over several class periods?		X		X	X		X			
F. Cooperative Learning Groups										
Are students: Taught cooperative learning techniques?			X							
Given problems which are specifically designed to be solved in groups?			X							

PUBLISHER	TITLE	COPYRIGHT
Glencoe Publishing Company	<i>Consumer Mathematics</i>	1986

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

The teacher's annotated edition provides detailed suggestions and strategies, enrichment material and ideas, answers to problems and exercises in the students' textbooks, and a complete testing program in the form of blackline masters.

The teacher's annotated edition is provided free on a one to 25 teacher to student ratio, as needed.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

3. Description of teacher's resource materials

All teacher's materials are included in the teacher's annotated edition. See the description of the teacher's annotated edition in item 1.

4. Description of related materials available for sale

The student's workbook provides two work sheets for every chapter section to help the teacher reinforce and extend the textbook material. This workbook is accompanied by its own teacher's annotated edition.

The student's test booklet contains testing programs, consisting of a diagnostic pretest plus a mastery test for each chapter in a handy, ready-to-use booklet form.

PUBLISHER	TITLE	COPYRIGHT
Glencoe Publishing Company	<i>Consumer Mathematics</i>	1986

IV. INFORMATION FROM THE PUBLISHER—Continued

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PUBLISHER	TITLE	COPYRIGHT
Glencoe Publishing Company	<i>Consumer Mathematics</i>	1986

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PUBLISHER	TITLE	COPYRIGHT
Hammond Incorporated	<i>Basic Math Skills for Today's Living</i>	1986

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

BASIC MATH SKILLS FOR TODAY'S LIVING is for remedial instruction in grades nine through twelve. The shape of the books gives the impression of workable pamphlets instead of textbooks, the format that represents failure for the intended users. The learning goals are stated at the beginning of each lesson so that the objectives are clear. There are three kinds of activities in the lessons: "Problem Solving

Practice" is skill development; "Progress Checkpoint" helps evaluate students' learning progress; and "Thinking It Through" applies concepts learned to solving word problems. Exercises, which appear in color-tinted boxes at the end of each activity, provide multiple reinforcement throughout each book. A glossary and final test are included.

Hammond Incorporated

Basic Math Skills for Today's Living

1986

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS

Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	N	
Using rational numbers	H	*
Using irrational numbers	N	
Evaluating expressions with roots, powers, and absolute value	N	
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	M	*

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	N	
Determining measures of central tendency	L	*
Interpreting data and making inferences	N	
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	M	*
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	M	*
Constructing standard straightedge compass figures	N	
Making models, scale drawings, orthographic projections	N	
Establishing congruence, similarity, symmetry	N	
Using coordinate geometry	N	
D. Patterns and Functions		
Determining and extending patterns	N	
Graphing functions and investigating their properties	N	

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	M	*
Evaluating algebraic expressions	N	
Solving equations and inequalities	M	*
Solving problems involving direct and inverse variation, including percents	N	

Hammond Incorporated

Basic Math Skills for Today's Living

1986

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Somewhat</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
		X								
		X								
	X		X	X		X				
		X								
		X								
		X								
		X								

C. Use of Calculators											
Are they used: To illustrate and/or develop concepts?			X								
In lessons designed to teach how to use calculators?			X								
In "calculator" problems?			X								
D. Use of Concrete Materials											
Are they used: When new concepts are introduced or when difficult problems are encountered?			X								
Continuously as ideas are developed?			X								
Do students work with pictures, drawings, and other representations?		X		X	X		X				X
E. Situational Lessons											
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X								
Do the lessons provide for: Several problems to be identified?			X								
A variety of approaches to be used?			X								
Study over several class periods?			X								
F. Cooperative Learning Groups											
Are students: Taught cooperative learning techniques?			X								
Given problems which are specifically designed to be solved in groups?			X								

PUBLISHER	TITLE	COPYRIGHT
Hammond Incorporated	<i>Basic Math Skills for Today's Living</i>	1986

IV INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

With each 25 students' texts, one answer key is provided at no charge. This 16-page key provides the answers for all four books in this series.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

This series does not require a separate teacher's edition.

3. Description of teacher's resource materials

This series does not have teacher's resource materials.

4. Description of related materials available for sale

Additional copies of the answer key are available for purchase.

PUBLISHER	TITLE	COPYRIGHT
Hammond Incorporated	<i>Basic Math Skills for Today's Living</i>	1986

IV. INFORMATION FROM THE PUBLISHER—Continued

Part B. Table of Contents

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PUBLISHER	TITLE	COPYRIGHT
Harcourt Brace Jovanovich, Inc.	<i>Essentials of Mathematics: Consumer and Career Applications</i>	1983

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

ESSENTIALS OF MATHEMATICS: CONSUMER AND CAREER SKILLS AND APPLICATIONS gives evidence of its flexibility with its five-unit structure. Unit I (chapters 1 through 6) contains a review of the essential skills that are required for the consumer and career applications in units II through V (chapters 7 through 18). These units can be taught in any sequence. The "Applications" exercises in

Unit I, the problem-solving techniques and lessons on rounding and estimating in units II through V, and the career and calculator applications in units I through V reflect the contemporary flavor of the program. Appendix A: "Introduction to Algebra" and Appendix B: "Introduction to Computers" add to the flexibility of the program.

Harcourt Brace Jovanovich, Inc.

Essentials of Mathematics: Consumer and Career Applications

1983

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS

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Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	M	*
Using rational numbers	H	*
Using irrational numbers	N	*
Evaluating expressions with roots, powers, and absolute value	M	*
B. Measurement		
Taking into account measurement precision	N	*
Converting within a measurement system	H	**

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	*
Determining theoretical and empirical probability	N	*
Determining measures of central tendency	M	*
Interpreting data and making inferences	H	*
F. Logic		
Using inductive reasoning to generate hypotheses	N	*

Measurement—Continued		
Using formulas to determine measures	H	**
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	N	*
Constructing standard straightedge compass figures	N	*
Making models, scale drawings, orthographic projections	N	*
Establishing congruence, similarity, symmetry	N	*
Using coordinate geometry	L	*
D. Patterns and Functions		
Determining and extending patterns	N	*
Graphing functions and investigating their properties	N	*

Logic—Continued		
Using deductive reasoning to reach conclusions	N	*
Distinguishing between necessary and sufficient conditions	N	*
G. Algebra		
Creating mathematical models to represent situations	M	**
Evaluating algebraic expressions	L	*
Solving equations and inequalities	H	*
Solving problems involving direct and inverse variation, including percents	H	*

Harcourt Brace Jovanovich, Inc.

Essentials of Mathematics: Consumer and Career Applications

1983

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book. <i>Somewhat</i> means taught at least occasionally. <i>Little or none</i> means little or none.

