

Math C: Intermediate Algebra Course Topics

Beginning and Intermediate Algebra by Martin-Gay (Pearson, 4th edition)

- Categories:
1. Must be covered in detail.
 2. Must be covered at least briefly.
 3. Do not cover unless you have extra time after adequately doing 1 and 2.

Category	Section	Topic
1	Appendix C.1	Equations (Linear and Quadratic Solved by Factoring)
1	Appendix C.2	Problem Solving
1	Appendix C.3	Graphing
1	Appendix C.4	Polynomials and Factoring
1	Appendix C.5	Rational Expressions
1	4.4	Solving Systems of Linear Equations in Three Variables
3***	4.5 Objective 1&2	Systems of Linear Equations and Problem Solving in Two Variables
1	4.5 Objective 3	Systems of Linear Equations and Problem Solving in Three Variables
1	Appendix E	Solving Systems of Equations by Matrices
1	Appendix F	Solving Systems of Equations by Determinants
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1	8.1	Graphing and Writing Linear Functions
1	8.2	Reviewing Function Notation and Graphing Nonlinear Functions
2	8.3 Objective 1	Graphing Piecewise-Defined Functions
1	8.3 Objective 2&3	Shifting and Reflecting Graphs of Functions
1	8.4	Variation and Problem Solving
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1	9.1	Compound Inequalities
1	9.2	Absolute Value Equations
1	9.3	Absolute Value Inequalities
1	9.4	Graphing Linear Inequalities in Two variables and System of Linear Inequalities
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1	10.1	Radicals and Radical Functions
1	10.2	Rational Exponents
1	10.3	Simplifying Radical Expressions
1	10.4	Adding, Subtracting, and Multiplying Radical Expressions
1	10.5	Rationalizing Denominators and Numerators of Radical Expressions
1	10.6	Radical Equations and Problem Solving
1	10.7	Complex Numbers

<u>Category</u>	<u>Section</u>	<u>Topic</u>
1	11.1	Solving Quadratic Equations by Completing the Square
1	11.2	Solving Quadratic Equations by the Quadratic Formula
1	11.3	Solving Equations by Using Quadratic Methods
1	11.4	Nonlinear Inequalities in One Variable
1	11.5	Quadratic Functions and Their Graphs
1	11.6	Further Graphing of Quadratic Functions
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1	12.1	The Algebra of Functions; Composite Functions
1	12.2	Inverse Functions
1	12.3	Exponential Functions
1	12.4	Logarithmic Functions
1	12.5	Properties of Logarithms
1	12.6	Common Logarithms, Natural Logarithms, and Change of Base
1	12.7	Exponential and Logarithmic Equations and Applications
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1	13.1	The Parabola and the Circle
1	13.2	The Ellipse and the Hyperbola
2	13.3	Solving Nonlinear Systems of Equations
3	13.4	Nonlinear Inequalities and System of Inequalities
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2	14.1	Sequences
2	14.2	Arithmetic and Geometric Sequences
2	14.3	Series
2	14.4	Partial Sums of Arithmetic and Geometric Sequences
2	14.5	The Binomial Theorem

*** was covered in Math 903 Elementary Algebra