

Computer Software

Basic College Mathematics

CD-ROM 510 B292

2nd ed. Martin-Gay, K. Elayn 2003

Calculus

CD-ROM 515.15 In8 1998

*Interactive Calculus

Derive 6

CD 512.1 D445 2004

Introductory Algebra

CD-ROM 512.9 IN8

2nd e. Martin-Gay, K. Elayn 2003

Intermediate Algebra

2nd ed. Martin-Gay, K. Elayn 2003

CD-ROM 512.9 IN8A

Intermediate Algebra with Applications (Aufmann/Barker/Lockwood 4th ed.)

CD 512 In8ct 1996

*Review of Real Numbers

*First Degree Equations & Inequalities

*Linear Functions & Inequalities

*Linear Functions & Inequalities in Two Variables

*Systems of Equations & Inequalities

*Polynomials & Exponents

*Rational Exponents & Radicals

*Radical Expressions

*Quadratic Equations & Inequalities

*Functions & Relations

*Exponential & Logarithmic Functions

*Sequences & Series

*Conic Solutions

*Cumulative Reviews

Introduction to Algebra

CD 512 IN8

*Signed Numbers

*Variable Expressions

Mathematics for Elementary Teachers 2001

CD-ROM 510 M42E 2001

Videos

Back to Back Math Series 1990

Fractions: A Comprehensive Review

VC 513.26 F841c

- *Understanding the Meaning of Fractions
- *Factoring Whole Numbers
- *Prime and Composite Numbers
- *Prime Factorizations
- *Finding the Greatest Common Factor
- *Raising Fractions to Higher Terms
- *Reducing Fractions to Lowest Terms
- *Express Whole or Mixed Numbers as Improper Fractions
- *Finding the Least Common Multiple
- *Finding the Least Common Denominator
- *Comparing Fractions
- *Add Like Fractions & Mixed Numbers with Like Fractions
- *Add Unlike Fractions & Mixed Numbers with Unlike Fractions
- *Subtract Like Fractions & Mixed Numbers with Like Fractions
- *Subtract Unlike Fraction & Mixed Numbers with Unlike Fractions
- *Multiplying Whole Numbers and Fractions
- *Multiplying Whole Numbers and Mixed Fractions
- *Multiplying Fractions
- *Multiplying Fractions and Mixed Numbers
- *Divide Whole Numbers by Fractions & Mixed Numbers
- *Divide Fractions & Mixed Numbers by Fractions
- *Divide Fractions and Mixed Numbers by Whole Numbers
- *Divide Mixed Numbers by Mixed Numbers

Basic College Mathematics (Martin-Gay)

VC 510 B292C 2003

- *Tips for Success
- *Place Value and Names for Numbers
- *Adding Whole Numbers
- *Subtracting Whole Numbers
- *Rounding and Estimating
- *Multiplying Whole Numbers
- *Dividing Whole Numbers
- *An Introduction to Problem Solving
- *Exponents and Order of Operations
- *Introduction to Fractions and Mixed Numbers
- *Factors and Prime Factorization
- *Simplest Form of A Fraction
- *Multiplying Fractions
- *Dividing Fractions
- *Adding and Subtracting Like Fractions

Adding and Subtracting Mixed Numbers
*Order, Exponents and the Order of Operations
*Fractions and Problem Solving
*Introduction to Decimals
*Order and Rounding
*Adding and Subtracting Decimals
*Multiplying Decimals
*Dividing Decimals
*Estimating and Order of Operations
*Fractions and Decimals
*Ratios
*Rates
*Proportions
*proportions and Problem Solving
*Introduction to Percent
*Percent and Fractions
*Solving Percent Problems Using Equations
*Solving Percent Problems Using Proportions
*Applications of Percent
*Percent and Problem Solving: Sales, Tax, Commission and Discount
*Percent and Problem Solving: Interest
*Length: U.S. and Metric Systems of Measurement
*Weight and Mass: U.S. and Metric Systems of Measurement
*Temperature: U.S. and Metric Systems of Measurement
*Energy: U.S. and Metric Systems of Measurement
*Lines and Angles
*Plane Figures and Solids
*Perimeter
*Area
*Volume
*Square Roots and the Pythagorean Theorem
*Congruent and Similar Triangles
*Reading Pictographs, Bar Graphs
*Reading Histograms
*Mean, Median, and Mode
*Counting and Introduction to Probability
*Signed Numbers
*Adding Signed Numbers
*Subtracting Signed Numbers
*Multiplying and Dividing Signed Numbers
*Order of Operations
*Solving Equations: The Addition Property
*Solving Equations: The Multiplication Property
*Solving Equations: Using Addition and Multiplication Properties
*Equations and Problem Solving