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

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B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
		X								
		X								
X			X	X	X	X	X		X	X
		X								
	X		X	X	X	X	X		X	X
X			X	X	X		X		X	X
X			X	X	X	X	X		X	X

C. Use of Calculators											
Are they used: To illustrate and/or develop concepts?		X		X						X	
In lessons designed to teach how to use calculators?			X								
In "calculator" problems?			X								
D. Use of Concrete Materials											
Are they used: When new concepts are introduced or when difficult problems are encountered?			X								
Continuously as ideas are developed?			X								
Do students work with pictures, drawings, and other representations?	X			X	X	X	X	X		X	X
E. Situational Lessons											
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X								
Do the lessons provide for: Several problems to be identified?			X								
A variety of approaches to be used?			X								
Study over several class periods?			X								
F. Cooperative Learning Groups											
Are students: Taught cooperative learning techniques?			X								
Given problems which are specifically designed to be solved in groups?			X								

PUBLISHER	TITLE	COPYRIGHT
Harcourt Brace Jovanovich, Inc.	<i>Essentials of Mathematics: Consumer and Career Applications</i>	1983

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

The teacher's resource book is a paperback publication that consists of copying masters that are perforated and three-hole punched. This publication contains two forms of each chapter test, six cumulative tests, a sample competency test, a consumer competency test, a 112-page workbook section that is correlated to the textbook, and an answer section.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

3. Description of teacher's resource materials

See the previous description of the teacher's resource book.

4. Description of related materials available for sale

The test booklet is a 92-page, self-cover publication with perforated pages. It contains two forms of each chapter test, six cumulative tests (one for each of the six units), a sample competency test that covers the content of chapters 1 through 6, and a consumer competency test that covers the content in chapters 7 through 18.

The workbook is a 112-page publication with perforated pages. The contents are correlated to the related pages in the student's edition, and this publication is accompanied by an annotated teacher's edition.

Harcourt Brace Jovanovich, Inc.

Essentials of Mathematics: Consumer and Career Applications

1983

Part B. Table of Contents - Continued

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PUBLISHER	TITLE	COPYRIGHT
Harcourt Brace Jovanovich, Inc.	<i>General Mathematics: Skills/Problem Solving/Applications</i>	1982

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

GENERAL MATHEMATICS: SKILLS/PROBLEM SOLVING/APPLICATIONS is designed to meet the wide range of interests and abilities usually found in a class of general mathematics students. The content is structured for three levels of ability. In addition, each chapter also contains optional content for these levels. Most chapters in this text contain a "Review of Related Skills" for the chapter, "Skills" lessons, "Problem Solving and Applications" lessons, "Career" lessons, "Calculator Exercises," a "Chapter Review," a "Chapter Test," and "Additional Practice." The integration of "Problem Solving and Applica-

tions" topics with "Skills" lessons illustrates for students both the need to achieve proficiency with computational skills and the need to improve competency with these skills. Each "Problem Solving and Applications" lesson focuses on a strategy for solving word problems. The exercises for these lessons first apply the problem-solving strategy in a nonverbal setting before applying it to word problems. "Career" lessons apply skills taught in the chapter to real-life problems related to career areas that present realistic career goals for general mathematics students.

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Harcourt Brace Jovanovich, Inc.	<i>General Mathematics: Skills/Problem Solving/Applications</i>	1982

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	**
Using rational numbers	H	**
Using irrational numbers	L	*
Evaluating expressions with roots, powers, and absolute value	M	*
B. Measurement		
Taking into account measurement precision	L	*
Converting within a measurement system	M	**

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	M	*
Determining theoretical and empirical probability	M	**
Determining measures of central tendency	M	**
Interpreting data and making inferences	M	*
F. Logic		
Using inductive reasoning to generate hypotheses	N	*

Measurement—Continued		
Using formulas to determine measures	H	****
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	L	*
Constructing standard straightedge compass figures	N	*
Making models, scale drawings, orthographic projections	L	*
Establishing congruence, similarity, symmetry	L	*
Using coordinate geometry	L	*
D. Patterns and Functions		
Determining and extending patterns	N	*
Graphing functions and investigating their properties	L	*

Logic—Continued		
Using deductive reasoning to reach conclusions	N	*
Distinguishing between necessary and sufficient conditions	N	*
G. Algebra		
Creating mathematical models to represent situations	M	*
Evaluating algebraic expressions	M	**
Solving equations and inequalities	M	**
Solving problems involving direct and inverse variation, including percents	H	*

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General Mathematics: Skills/Problem Solving/Applications

1982

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Somewhat</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
	X		X	X	X				X	
		X								
X			X	X	X	X	X		X	X
	X					X			X	
	X		X	X	X		X			
X			X	X	X	X	X		X	X
	X		X	X	X				X	

C. Use of Calculators											
Are they used: To illustrate and/or develop concepts?		X		X						X	
In lessons designed to teach how to use calculators?			X							X	
In "calculator" problems?			X								
D. Use of Concrete Materials											
Are they used: When new concepts are introduced or when difficult problems are encountered?			X								
Continuously as ideas are developed?			X								
Do students work with pictures, drawings, and other representations?	X			X	X	X	X			X	X
E. Situational Lessons											
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?		X		X	X					X	
Do the lessons provide for: Several problems to be identified?		X		X	X					X	
A variety of approaches to be used?			X								
Study over several class periods?			X								
F. Cooperative Learning Groups											
Are students: Taught cooperative learning techniques?			X								
Given problems which are specifically designed to be solved in groups?			X								

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Harcourt Brace Jovanovich, Inc.	<i>General Mathematics: Skills/Problem Solving/Applications</i>	1982

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

The teacher's resource book is a paperback publication, consisting of copy masters that are perforated and three-hole punched. This publication contains two forms of each chapter test, six cumulative tests, three sample competency tests, a 112-page workbook section that is correlated to the text, warm-up exercises for most skills lessons in chapters 1 through 14, and an answer section.

Teacher's edition See item 2.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

3. Description of teacher's resource materials

See the previous description of the teacher's resource book.

4. Description of related materials available for sale

The test booklet is a 112-page, self-cover publication with perforated pages. It contains two forms of each chapter test, six cumulative tests (one for each of the six units), and three sample competency tests (one for chapters 1 through 11, one for chapters 1 through 14, and one for chapters 1 through 20).

The workbook is a 112-page paperback publication with perforated pages. The contents are correlated to the related pages in the student's edition, and it is accompanied by an annotated teacher's edition.

Harcourt Brace Jovanovich, Inc.

General Mathematics: Skills/Problem Solving/Applications

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PUBLISHER	TITLE	COPYRIGHT
D. C. Heath and Company	<i>Heath General Mathematics</i>	1985

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

HEATH GENERAL MATHEMATICS is a remedial course for students who have not mastered junior high school mathematics. The content is organized in a clear and careful development of the basic number skills to ensure students' success. Frequent cumulative practice

maintains these skills. Every lesson is built on a high-interest theme that makes the mathematics relevant to the students' world. Problem-solving skills are developed throughout the course, with special lessons on problem solving and the incorporation of word problems into every lesson.

