

Introduction to College Mathematics

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Part 1: College Mathematics

1. Review of Basic Algebra
2. Solving Linear Equations and Inequalities
3. Graphs, Functions, and Applications
4. Systems of Equations
5. Polynomials and Polynomial Functions
6. Rational Expressions, Equations, and Functions
7. Radical Expressions, Equations, and Functions
8. Quadratic Equations and Functions
9. Introduction to Geometry
10. Exponential and Logarithmic Functions

Part 2: Learning Mathematics Through Real-World Applications

1. Wiring Parallel Resistors
2. Inductors
3. Ohm's Law
4. Thermodynamics
5. Transformers
6. The Radius of a Black Hole
7. Kepler's Law of Periods
8. Tax Withholding in the Workplace
9. Semiconductors in Computers
10. Color and Eye Sensitivity
11. The Law of Demand
12. Introduction to Microeconomics
13. Converting Between Fahrenheit and Celsius
14. Simultaneous Equations and the Physical World
15. Financial Investing
16. Bernoulli's Equation
17. The Average Cost Function
18. Proportions in a Computer Science Classroom
19. Projectile Motion
20. The Origins of Equations
21. Minimum Monthly Revenue
22. Two and Three Dimensional Visualization in Computer Generated Graphical Design
23. The Limitations of Computer Processors
24. Memory Fields Inside Computers
25. Comparing Computer Programming Languages
26. Productions and Pricing
27. Productions Costs
28. Sound Level
29. Radiocarbon Dating