Basic Decimals

VC 513.55 B292

- *Adding/Subtracting/Multiplying/Dividing Decimals
- *Decimal Word Problems
- *Decimal Word Problems with Proportions

Basic Fractions

VC 513.26 B292

- *What is a Fraction?
- *Finding a Common Denominator
- *Changing a Mixed Number to an Improper Fraction
- *Changing an Improper Fraction to a Mixed Number
- *Adding Fractions Having the Same Denominator
- *Subtracting Fractions Having the Same Denominator
- *Adding Fraction with Different Denominators
- *Subtracting Fractions Having Different Denominators
- *Adding/Subtracting Fractions
- *Multiplying/Dividing Fractions

Basic Geometry

VC 513.26 B292

- *Identifying Geometric Figures
- *Finding the Perimeter of a Geometric Figure
- *Identifying the Center, Radius
- *Diameter of a Circle
- *Understanding Concepts of Right/Acute/Obtuse/Straight Angles
- *Identifying Parallel & Perpendicular Lines
- *Find the Areas of Geometric Figures
- *Understanding the Complementary/Supplementary Angles
- *Finding Volume of Cylinder, Cone, Pyramid, or Rectangular Solid
- *Finding Perimeter & Computing Area of a Specified Region
- *Identifying Similar (Congruent) Figures
- *Identifying Points on a Coordinate Plane

Basic Number Concepts

VC 513 B292n

- *Comparing Equivalent Fractions
- *Changing Decimals to Fractions
- *Changing Fractions to Decimals
- *Rounding Decimals
- *Comparing Integers Using $<$ or $>$ signs
- *Applying Concepts of Exponents
- *Identifying Prime and Composite Numbers
- *Prime Factors of a Whole Number
- *Identifying the Greatest Common Factor
- *Finding the Least Common Denominator

Basic Percent

VC 513.24 b292

- *What is a Percent?
- *Converting Percents to Decimals/Decimals to Percent
- *Converting Fractions to Percent/Percent to Fractions
- *Finding a Percent of a Number
- *Finding the Percent One Number is of Another Number
- *Finding the Total Number When a Percent of it is Known
- *Mixed Percent Problems
- *Word Problems Dealing with Percents

Basic Pre-Algebra

VC 513.12 B292

- *Addition of Signed Numbers
- *Subtraction of Signed Numbers
- *Multiplication of Signed Numbers
- *Division of Signed Numbers
- *Combining Like Terms
- *Simple Equations
- *Solving Equations by Using 2 or More Operations
- *Combining Like Terms to Solve Equations
- *Graphing Solution Sets/Numbers Lines
- *Review of Signed Numbers
- *Evaluation Algebraic Expressions
- *Adding Monomials
- *Subtracting Monomials
- *Dividing Monomials
- *Adding and Subtracting Polynomials

Basic Word Problem 1988

VC 513 B292W

- *Word Problems Utilizing the Basic Operations

Calculus

VC 515.5 T624

- *Topics in Calculus I
- *Introduction to Limits
- *Epsilon/Delta Definition of Limits
- *Tangent Line Problem & Definition of Derivative
- *Topics in Calculus II

Calculus 1: A Comprehensive Review 1989

VC 515 C1260

- *Equations of Straight Lines
- *Functions
- *Limits

- *Derivatives
- *Graphing
- *Applications

Calculus 2: A Comprehensive Review 1989

VC 515 C126t

- *Simple integrals
- *Applications
- *Logarithmic & Exponential Functions
- *Trigonometric Functions
- *Inverse Trigonometric Functions
- *Methods Integration