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D. C. Heath and Company	Heath General Mathematics	1985

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	**
Using rational numbers	H	*
Using irrational numbers	N	
Evaluating expressions with roots, powers, and absolute value	N	
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	H	**

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	M	**
Determining theoretical and empirical probability	M	**
Determining measures of central tendency	M	*
Interpreting data and making inferences	M	**
F. Logic		
Using inductive reasoning to generate hypotheses	L	*

Measurement—Continued		
Using formulas to determine measures	H	*
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	M	*
Constructing standard straightedge compass figures	N	
Making models, scale drawings, orthographic projections	N	
Establishing congruence, similarity, symmetry	M	**
Using coordinate geometry	L	*
D. Patterns and Functions		
Determining and extending patterns	L	*
Graphing functions and investigating their properties	N	

Logic—Continued		
Using deductive reasoning to reach conclusions	L	*
Distinguishing between necessary and sufficient conditions	L	*
E. Algebra		
Creating mathematical models to represent situations	L	*
Evaluating algebraic expressions	L	*
Solving equations and inequalities	M	**
Solving problems involving direct and inverse variation, including percents	H	**

D. C. Heath and Company

Heath General Mathematics

1985

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS	Extent Included			Where			How the Focus Is Presented in the Student's Edition				
	Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
Extent Included <i>Substantially</i> means integrated throughout the book. <i>Somewhat</i> means taught at least occasionally. <i>Little or none</i> means little or none.											
A. Problem Solving (nonroutine problems)											
See the definition on page 2 of the <i>Mathematics Framework</i> .											
Is nonroutine problem solving modeled?		X			X	X	X				
Are students taught specific strategies for solving nonroutine problems?		X		X	X	X	X				
B. Estimation and Mental Arithmetic											
Are students:											
Taught specific techniques of estimation?			X		X ¹						
Encouraged routinely to estimate the answer before doing a problem?		X		X	X		X				
Given exercises or games which include mental arithmetic?			X								
150 Is estimation used:											
With computational problems?		X		X	X		X				
With calculator problems?			X								

¹Specific techniques of estimation are presented in the teacher's edition.

C. Use of Calculators											
Are they used: To illustrate and/or develop concepts?			X								
In lessons designed to teach how to use calculators?			X								
In "calculator" problems?			X								
D. Use of Concrete Materials											
Are they used: When new concepts are introduced or when difficult problems are encountered?		X			X	X	X				
Continuously as ideas are developed?			X								
Do students work with pictures, drawings, and other representations?	X			X	X	X	X	X	X	X	X
E. Situational Lessons											
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X								
Do the lessons provide for: Several problems to be identified?			X								
A variety of approaches to be used?			X								
Study over several class periods?			X								
F. Cooperative Learning Groups											
Are students: Taught cooperative learning techniques?			X								
Given problems which are specifically designed to be solved in groups?			X								

PUBLISHER	TITLE	COPYRIGHT
D. C. Heath and Company	<i>Heath General Mathematics</i>	1985

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

One teacher's edition and one set of copymasters are supplied free with the purchase of 25 students' editions.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

Extensive teaching suggestions, reproduced work sheets, and reproduced tests are provided in the wide margins beside the pupils' pages shown on the teacher's edition.

Answers are overprinted in red on the pupils' pages shown in the teacher's edition.

3. Description of teacher's resource materials

Copymasters contain 336 blackline masters, consisting of tests, 108 pages; visual aids, 44 pages; and work sheets, 184 pages.

4. Description of related materials available for sale

The tests contained in the copymasters are also available as duplicating masters.

The visual aids contained in the copymasters are also available as overhead transparencies.

The work sheets contained in the copymasters are also available as duplicating masters and as workbooks with a teacher's edition of the workbook.

D. C. Heath and Company

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IV. INFORMATION FROM THE PUBLISHER—Continued

Part B. Table of Contents

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D. C. Heath and Company	<i>Heath General Mathematics</i>	1985

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In addition to the topics listed previously, each chapter contains the following activities:

- Cumulative Skill Practice
- Problem Solving
- Chapter Review
- Chapter Test
- Cumulative Test

PUBLISHER	TITLE	COPYRIGHT
Holt, Rinehart and Winston	<i>Holt General Mathematics</i>	1982

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

HOLT GENERAL MATHEMATICS is a complete program designed for any student who requires instruction in basic skills and a comprehensive survey of fundamental topics in mathematics.

The lesson format presents a step-by-step development of concepts and skills through use of worked-out examples that guide students through the solution process.

The exercise set is structured according to the student's skill and ability levels. It includes practical applications.

A section entitled "Extra Practice" is provided in the back of the book for students who need additional reteaching of skills. In a section of optional activities entitled "Special Topics," sections on "Algebra" and "Computer Literacy" are also offered.

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Holt, Rinehart and Winston	<i>Holt General Mathematics</i>	1982

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DEFINITIONS OF TERMS AND SYMBOLS	
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L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
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	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	**
Using rational numbers	H	**
Using irrational numbers	N	
Evaluating expressions with roots, powers, and absolute value	M	**
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	H	**

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	M	**
Determining measures of central tendency	L	*
Interpreting data and making inferences	L	**
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	H	**
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	H	***
Constructing standard straightedge compass figures	M	**
Making models, scale drawings, orthographic projections	L	**
Establishing congruence, similarity, symmetry	M	**
Using coordinate geometry	L	*
D. Patterns and Functions		
Determining and extending patterns	N	
Graphing functions and investigating their properties	N	

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	M	**
Evaluating algebraic expressions	L	*
Solving equations and inequalities	H	**
Solving problems involving direct and inverse variation, including percents	M	***

Holt, Rinehart and Winston

Holt General Mathematics

1982

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book. <i>Somewhat</i> means taught at least occasionally. <i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
		X								
		X								
	X		X	X			X			
	X		X	X		X				
		X								
	X		X	X		X	X			
		X								

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:
With computational problems?

With calculator problems?

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C. Use of Calculators											
Are they used: To illustrate and/or develop concepts?			X								
In lessons designed to teach how to use calculators?			X								
In "calculator" problems?			X								
D. Use of Concrete Materials											
Are they used: When new concepts are introduced or when difficult problems are encountered?			X								
Continuously as ideas are developed?			X								
Do students work with pictures, drawings, and other representations?	X			X	X		X	X			
E. Situational Lessons											
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X								
Do the lessons provide for: Several problems to be identified?			X								
A variety of approaches to be used?			X								
Study over several class periods?			X								
F. Cooperative Learning Groups											
Are students: Taught cooperative learning techniques?			X								
Given problems which are specifically designed to be solved in groups?			X								

PUBLISHER	TITLE	COPYRIGHT
Holt, Rinehart and Winston	<i>Holt General Mathematics</i>	1982

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

On request, a teacher's edition is supplied free for every 25 students' textbooks.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

The teacher's edition includes chapter-by-chapter commentary, teaching suggestions, and all answers.

3. Description of teacher's resource materials

See the related teacher's materials listed below.

4. Description of related materials available for sale

Skillmasters contains a set of 48 duplicating masters. These masters contain alternative "Self-Checks" for the "Skills Development" section, as well as diagnostic checkups for chapters 1 through 10. Activity-oriented practice and enrichment activities are also included.

