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Book: Intermediate Algebra (6th Edition) by Aufmann, Barker and Lockwood

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*Intermediate Algebra Curriculum*

1. Review of Real Numbers
  - 1.1 Into to Real Numbers
  - 1.2 Operations on Rational Numbers
  - 1.3 Variable Expressions
  - 1.4 Verbal Expressions and Variable Expressions
  
2. First-Degree Equations and Inequalities
  - 2.1 Equations in One Variable
  - 2.2 Inequalities in One Variable
  - 2.3 Absolute Value Equations and Inequalities
  
3. Linear Functions and Inequalities in Two Variables
  - 3.1 The Rectangular Coordinate System
  - 3.2 Intro to Functions
  - 3.3 Linear Functions
  - 3.4 Slope of a Straight Line
  - 3.5 Finding Equations of Lines
  - 3.6 Parallel and Perpendicular Lines
  - 3.7 Inequalities in Two Variables
  
4. Systems of Equations and Inequalities
  - 4.1 Solving Systems of Linear Equations by Graphing and by the Substitution Method
  - 4.2 Solving Systems of Linear Equations by the Addition Method
  - 4.3 Solving Systems of Linear Inequalities
  
5. Polynomials and Exponents
  - 5.1 Exponential Expressions
  - 5.2 Intro to Polynomials
  - 5.3 Multiplication of Polynomials
  - 5.4 Division of Polynomials
  - 5.5 Factoring Polynomials
  - 5.6 Special Factoring
  - 5.7 Solving Equations by factoring
  
6. Rational Expressions
  - 6.1 Intro to Rational Functions
  - 6.2 Operations on Rational Expressions
  - 6.3 Complex Fractions

- 6.4 Rational Equations
- 6.5 Proportions and Variation
- 6.6 Literal Equations
  
- 7. Rational Exponents and Radicals
  - 7.1 Rational Exponents and Radical Expressions
  - 7.2 Operations on Radical Expressions
  - 7.3 Radical Functions
  - 7.4 Solving Equations Containing Radical Expressions
  - 7.5 Complex Numbers
  
- 8. Quadratic Equations and Inequalities
  - 8.1 Solving Quadratic Equations by Factoring or by Taking Square Roots
  - 8.2 Solving Quadratic Equations by Completing the Square and by Using the Quadratic Formula
  - 8.3 Equations that are Reducible to Quadratic Equations
  - 8.4 Applications of Quadratic Equations
  - 8.5 Nonlinear Inequalities
  - 8.6 Properties of Quadratic Functions
  - 8.7 Applications of Quadratic Functions
  
- 9. Functions and Relations
  - 9.1 Graphs of Functions
  - 9.2 Translations of Graphs
  - 9.3 Algebra of Functions
  - 9.4 One-to-One and Inverse Functions
  
- 10. Exponential and Logarithmic Functions
  - 10.1 Exponential Functions
  - 10.2 Intro to Logs
  - 10.3 Graphs of Log Functions
  - 10.4 Exponential and Log Equations
  - 10.5 Applications of Exponential and Log Functions
  
- 11. Sequences and Series
  - 11.1 Intro to Sequences and Series
  - 11.2 Arithmetic Sequences and Series
  - 11.3 Geometric Sequences and Series
  - 11.4 Binomial Expansion
  
- 12. Conic Sections
  - 12.1 The Parabola
  - 12.2 The Circle
  - 12.3 The Ellipse and Hyperbola
  - 12.4 Solving Nonlinear Systems of Equations
  - 12.5 Quadratic Inequalities and Systems of Inequalities