College Algebra (Brooks/Cole 7th ed. 2001)

VC 512.9 C686G 2001

- *Basic Concepts
- *Equations & Inequalities
- *The Rectangular Coordinate System and Graphs of Equations
- *Functions
- *Exponential and Logarithmic Functions
- *Solving Polynomial Equations
- *Systems of Linear Equations
- *Conic Sections & Quadratic Systems
- *Natural Number Functions and Probability
- *The Mathematics of Finance

College Algebra (Beecher, Penna, & Bittinger, 2nd ed.)

VC 512.9 C686ca 2005 (Pt. 1 – 11)

- *Basic Concepts of Algebra
- *Graphs, Function, and Models
- *Functions, Equations, and Inequalities
- *Polynomial and Rational Functions
- *Exponential and Logarithmic Functions
- *Systems of Equations and Matrices
- *Conic Sections
- *Sequences, Series, and Combinatorics

Cosmos 1989

VC 520 C821

- *The Shores of the Cosmic Ocean
- *One Voice in the Cosmic Fugue
- *The Harmony of the World
- *Heaven & Hell
- *Blues for a Red Planet
- *Travelers' Tales the Backbone of Night
- *Travel in Space & Time

- *The Lives of the Stars
- *The Edge of Forever
- *The Persistence of Memory
- *Encyclopedia Galactica
- *Who Speak for Earth

GED Mathematics

VC 373.1262 G286

- *GED Math 1-Chapter 1 Let's be Rational about Fractions
- *GED Math 2-Chapter 2 Fractions for the Forgetful
- *GED Math 3-Chapter 3 Unmixed Mixed Numbers
- *GED Math 4-Chapter 4 Show and Tell
- *GED Math 5-Chapter 5 Operating Room
- *GED Math 6-Chapter 6 Make it Easy on Yourself
- *GED Math 7-Chapter 7 The Point of Decimals
- *GED Math 8-Chapter 8 Keeping Things in Proportion
- *GED Math 9-Chapter 9 Playing the Percentages
- *GED Math 10-Chapter 10 The Percentage Revolution
- *GED Math 11-Chapter 11 Being Positive about Signed Numbers
- *GED Math 12-Chapter 12 Algebra on the Run
- *GED Math 13 Chapter 13 Shaping up Your Geometry
- *GED Math 14-Chapter 14 How Many? Long? Big? Full? Heavy?
- *GED Math 15-Chapter 15 "The James"

Development Mathematics

Basic College Mathematics and Applied Approach 5th ed.

VC 510 B292a 1995

- *Whole Numbers
- *Fractions
- *Decimals
- *Decimals/Word Problems
- *Ration & Proportions
- *Percents
- *Statistics
- *Application to Business & Consumer
- *U.S. Customary Units of Measurement
- *The Metric Systems of Measurement
- *Rational Numbers
- *Introduction to Algebra
- *Geometry

Decimals

VC 513.55 D356

- *Introduction to Decimals Number System
- *Decimals Represented as Points on a Number Line
- *Addition and Subtraction of Decimal Numbers

- *Multiplication of Decimal Numbers
- *Division of Decimal Numbers
- *Categories of Decimal Numbers
- *Convert Fraction to Decimal Form
- *Convert Decimal to Fraction Form
- *Ratio & Proportion
- *Using Calculators
- *Ratios
- *Proportions-Means & Extremes

Donald in Mathmagic Land (1959)