Testmasters contains a set of 46 duplicating masters. They provide multiple-choice format tests for each unit of the "Skills Development" section, a test for each of the ten chapters, and a multiple-choice "Problem Solving" test. Also included are additional "Progress Tests" and a "Final Test."

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IV. INFORMATION FROM THE PUBLISHER—Continued

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Classified Ads	28
Divide	30
Divide by Tens	33
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Pretest (Part 2)	63
Subtract	64
More Subtracting	68
Multiply	72
More Multiplying	75
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Divide	80

C. Decimals

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------------------	----

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Compare/Order	92
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Each chapter from Chapter 1, "Measurement," through Chapter 10, "Rational Numbers," contains sections entitled "Maintenance Skills Review," "Calculator Activity," and "Reading in Math." A "Unit Review" and a "Unit Test" follow each of the units A, B, and C. A "Chapter Review" and a "Chapter Test" follow each chapter.



PUBLISHER	TITLE	COPYRIGHT
Houghton Mifflin Company	<i>Fundamentals of Mathematics: Skills and Applications</i>	1986

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

FUNDAMENTALS OF MATHEMATICS: SKILLS AND APPLICATIONS is a general mathematics text that provides comprehensive coverage of all topics normally taught in a ninth grade general mathematics course. The text provides coverage of whole numbers, fractions, decimals and percents, geometry, and measurement and also includes prealgebra concepts.

Four-color art highlights each section of the text. The unique organization is built around an instructional model in which each unit begins with a unit preview that helps teachers determine which skills have been previously mastered. This model is followed by a weekly plan, which moves from skill to applications to problem-solving lessons. These lessons are then followed by reviews and opportunities for evaluation.

Houghton Mifflin Company

Fundamentals of Mathematics: Skills and Applications

1986

II. MATHEMATICS - CONTENT

DEFINITIONS OF TERMS AND SYMBOLS

Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Conte.	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	***
Using rational numbers	H	*
Using irrational numbers	N	
Evaluating expressions with roots, powers, and absolute value	M	**
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	M	*

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	L	*
Determining measures of central tendency	L	*
Interpreting data and making inferences	N	
F. Logic		
Using inductive reasoning to generate hypotheses	N	

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Measurement—Continued		
Using formulas to determine measures	M	*
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	L	*
Constructing standard straightedge compass figures	N	
Making models, scale drawings, orthographic projections	N	
Establishing congruence, similarity, symmetry	N	
Using coordinate geometry	M	*
D. Patterns and Functions		
Determining and extending patterns	N	
Graphing functions and investigating their properties	N	

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	M	**
Evaluating algebraic expressions	M	**
Solving equations and inequalities	M	**
Solving problems involving direct and inverse variation, including percents	N	

Houghton Mifflin Company

Fundamentals of Mathematics: Skills and Applications

1986

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book. <i>Somewhat</i> means taught at least occasionally. <i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition:				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
A. Problem Solving (nonroutine problems)										
See the definition on page 2 of the <i>Mathematics Framework</i> .										
Is nonroutine problem solving modeled?										
		X								
Are students taught specific strategies for solving nonroutine problems?										
		X								
B. Estimation and Mental Arithmetic										
Are students:										
Taught specific techniques of estimation?										
Encouraged routinely to estimate the answer before doing a problem?										
		X								
Given exercises or games which include mental arithmetic?										
		X								
Is estimation used:										
With computational problems?										
		X	X	X					X	
With calculator problems?										
		X								

C. Use of Calculators										
Are they used:										
To illustrate and/or develop concepts?		X		X	X			X		X
In lessons designed to teach how to use calculators?		X		X	X			X		X
In "calculator" problems?		X		X	X			X		X
D. Use of Concrete Materials										
Are they used:										
When new concepts are introduced or when difficult problems are encountered?				X						
Continuously as ideas are developed?				X						
Do students work with pictures, drawings, and other representations?		X		X			X		X	X
E. Situational Lessons										
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?				X						
Do the lessons provide for:										
Several problems to be identified?				X						
A variety of approaches to be used?				X						
Study over several class periods?				X						
F. Cooperative Learning Groups										
Are students:										
Taught cooperative learning techniques?				X						
Given problems which are specifically designed to be solved in groups?				X						

PUBLISHER	TITLE	COPYRIGHT
Houghton Mifflin Company	<i>Fundamentals of Mathematics: Skills and Applications</i>	1986

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

Teacher's edition

Test masters (one set per building)

Practice masters (one set per building)

Problem-solving masters (one set per building)

Answer key, test masters

Answer key, practice masters

Answer key, problem-solving masters

2. Description of the teacher's edition

Annotated

Teaching notes

Answers/placement

3. Description of teacher's resource materials

This textbook is not accompanied by a teacher's resource book.

4. Description of related materials available for sale

All of the materials listed under item one on this page are listed for sale in the current catalog.

Houghton Mifflin Company

Fundamentals of Mathematics: Skills and Applications

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IV. INFORMATION FROM THE PUBLISHER—Continued

Part B. Table of Contents

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Houghton Mifflin Company	<i>Fundamentals of Mathematics: Skills and Applications</i>	1986

Part B. Table of Contents—Continued

7. Rates, Ratios, Proportions Probability and Statistics Problem Solving—Continued	9. Percent Skills Applying Percents Problem Solving	11. Variable Expressions Translating Words into Symbols Problem Solving
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PUBLISHER	TITLE	COPYRIGHT
Laidlaw Educational Publishers	<i>Applying Mathematics in Daily Living</i>	1986

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

A *PLYING MATHEMATICS IN DAILY LIVING* is a one-year general mathematics textbook designed for the student who has basic competency in mathematics skills but can benefit from skills reinforcement through practical applications.

Problem-solving activities, integrated into every chapter, develop students' higher level thinking skills.

A "Computing Skills Refresher" section provides reteaching and maintenance of computational skills as needed.

"Calculator Skills" sections provide instruction and practice in the use of the hand-held calculator. These sections can be used with textbook lessons or as a separate unit.

The text may be used in a terminal high school course or as a bridge to higher level mathematics courses.

PUBLISHER	TITLE	COPYRIGHT
Laidlaw Educational Publishers	<i>Applying Mathematics in Daily Living</i>	1986

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	N	
Using rational numbers	H	*
Using irrational numbers	N	
Evaluating expressions with roots, powers, and absolute value	L	*
B. Measurement		
Taking into account measurement precision	M	*
Converting within a measurement system	M	*

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	L	*
Determining theoretical and empirical probability	M	*
Determining measures of central tendency	M	**
Interpreting data and making inferences	H	**
F. Logic		
Using inductive reasoning to generate hypotheses	L	**

Measurement—Continued		
Using formulas to determine measures	H	**
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	M	*
Constructing standard straightedge compass figures	N	
Making models, scale drawings, orthographic projections	M	**
Establishing congruence, similarity, symmetry	L	*
Using coordinate geometry	M	*
D. Patterns and Functions		
Determining and extending patterns	N	
Graphing functions and investigating their properties	L	*

Logic—Continued		
Using deductive reasoning to reach conclusions	L	*
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	M	*
Evaluating algebraic expressions	M	*
Solving equations and inequalities	M	*
Solving problems involving direct and inverse variation, including percents	H	**

Laidlaw Educational Publishers

Applying Mathematics in Daily Living

1986

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Somewhat</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
	X		X		X				X	
		X								
		X	X		X	X	X			
	X		X		X	X	X			X
	X		X		X	X				
	X		X			X	X			X
	X		X		X	X	X			X

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

 Taught specific techniques of estimation?

