

Preface	vii
PART ONE THEME AND SOLUTION	1
Chapter 1 Historical Setting; Guthrie's Conjecture and its Dual	3
Chapter 2 Map Coloring; Problems and Methods	21
Chapter 3 Solution of the Four-Color Problem; Cubic Maps, Reducibility, and Discharging	52
PART TWO VARIATIONS	99
Chapter 4 Edge Colorings; The Hamiltonian Connection	101
Chapter 5 Algebraic and Arithmetic Variations	119
Chapter 6 Chromatic Numbers and Chromatic Polynomials	134
Chapter 7 Projective Geometry and Chain Groups	164
Appendix	175
Books on Graph Theory	194
Bibliography	197
Index	212