VC 510 D714

Introductory Algebra 2nd ed 2003

VC 512.9 IN8IA 2003

- *Tips for Success in Mathematics
- *Symbols and Sets of Numbers
- *Introduction to Variable Expressions and Equations
- *Adding Real Numbers
- *Subtracting Real Numbers
- *Multiplying Real Numbers
- *Dividing Real Numbers
- *Properties of Real Numbers
- *Reading Graphs
- *Simplifying Expressions
- *The Addition Property of Equality
- *The Multiplication Property of Equality
- *Further Solving Linear Equations
- *An Introduction to Problem Solving
- *Formula and Problem solving
- *Percent, Ratio, and Proportion
- *Solving Linear Inequalities
- *Exponents
- *Negative Exponents and Scientific Notation
- *Introduction to Polynomials
- *Adding and Subtracting Polynomials
- *Multiplying Polynomials
- *Special Products
- *Dividing Polynomials
- *The Greatest Common Factor
- *Factoring Trinomials of the Form X^2+BX+C
- *Factoring Trinomials of the Form AX^2+BX+C
- *Factoring Trinomials of the Form AX^2+BX+C by Grouping
- *Factoring Perfect Square Trinomials and the Difference of Two Squares
- *Solving Quadratic Equations by Factoring
- *Quadratic Equations and Problem Solving

- *Simplifying Rational Expressions
- *Multiplying and Dividing Rational Expressions
- *Adding and Subtracting Rational Expressions with the Same Denominator and Least Common Denominator
- *Adding and Subtracting Rational Expressions with Different Denominators
- *Solving Equations Containing Rational Expressions
- *Rational Equations and Problem Solving
- *Simplifying Complex Fractions
- *The Rectangular Coordinate System
- *Graphing Linear Equations
- *Intercepts
- *Slope
- *Equations of Lines
- *Introduction to Functions
- *Graphing Linear Inequalities in Two Variables
- *Solving Systems of Linear Equations by Graphing
- *Solving Systems of Linear Equations by Substitution
- *Solving Systems of Linear Equations by Addition
- *Systems of Linear Equations and Problem Solving
- *Introduction to Radicals
- *Simplifying Radicals
- *Adding and Subtracting Radicals
- *Multiplying and Dividing Radicals
- *Solving Equations Containing Radicals
- *Radical Equations and Problem Solving
- *Solving Quadratic Equations by the Square Root Property
- *Solving Quadratic Equations by Completing the Square
- *Solving Quadratic Equations by the Quadratic Formula
- *Graphing Quadratic Equations in Two Variables
- *Factors and the Least Common Multiple
- *Decimals and Percents

Instruction Series (Algebra 1-6 Volumes)

VC 512 A133

- *Combining Like Terms
- *Simple Equations
- *Solving Equations by Using Two or More Operations
- *Combining Like Terms to Solve Equations
- *Graphing Solution Sets/Number Lines
- *Signed Numbers
- *Evaluating Algebraic Expressions
- *Adding Monomials
- *Subtracting Monomials
- *Multiplying Monomials
- *Dividing Monomials
- *Adding Polynomials & Subtracting Polynomials

- *Dividing Polynomials by a Binomial (Polynomial)
- *Equations Containing Parentheses
- *Absolute Value Equations
- *Solving Equations Containing More than One Variable
- *Inequalities Containing One Variable
- *Factoring Polynomials Whose Terms have a Common Factor
- *Squaring a Monomial
- *Multiplying the Sum & Difference of Two Numbers
- *Factoring the Difference of Two Squares
- *Finding the Product of Two Binomials
- *Factoring Trinomials
- *Factoring Completely
- *Reducing Fractions
- *Multiplying Fractions
- *Dividing Fractions
- *Adding Fractions Having the Same Denominator
- *Subtracting Fraction having the Same Denominator
- *Adding Fractions Having Different Denominators
- *Subtracting Fractions Having Different Denominators
- *Mixed Expressions
- *Solving Equations Containing Fractions
- *Solving Decimal Equations
- *Solving Inequalities Containing Fractional & Decimal Coefficients
- *Solving for X when Many Variables re Involved
- *Graphing/Plotting Points
- *Graphing Solution Sets/Graphing Equations
- *Graphing Lines Parallel to the X or Y Axis
- *Slope
- *Slope & Y-Intercept of an Equation
- *Finding Equation when Slope & a Point are Given
- *Finding Equation when Two Points are Given
- *The Equation of a Line $Y=mx + b$
- *Absolute Value Graphing
- *Inequality Graphing
- *Solving Equations Simultaneously
- *Solving Equations by Substitution
- *Graphing Solution Sets of Systems of Inequalities
- *Repeating Decimals
- *Square Roots
- *Radicals-Simplifying in Radical Form
- *Radicals-Decimal Form
- *Radical-Square Root of Monomials
- *Simplifying a Radical Whose Radicand is a Fraction
- *Adding/Subtracting Radicals
- *Multiplying Radicals
- *Dividing Radicals