 Encouraged routinely to estimate the answer before doing a problem?

 Given exercises or games which include mental arithmetic?

Is estimation used:

 With computational problems?

 With calculator problems?

C. Use of Calculators											
Are they used: To illustrate and/or develop concepts?			X								
In lessons designed to teach how to use calculators?	X			X			X	X	X		
In "calculator" problems?		X		X	X	X	X	X			
D. Use of Concrete Materials											
Are they used: When new concepts are introduced or when difficult problems are encountered?	X			X	X	X	X	X		X	
Continuously as ideas are developed?	X			X	X	X	X	X			
Do students work with pictures, drawings, and other representations?	X			X		X	X	X	X	X	X
E. Situational Lessons											
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?				X	X	X	X		X		X
Do the lessons provide for: Several problems to be identified?				X	X	X	X	X	X		X
A variety of approaches to be used?				X	X	X	X		X		
Study over several class periods?				X	X	X	X		X		
F. Cooperative Learning Groups											
Are students: Taught cooperative learning techniques?				X							
Given problems which are specifically designed to be solved in groups?				X							

PUBLISHER	TITLE	COPYRIGHT
Laidlaw Educational Publishers	<i>Applying Mathematics in Daily Living</i>	1986

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

One teacher's edition is supplied with the purchase of 25 copies of the students' textbooks.

One teacher's resource binder is supplied to each teacher with the purchase of 25 copies of the students' textbooks.

2. Description of the teacher's edition

- Annotated
- Teaching notes (in manual prior to annotated students' pages)
- Answers/ placement (annotated on appropriate student's page adjacent to problem)

3. Description of teacher's resource materials

The teacher's resource binder of reproducible masters includes:

- Chapter tests: forms A and B for each chapter
- Cumulative tests organized to cover two chapters
- Computing skills tests
- Applications (projects and discovery lessons)
- Answers for the masters
- Answers for the odd-numbered exercises for the student's textbook

4. Description of related materials available for sale

"Answers to Selected Exercises" includes answers for all the odd-numbered exercises in the textbook.

Computer Supplement: "Applying Mathematics Skills" consists of three disks. Disks 1 and 3 are tutorials that focus on work-related topics. Disk 2 is a game simulation on personal financial planning.

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I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

MATHEMATICS SKILLS FOR DAILY LIVING is a one-year general mathematics textbook designed to develop essential mathematics skills and problem-solving techniques.

The goal is to provide the opportunity for students to become mathematically literate in the basic skills applicable to everyday life. With examples from real-life situations, this textbook establishes the relevance of learning mathematics skills.

It is designed for the student who lacks a solid foundation of basic skills and is unlikely to pursue higher level mathematics courses. This textbook should be considered for the first course of a general mathematics sequence or for a terminal course.

PUBLISHER	TITLE	COPYRIGHT
Laidlaw Educational Publishers	<i>Mathematics Skills for Daily Living</i>	1986

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	M	**
Using rational numbers	H	*
Using irrational numbers	N	
Evaluating expressions with roots, powers, and absolute value	N	
B. Measurement		
Taking into account measurement precision	M	*
Converting within a measurement system	H	*

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	H	*
Determining measures of central tendency	H	**
Interpreting data and making inferences	H	**
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	H	*
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	M	*
Constructing standard straightedge compass figures	L	*
Making models, scale drawings, orthographic projections	M	*
Establishing congruence, similarity, symmetry	M	**
Using coordinate geometry	M	*
D. Patterns and Functions		
Determining and extending patterns	N	
Graphing functions and investigating their properties	L	*

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	L	*
G. Algebra		
Creating mathematical models to represent situations	L	*
Evaluating algebraic expressions	L	*
Solving equations and inequalities	M	*
Solving problems involving direct and inverse variation, including percents	H	**

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Mathematics Skills for Daily Living

1986

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Somewhat</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
	X		X						X	
		X	X	X		X				
		X	X	X		X	X			X
		X								
	X		X			X	X			X
		X								

C. Use of Calculators										
Are they used: To illustrate and/or develop concepts?			X	X						X
In lessons designed to teach how to use calculators?	X			X						X
In "calculator" problems?	X			X		X				X
D. Use of Concrete Materials										
Are they used: When new concepts are introduced or when difficult problems are encountered?			X				X			
Continuously as ideas are developed?			X	X		X	X	X		X
Do students work with pictures, drawings, and other representations?	X			X			X	X	X	X
E. Situational Lessons										
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X	X	X	X				X
Do the lessons provide for: Several problems to be identified?			X							
A variety of approaches to be used?			X							
Study over several class periods?			X	X		X				X
F. Cooperative Learning Groups										
Are students: Taught cooperative learning techniques?			X							
Given problems which are specifically designed to be solved in groups?			X							

PUBLISHER	TITLE	COPYRIGHT
Laidlaw Educational Publishers	<i>Mathematics Skills for Daily Living</i>	1986

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

One teacher's edition is supplied with the purchase of 25 copies of students' textbooks.

One teacher's resource binder is supplied for each teacher with the purchase of 25 copies of students' textbooks.

2. Description of the teacher's edition

- Annotated
- Teaching notes (in manual following the annotated students' pages)
- Answers/placement (annotated on appropriate student's page adjacent to problem)

3. Description of teacher's resource materials

The teacher's resource binder of reproducible masters includes:

- Chapter tests: forms A and B for each chapter
- Cumulative tests
- Competency tests
- Skills masters
- Projects
- Answers

4. Description of related materials available for sale

"Answers to Selected Exercises" includes answers for all the odd-numbered exercises in the textbook.

PUBLISHER	TITLE	COPYRIGHT
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PUBLISHER	TITLE	COPYRIGHT
Media Materials, Inc.	<i>Basic Mathematics Skills</i>	1982

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

BASIC MATHEMATICS SKILLS is for remedial or special education high school students in grades seven through twelve. This text is designed for students who have been exposed to the concepts of modern mathematics but who need some additional instruction and reinforcement in the basic skills. The no frills approach emphasizes mastering necessary skills through a wealth of drill exercises.

This textbook presents a logical, sequential development of the arithmetic of whole numbers, fractions, decimals, and percent, while providing numerous problems of a practical nature. Some of the special features of *Basic Mathematics Skills* are easy readability, provision of examples, functional problems, and varied formats.

