

Elementary Algebra by Harold R. Jacobs
Table of Contents.

1	<u>Fundamental Operations</u>
1.1	Addition
1.2	Subtraction
1.3	Multiplication
1.4	Division
1.5	Raising to a Power
1.6	Zero and One
1.7	Several Operations
1.8	Parentheses
1.9	The Distributive Rule
	SUMMARY AND REVIEW
2	<u>Functions and Graphs</u>
2.1	An Introduction to Functions
2.2	The Coordinate Graph
2.3	More on Functions
2.4	Direct Variations
2.5	Linear Functions
2.6	Inverse Variation
	SUMMARY AND REVIEW
3	<u>The Integers</u>
3.1	The Integers
3.2	More on the Coordinate Graph
3.3	Addition
3.4	Subtraction
3.5	Multiplication
3.6	Division
3.7	Several Operations
	SUMMARY AND REVIEW
4	<u>The Rational Numbers</u>
4.1	The Rational Numbers
4.2	Absolute Value and Addition
4.3	More on Operations w Rational Nos.
4.4	Approximations
4.5	More on Graphing Functions
	SUMMARY AND REVIEW
5	<u>Equations in One Variable</u>
5.1	1 Equations
5.2	2 Inverse Operations
5.3	3 Equivalent Equations
5.4	4 Equivalent Expressions
5.5	5 More on Solving Equations
5.6	6 Length and Area
5.7	7 Distance, Rate and Time
5.8	8 Rate Problems

Elementary Algebra by Harold R. Jacobs

Table of Contents.

	Summary and Review
6	<u>Equations in Two Variables</u>
6.1	1 Equations in Two Variables
6.2	2 Formulas
6.3	3 Graphing Linear Equations
6.4	4 Intercepts
6.5	5 Slope
6.6	6 The Slope Intercept Form
	Summary and Review
7	<u>Simultaneous Equations</u>
7.1	1 Simultaneous Equations
7.2	2 Solving by Subtraction
7.3	3 More on Solving by Addition and Subtraction
7.4	4 Graphing Simultaneous Equations
7.5	6 Solving by Substitution
7.6	7 Mixture Problems
	Summary and Review
8	<u>Exponents</u>
8.1	1 Large Numbers
8.2	2 A Fundamental Property of Exponents
8.3	3 Two More Properties of Exponents
8.4	4 Zero and Negative Exponents
8.5	5 Small Numbers
8.6	6 Powers of Products and Quotients
8.7	7 Exponential Functions
	Summary and Review
	MIDTERM REVIEW
9	<u>Polynomials</u>
9.1	1 Monomials
9.2	2 Polynomials
9.3	3 Adding and Subtracting Polynomials
9.4	4 Multiplying Polynomials
9.5	5 More on Multiplying Polynomials
9.6	6 Squaring Binomials
9.7	7 Dividing Polynomials
	Summary and Review
10	<u>Factoring</u>
10.1	1 Prime and Composite Numbers
10.2	2 Monomials and their Factors
10.3	3 Polynomials and their Factors
10.4	4 Factoring Second-Degree Polynomials
10.5	5 Factoring the Difference of Two Squares
10.6	6 Factoring Trinomial Squares
10.7	7 More on Factoring 2 nd -Degree Polynomials

Elementary Algebra by Harold R. Jacobs

Table of Contents.

- 10.8 8 Factoring Higher Degree Polynomials
- Summary and Review
- 11 FRACTIONS
- 11.1 Fractions
- 11.2 Algebraic Fractions
- 11.3 Adding and Subtracting Fractions
- 11.4 More on Addition and Subtraction
- 11.5 Multiplying Fractions
- 11.6 More on Multiplication
- 11.7 Dividing Fractions
- 11.8 Complex Fractions
- Summary and Review
- 12 Square Roots
- 12.1 Squares and Square Roots
- 12.2 Square Roots of Products
- 12.3 Square Roots of Quotients
- 12.4 Adding and Subtracting Square Roots
- 12.5 Mutlplying Square Roots
- 12.6 Dividing Square Roots
- 12.7 Radical Equations
- Summary and Review
- 13 Chapter 13 Quadratic Equations
- 13.1 Polynomial Equations
- 13.2 Polynomial Functions
- 13.3 Solving Polynomial Equations by Graphing
- 13.4 Solving Quadratic Equations by Factoring
- 13.5 Solving Quadratic Equations by Taking SqRoots
- 13.6 Completing the Square
- 13.7 The Quadratic Formula
- 13.8 The Discriminant
- 13.9 Solving Higher Degree Equations
- Summary and Review
- 14 Chapter 14 The Real Numbers
- 14.1 Rational Numbers
- 14.2 Irrational Numbers
- 14.3 More Irrational Numbers
- 14.4 Pi
- 14.5 The Real Numbers
- Summary and Review
- 15 Chapter 15 Fractional Equations
- 15.1 Ratio and Proportion
- 15.2 Equations Containing Fractions
- 15.3 More on Fractional Equations
- 15.4 Solving Formulas

Elementary Algebra by Harold R. Jacobs
Table of Contents.

15.5	More on Solving Formulas Summary and Review
16	<u>Chapter 16 Inequalities</u>
16.1	Inequalities
16.2	Solving Linear Inequalities
16.3	More on Solving Inequalities
16.4	Absolute Value and Inequalities Summary and Review
17	<u>Chapter 17 Number Sequences</u>
17.1	Number Sequences
17.2	Arithmetic Sequences
17.3	Geometric Sequences
17.4	Infinite Geometric Sequences Summary and Review
	FINAL REVIEW