- *Rationalizing an Irrational Radical Denominator
- *Solving Radical Equations
- *Factoring & Solving Quadratic Equations
- *Solving Incomplete Quadratic Equations
- *Solving Quadratic Equations by Using the Quadratic Formula

Intermediate Algebra

VC 512.9 IN8A 2003

- *Tips for Success in Mathematics
- *Sets of Numbers
- *Properties of Real Numbers
- *Operations of Real Numbers
- *Order of Operations and Algebraic Expressions
- *Exponents and Scientific Notation
- *More Work with Exponents and Scientific Notation
- *Linear Inequalities and Problem Solving
- *Sets and Compound Inequalities
- *Absolute Value Equations and Inequalities
- *Graphing Linear Inequalities
- *Solving Systems of Linear Equations in Two Variables
- *Solving Systems of Linear Equations and Problem Solving
- *Solving Systems of Equations Using Matrices
- *Systems of Linear Inequalities
- *Adding and Subtracting Polynomials
- *Multiplying Polynomials
- *Dividing Polynomials
- *The Greatest Common Factor and Factoring by Grouping
- *Factoring Trinomials
- *Factoring Special Products
- *Solving Equations by Factoring and Solving Problems
- *An Introduction to Graphing Polynomial Functions
- *Multiplying and Dividing Rational Expressions
- *Adding and Subtracting Rational Expressions
- *Simplifying Complex Fractions
- *Solving Equations Containing Rational Expressions
- *Rational Expressions and Problem Solving
- *Variations and Problem Solving
- *Radical Expressions
- *Rational Exponents
- *Simplifying Radical Expressions
- *Adding, Subtracting, and Multiplying Radical Expressions
- *Rationalizing Numerators and Denominators of Radical Expressions
- *Radical Equations and Problem Solving
- *Complex Numbers
- *Solving Quadratic Equations by Completing the Square
- *Solving Quadratic Equations by Using the Quadratic Formula

- *Solving Equations by Using Quadratic Methods
- *Nonlinear Inequalities in One Variable
- *Quadratic Functions and Their Graphs
- *Further Graphing of Quadratic Functions
- *The Parabola and the Circle
- *The Ellipse and the Hyperbola
- *Graphing Nonlinear Functions
- *Solving Nonlinear Systems of Equations
- *Nonlinear Inequalities and Systems of Inequalities
- *The Algebra of Functions
- *Inverse Function
- *Exponential Functions
- *Logarithmic Functions
- *Properties of Logarithms
- *Common Logarithms, Natural Logarithms and Changes of Base
- *Exponential and Logarithmic Equations and Problem Solving

Intermediate Algebra (Aufmann/Barker/Lockwood 5th ed) 200

VC 512 IN8 2000

- *Review of Real Numbers
- *First Degree Equations and Inequalities
- *Linear Functions and Inequalities in Two Variables
- *Systems of Equations and Inequalities
- *Polynomials and Exponents
- *Rational Expressions
- *Rational Exponents and Radicals
- *Quadratic Equations and Inequalities
- *Functions and Relations
- *Exponential & Logarithmic Functions
- *Sequence and Series
- *Conic Sections

Introduction to Pure Mathematics

- *Calculating PI
VC 515.15 c 126
- *Series & E
VC 515.15 Se67
- *Application of Conic Sections
VC 516.15 Ap58

Math! A Four Letter Word (1988)

VC 510.712 M42

Math Lab-Math Made Easy 1991

VC 515 V668

- *Limits & Their Properties

- *Differentiation
- *Applications of Differentiation
- *Integrations
- *Transcendental Functions
- *Applications of Integration
- *Integration Techniques
- *More Integration Techniques, L'Hospital's Rule