PUBLISHER	TITLE	COPYRIGHT
Media Materials, Inc.	<i>Basic Mathematics Skills</i>	1982

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	N	
Using rational numbers	H	*
Using irrational numbers	N	*
Evaluating expressions with roots, powers, and absolute value	L	*
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	M	*

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	N	
Determining measures of central tendency	N	
Interpreting data and making inferences	M	*
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	M	*
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	M	*
Constructing standard straightedge compass figures	N	
Making models, scale drawings, orthographic projections	L	*
Establishing congruence, similarity, symmetry	N	*
Using coordinate geometry	N	
D. Patterns and Functions		
Determining and extending patterns	N	*
Graphing functions and investigating their properties	N	

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	N	
Evaluating algebraic expressions	L	*
Solving equations and inequalities	L	*
Solving problems involving direct and inverse variation, including percents	L	*

PUBLISHER	TITLE	COPYRIGHT
Media Materials, Inc.	Basic Mathematics Skills	1982

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<p><i>Substantially</i> means integrated throughout the book. <i>Somewhat</i> means taught at least occasionally. <i>Little or none</i> means little or none.</p>

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
		X	X							
		X	X							
		X	X							
		X	X							
		X	X							
		X	X							
		X	X							

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

C. Use of Calculators										
Are they used: To illustrate and/or develop concepts?			X	X						
In lessons designed to teach how to use calculators?			X	X						
In "calculator" problems?			X	X						
D. Use of Concrete Materials										
Are they used: When new concepts are introduced or when difficult problems are encountered?		X		X			X			
Continuously as ideas are developed?		X		X						
Do students work with pictures, drawings, and other representations?	X			X			X			
E. Situational Lessons										
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X							
Do the lessons provide for: Several problems to be identified?		X		X			X			
A variety of approaches to be used?			X							
Study over several class periods?			X							
F. Cooperative Learning Groups										
Are students: Taught cooperative learning techniques?			X							
Given problems which are specifically designed to be solved in groups?			X							

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Media Materials, Inc.	<i>Basic Mathematics Skills</i>	1982

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

On request one free teacher's guide is provided with every purchase of ten textbooks. This teacher's guide is meant to be a resource for the teacher in checking the students' work and in planning for further instruction. The teacher's guide includes reproducible masters for practice and tests. Also on request, the answer key for the student's workbook is provided free when ten students' workbooks are purchased.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

A teacher's guide, an answer key, and reproducible supplementary exercises are provided (see the description above).

3. Description of teacher's resource materials

Blackline masters

4. Description of related materials available for sale

Student's workbook
 Workbook answer key
 Correlated software package

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PUBLISHER	TITLE	COPYRIGHT
Media Materials, Inc.	<i>Life Skills Mathematics</i>	1983

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

LIFE SKILLS MATHEMATICS, which is for remedial or special education high school students, applies computational skills to situations encountered in the everyday world of young people. Step-by-step instructions, practice exercises, calculator and computer activities, and chapter tests all combine to ensure students' understanding. The textbook presents a logical, sequential development of the arithmetic of whole numbers, fractions, decimals, and percents within the context of

practical situations that are familiar to most students. Instruction is given in clear, simple terms. The authors believe that students should spend most of their time working mathematics problems, rather than reading about how to work them.

Some of the special features of *Life Skills Mathematics* are easy readability, provision of examples, functional activities, and calculator and computer activities.

PUBLISHER	TITLE	COPYRIGHT
Media Materials, Inc.	<i>Life Skills Mathematics</i>	1983

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	N	*
Using rational numbers	H	*
Using irrational numbers		
Evaluating expressions with roots, powers, and absolute value	N	
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	L	*

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	L	*
Determining theoretical and empirical probability	H	**
Determining measures of central tendency	N	*
Interpreting data and making inferences	L	*
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	L	*
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	M	*
Constructing standard straightedge compass figures	N	*
Making models, scale drawings, orthographic projections	N	*
Establishing congruence, similarity, symmetry	N	
Using coordinate geometry	N	
D. Patterns and Functions		
Determining and extending patterns	N	
Graphing functions and investigating their properties	N	*

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	N	
Evaluating algebraic expressions	N	
Solving equations and inequalities	N	
Solving problems involving direct and inverse variation, including percents	N	*

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Life Skills Mathematics

1983

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS	Extent Included			Where			How the Focus Is Presented in the Student's Edition					
	Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material	
Extent Included												
<i>Substantially</i> means integrated throughout the book. <i>Somewhat</i> means taught at least occasionally. <i>Little or none</i> means little or none.												
A. Problem Solving (nonroutine problems)												
See the definition on page 2 of the <i>Mathematics Framework</i> .												
Is nonroutine problem solving modeled?			X									
Are students taught specific strategies for solving nonroutine problems?			X									
B. Estimation and Mental Arithmetic												
Are students:												
Taught specific techniques of estimation?			X									
Encouraged routinely to estimate the answer before doing a problem?			X									
Given exercises or games which include mental arithmetic?			X									
Is estimation used:												
With computational problems?			X	X			X					
With calculator problems?			X	X			X	X				

C. Use of Calculators											
Are they used:											
To illustrate and/or develop concepts?	X			X			X	X			
In lessons designed to teach how to use calculators?		X		X				X			
In "calculator" problems?	X			X			X				
D. Use of Concrete Materials											
Are they used:											
When new concepts are introduced or when difficult problems are encountered?			X								
Continuously as ideas are developed?			X								
Do students work with pictures, drawings, and other representations?		X		X			X	X			
E. Situational Lessons											
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X								
Do the lessons provide for:											
Several problems to be identified?			X								
A variety of approaches to be used?			X								
Study over several class periods?			X								
F. Cooperative Learning Groups											
Are students:											
Taught cooperative learning techniques?			X								
Given problems which are specifically designed to be solved in groups?			X								

PUBLISHER	TITLE	COPYRIGHT
Media Materials, Inc.	<i>Life Skills Mathematics</i>	1983

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

On request one free teacher's guide is provided with every purchase of ten textbooks. This teacher's guide is meant to be a resource for the teacher in checking the student's work and in planning for further instruction. The teacher's guide includes reproducible masters for practice and tests. Also on request the answer key for the student's workbook is provided free when ten students' workbooks are purchased.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

A teacher's guide, an answer key, and reproducible supplementary exercises are provided (see the description above).

3. Description of teacher's resource materials

Blackline masters

4. Description of related materials available for sale

Student's workbook
 Workbook answer key
 Correlated software package

PUBLISHER	TITLE	COPYRIGHT
Media Materials, Inc.	<i>Life Skills Mathematics</i>	1983

IV. INFORMATION FROM THE PUBLISHER—Continued

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PUBLISHER	TITLE	COPYRIGHT
Scott, Foresman and Company	<i>Mathematics in Life, Second Edition</i>	1985

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

MATHEMATICS IN LIFE is for students in grades nine and ten who are not college preparatory but who might enter that sequence. This textbook fulfills the description for "Math A" on page 38 of the *Mathematics Framework for California Public Schools, Kindergarten Through Grade Twelve*.

