## **Lessons For Intermediate Algebra**

1	Review and Overview
2	Functions Review
3	Complex Numbers
4	Quadratic Equations and Graphing Parabolas
5	Minima, Maxima, and Circles
6	Conics
7	Polynomial Division, the Remainder Theorem, the Factor Theorem
8	Integer and Rational Roots
9	Proof by Contradiction and Irrational Roots
10	Vieta's Formulas
11	Multivariable Polynomials
12	Advanced Strategies for Polynomials
13	Arithmetic and Geometric Sequences and Series
14	Advanced Sequences and Series
15	Induction
16	Exponents and Logarithms
17	Radicals, Monotonic, and Even and Odd Functions
18	Rational Functions and Partial Fractions
19	Piecewise Functions, Absolute Value, Integer and Fractional Part

20	Inequalities
21	Mean Inequality Chain
22	Cauchy-Schwarz Inequality
23	Functional Equations
24	More Functional Equations and Challenging Problems