Pre-Calculus Made Easy Series 1990

VC 512.1 P911

- *The Number System
- *Inequalities & Intervals
- *Absolute Value
- *Exponents & Radicals
- *Graphs in the Coordinate
- *The Distance Formula
- *Graphs of Equations
- *Circles in the Plane
- *Introduction to Functions
- *Domain, Range, & Graphs of Functions
- *More Graphing Techniques
- *Linear Functions & Their Graphs
- *The Algebra of Functions & Inverses
- *Quadratic Functions
- *Polynomial Functions & Their Graphs
- *Graphing Rational Functions

Real Life Math and Its Applications (Math Tutor Series) 1988

VC 513.26 F841

- *Fractions: Parts of a Whole
- *Fractions & Division
- *Improper Fractions & Mixed Numbers
- *Equivalent Fractions
- *Reducing Fractions
- *Raising Fractions to Higher Terms
- *Comparing Fractions
- *Adding Like Fractions
- *Subtracting Like Fractions
- *Adding Unlike Fractions
- *Subtracting Unlike Fractions
- *Adding Mixed Numbers
- *Subtracting Mixed Numbers
- *Multiplying Common Fractions
- *Multiplying Mixed Numbers
- *Dividing Fractions
- *Complex Fractions

The Math Tutor (1986)

VC 510.7 M42

- *Algebraic Terms & Operations
- *Solve Algebraic Equations 1st Degree Inequalities
- *Factor and Solve Quadratic Equations
- *Solve Simultaneous Equations & Inequalities Algebraically & Geometrically
- *Verbal Problems & Introduction to Trig
- *Introduction to Logic
- *Introduction to Probability & Statistics
- *Intro to Geometric Terms, Angles, & Triangles
- *The Geometry of Parallel Line, Geometric Figures, The Parallelogram & Circles

The Mechanical Universe

VC 531 M464

- *Introduction to the Mechanical Universe
- *The Law of Falling Bodies
- *Derivatives
- *Inertia
- *Vectors
- *Newton's Laws
- *Integration
- *The Apple & the Moon
- *Moving in Circles
- *Fundamental Forces
- *Gravity, Electricity, Magnetism
- *The Millikan Experiment
- *Conservation of Energy
- *Potential Energy
- *Conservation of Momentum
- *Harmonic Motion
- *Resonance
- *Waves
- *Angular Momentum
- *Torgues & Gyroscopes
- *Kepler's Three Laws
- *The Kepler Problem
- *Energy & Eccentricity
- *Navigating in Space
- *From Kepler to Einstein
- *Harmony of the Sphere
- *Beyond the Mechanical Universe
- *Static Electricity
- *The Electric Field
- *Potential & Capacitance
- *Voltage, Energy, & Force
- *The Electric Battery

- *Electric Circuits
- *Magnets
- *Magnetic Fields
- *vector Fields & Hydrodynamics
- *Electromagnetic Induction
- *Alternating Current
- *Maxwell's Equations
- *Optics
- *Michelson-Morley Experiment
- *The Lorentz Transformation
- *Velocity & Time
- *MSS, Momentum, Energy
- *Temperature & Gas
- *Engine of Nature
- *Entropy
- *Low Temperatures
- *the Atom
- *Particles & Waves
- *From Atoms to Quarks
- *Quantum Mechanical Universe

The Science of Energy

VC 530 Sci27

Trigonometry: A Comprehensive Review (1991)

VC 516.24 T734

- *Trigonometry of the Right Triangle
- *Trig Functions of Angles of any Size: General Angle
- *Trig Graphs
- *Generalized Trigonometric Relationships
- *Trigonometric Equations

Trigonometry

VC 516.24 T734

- *The Six Trig Functions
- *Right Triangle Trig
- *Radian Measure
- *Graphing & Inverse Functions
- *Identities & Formulas
- *Equations
- *Triangles
- *Complex Numbers & Polar Coordinate
- *Logarithms

Why Study Math (1989)

VC 510 W622