Program highlights are as follows:

- Each chapter contains sections on skills and problem solving, with pretests and post-tests in both sections.
- Simple step-by-step examples and solutions are provided.

- Lessons are easy because reading is kept to a minimum.
- Useful mathematics is stressed: Actual consumer and business forms are reproduced throughout the textbook, and computer literacy involvement prepares students for the job market.
- Strong emphasis is placed on problem-solving strategies and common-sense estimation.
- Optional activities are "Computer Literacy," "Calculator Applications," and "Break Times."

Scott, Foresman and Company

Mathematics in Life, Second Edition

1985

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	**
Using rational numbers	H	*
Using irrational numbers	L	*
Evaluating expressions with roots, powers, and absolute value	M	*
B. Measurement		
Taking into account measurement precision	N	*
Converting within a measurement system	M	*

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	*
Determining theoretical and empirical probability	M	*
Determining measures of central tendency	M	*
Interpreting data and making inferences	M	*
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	H	*
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	H	***
Constructing standard straightedge compass figures	N	
Making models, scale drawings, orthographic projections	M	*
Establishing congruence, similarity, symmetry	M	*
Using coordinate geometry	H	**
D Patterns and Functions		
Determining and extending patterns	M	*
Graphing functions and investigating their properties	M	*

Logic—Continued		
Using deductive reasoning to reach conclusions	N	*
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	M	*
Evaluating algebraic expressions	M	**
Solving equations and inequalities	M	**
Solving problems involving direct and inverse variation, including percents	H	**

Scott, Foresman and Company

Mathematics in Life, Second Edition

1985

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book.
<i>Somewhat</i> means taught at least occasionally.
<i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
	X		X	X					X	
	X		X	X			X			
		X	X	X		X	X			X
	X					X				
	X		X	X		X				
	X		X	X			X			
	X		X	X						
	X		X	X			X			

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

C. Use of Calculators										
Are they used: To illustrate and/or develop concepts?			X							
In lessons designed to teach how to use calculators?	X			X	X			X		X
In "calculator" problems?	X			X	X			X		X
D. Use of Concrete Materials										
Are they used: When new concepts are introduced or when difficult problems are encountered?			X							
Continuously as ideas are developed?			X							
Do students work with pictures, drawings, and other representations?	X			X	X		X			
E. Situational Lessons										
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X	X	X					X
Do the lessons provide for: Several problems to be identified?			X	X	X					
A variety of approaches to be used?			X	X	X					
Study over several class periods?			X	X	X					
F. Cooperative Learning Groups										
Are students: Taught cooperative learning techniques?			X							
Given problems which are specifically designed to be solved in groups?			X							

PUBLISHER	TITLE	COPYRIGHT
Scott, Foresman and Company	<i>Mathematics in Life, Second Edition</i>	1985

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

Teachers' editions will be supplied on request when *Mathematics in Life* is purchased.

Reproducible blackline masters for multiple-choice unit tests, end-of-book tests, and competency tests are included with each teacher's edition.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

3. Description of teacher's resource materials

See related teacher's resource materials below.

4. Description of related materials available for sale

Problem-solving masters provide applications on 64 duplicating masters that reinforce and extend problem-solving lessons in the students' textbooks. Also included are real-life consumer forms, such as checks, deposit slips, and so forth. This material is available on blackline or duplicating masters.

Test masters contain alternative forms of each chapter, unit, end-of-book, and competency test on 60 blackline or duplicating masters.

The solution key provides answers to all exercises. Answers for most consumer and career applications problems are worked out.

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Mathematics in Life, Second Edition

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IV. INFORMATION FROM THE PUBLISHER—Continued

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Multiplying with One-Digit Multipliers	Subtracting Decimals	80	<i>Skills</i>	Writing Fractions and Mixed Numbers	150
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Multiplying with Three-Digit Multipliers	Estimating Sums and Differences	83	Multiplying Fractions	154	Multiplying Fractions
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Problem Solving

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Problem Solving

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Problem Solving

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13. Positive and Negative Numbers*Skills*

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Problem Solving

Developing Strategies Tactics: Using Positive and Negative Numbers	300
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14. Expressions and Equations*Skills*

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Developing Strategies Tactics: Using a Formula, Making a Graph	324
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15. Graphing*Skills*

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Problem Solving

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Problem Solving

Developing Strategies Tactics: Obtaining Information from a Picture, Using a Formula, Selecting Necessary Data	368
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17. Surface Area and Volume*Skills*

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Problem Solving

Developing Strategies Tactics: Obtaining Information from a Picture, Using a Formula, Reading a Table	390
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18. The Pythagorean Rule and Trigonometry*Skills*

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Problem Solving

Developing Strategies Tactics: Drawing a Picture, Using Trigonometric Ratios	412
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"Consumer Applications" and "Career Applications" appear in the "Problem Solving" section of each chapter

PUBLISHER	TITLE	COPYRIGHT
University of Chicago School Mathematics Project	<i>Transition Mathematics</i>	1985

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

TRANSITION MATHEMATICS is intended for students who score at grade levels between 7.0 and 8.5 in September on standardized tests (irrespective of the student's age). This textbook is designed to prepare such students to enroll in an algebra course the following year and a geometry course a year later.

Scientific calculators are required, for which applications abound.

Problem solving is a constant theme. There is continual review and a modified mastery approach on skills.

Testing shows that students in this course keep the same paper-and-pencil arithmetic skills and are far better prepared for algebra and geometry than are students in comparable classes.

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University of Chicago School Mathematics Project	<i>Transition Mathematics</i>	1985

II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	***
Using rational numbers	H	***
Using irrational numbers	L	***
Evaluating expressions with roots, powers, and absolute value	H	***
B. Measurement		
Taking into account measurement precision	L	***
Converting within a measurement system	H	***

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	N	
Determining measures of central tendency	N	
Interpreting data and making inferences	N	
F. Logic		
Using inductive reasoning to generate hypotheses	M	**

Measurement—Continued		
Using formulas to determine measures	H	***
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	H	***
Constructing standard straightedge compass figures	L	*
Making models, scale drawings, orthographic projections	M	**
Establishing congruence, similarity, symmetry	M	***
Using coordinate geometry	M	**
D. Patterns and Functions		
Determining and extending patterns	H	**
Graphing functions and investigating their properties	M	**

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	H	*
Evaluating algebraic expressions	H	**
Solving equations and inequalities	H	**
Solving problems involving direct and inverse variation, including percents	M	**

University of Chicago School Mathematics Project

Transition Mathematics

1985

III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book. <i>Somewhat</i> means taught at least occasionally. <i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
	X		X		X	X		X		X
	X		X		X	X		X		X
	X		X				X			X
		X	X							X
	X		X			X				
	X		X			X				
	X		X			X				

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

C. Use of Calculators										
Are they used:										
To illustrate and/or develop concepts?	X			X		X	X	X		X
In lessons designed to teach how to use calculators?	X			X		X	X	X		X
In "calculator" problems?	X			X		X	X	X		X
D. Use of Concrete Materials										
Are they used:										
When new concepts are introduced or when difficult problems are encountered?				X	X					
Continuously as ideas are developed?				X	X					
Do students work with pictures, drawings, and other representations?	X			X		X	X			X
E. Situational Lessons										
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?				X						
Do the lessons provide for:										
Several problems to be identified?				X						
A variety of approaches to be used?				X						
Study over several class periods?				X						
F. Cooperative Learning Groups										
Are students:										
Taught cooperative learning techniques?				X						
Given problems which are specifically designed to be solved in groups?				X						

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University of Chicago School Mathematics Project	<i>Transition Mathematics</i>	1985

IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

The teacher's notes are provided free of charge to each teacher using this material. Additional copies are available for purchase. The teacher's notes contain quizzes, tests, and cumulative tests for each chapter; cumulative tests for chapters 1 through 3, 4 through 6, 7 through 9, and 10 through 13; and semester and final tests, all with answers.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

3. Description of teacher's resource materials

Teacher's resource materials are included in the teacher's notes. See the previous description.

4. Description of related materials available for sale

University of Chicago School Mathematics Project Algebra will be available in a preliminary form in spring, 1987.

University of Chicago School Mathematics Project

Transition Mathematics

1985

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Each chapter concludes with a “Chapter Summary,” “SPUR Mastery Self-Test,” and “SPUR Objectives and Review.”

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West Educational Publishing	<i>Arithmetic: A Problem-Solving Approach</i>	1985

I. PUBLISHER'S DESCRIPTION OF THE TEXT AND INTENDED AUDIENCE

A *RITHMETIC: A PROBLEM-SOLVING APPROACH* is intended for the high school student interested in learning the mathematics skills needed to solve everyday problems. This textbook is designed to meet the learning needs of each student. Pretests open every chapter in Part I to help the teacher assess how much of each chapter student need to cover and what learning objectives are involved. Numerous problems

throughout the textbook give students plenty of practice. Word problems are identified by a picture key, indicating applications from a variety of fields, such as chemistry, business/economics, biology, and so forth. "Challenge" questions keep the advanced students interested; and a special appendix, "Practice Problem Sets," offers 1,800 extra exercises for slower students.

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II. MATHEMATICS CONTENT

DEFINITIONS OF TERMS AND SYMBOLS	
Key for Degree of Emphasis	Key for Match with High School Core Curriculum
H <i>High emphasis</i> means a chapter or more or lessons throughout the book.	**** Means all or virtually all match the <i>Mathematics Framework's</i> description for high school core content
M <i>Moderate emphasis</i> means less than a chapter but more than one lesson.	*** Means mainly high school core content but some from other levels
L <i>Limited emphasis</i> means one lesson.	** Means mainly from other levels but some from high school core content
N <i>Little or no emphasis</i> means an occasional exercise or mention.	* Means little or no match with high school core content
	Blank Means there is no material that matches the high school core curriculum

Content	Degree of Emphasis	Match with High School Core Curriculum
A. Number		
Using signed numbers	H	****
Using rational numbers	H	****
Using irrational numbers	L	**
Evaluating expressions with roots, powers, and absolute value	M	**
B. Measurement		
Taking into account measurement precision	N	
Converting within a measurement system	M	****

Content	Degree of Emphasis	Match with High School Core Curriculum
E. Statistics and Probability		
Using counting procedures to solve combinatorial problems	N	
Determining theoretical and empirical probability	N	
Determining measures of central tendency	N	
Interpreting data and making inferences	N	
F. Logic		
Using inductive reasoning to generate hypotheses	N	

Measurement—Continued		
Using formulas to determine measures	H	**
C. Geometry		
Using geometric properties of plane and solid figures to determine measures	N	
Constructing standard straightedge compass figures	N	
Making models, scale drawings, orthographic projections	N	
Establishing congruence, similarity, symmetry	N	
Using coordinate geometry	N	
D. Patterns and Functions		
Determining and extending patterns	N	
Graphing functions and investigating their properties	N	

Logic—Continued		
Using deductive reasoning to reach conclusions	N	
Distinguishing between necessary and sufficient conditions	N	
G. Algebra		
Creating mathematical models to represent situations	N	
Evaluating algebraic expressions	N	
Solving equations and inequalities	M	**
Solving problems involving direct and inverse variation, including percents	N	

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III. FRAMEWORK FOCUSES

DEFINITION OF TERMS
Extent Included
<i>Substantially</i> means integrated throughout the book. <i>Somewhat</i> means taught at least occasionally. <i>Little or none</i> means little or none.

Extent Included			Where			How the Focus Is Presented in the Student's Edition				
Substantially	Somewhat	Little or None	Student's Edition	Teacher's Edition	Teacher's Resource Material	Incorporated Within Lessons	Separate Lessons	Dedicated Chapter	Special Feature	With Review Material
		X								
		X								
		X	X				X			
		X								
		X								
		X								
		X								

A. Problem Solving (nonroutine problems)

See the definition on page 2 of the *Mathematics Framework*.

Is nonroutine problem solving modeled?

Are students taught specific strategies for solving nonroutine problems?

B. Estimation and Mental Arithmetic

Are students:

Taught specific techniques of estimation?

Encouraged routinely to estimate the answer before doing a problem?

Given exercises or games which include mental arithmetic?

Is estimation used:

With computational problems?

With calculator problems?

C. Use of Calculators											
Are they used: To illustrate and/or develop concepts?			X								
In lessons designed to teach how to use calculators?		X		X				X		X	
In "calculator" problems?			X								
D. Use of Concrete Materials											
Are they used: When new concepts are introduced or when difficult problems are encountered?			X								
Continuously as ideas are developed?			X								
Do students work with pictures, drawings, and other representations?		X		X			X				
E. Situational Lessons											
Are lessons included which begin with a description of an interesting, challenging situation from which a number of activities can emerge?			X								
Do the lessons provide for: Several problems to be identified?			X								
A variety of approaches to be used?			X								
Study over several class periods?			X								
F. Cooperative Learning Groups											
Are students: Taught cooperative learning techniques?			X								
Given problems which are specifically designed to be solved in groups?			X								

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IV. INFORMATION FROM THE PUBLISHER

Part A. Components and Ancillary Materials

1. Description of components supplied with the student's edition without cost

The teacher's manual contains five additional tests per chapter, three additional cumulative review tests for Part I, and several final exams. Transparency masters are included for the appendix, "Arithmetic in a Nutshell."

The *West MathTest* is a software package that allows the teacher to generate up to 600 different tests per chapter. The teacher may choose any combination of arithmetic problems, series of matching exercises, and multiple-choice questions for the test. The option of printing just the answers or solutions and answers also exists. The software is available for the Apple IIe®, IIc®, or IIplus®.

2. Description of the teacher's edition

- Annotated
- Teaching notes
- Answers/placement

3. Description of teacher's resource materials

Teacher's resource materials are included in the teacher's manual (see the preceding description).

4. Description of related materials available for sale

No additional items are for sale.

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This publication is one of over 600 that are available from the California State Department of Education. Some of the more recent publications or those most widely used are the following:

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