CONTENTS

LIST OF CONTRIBUTORS vii

PREFACE ix

COMMENT ON THE BIBLIOGRAPHY xi

THE FOUR COLOR CONJECTURE AND OTHER GRAPHICAL DISEASES
Frank Harary 1

SEVERAL PROOFS OF THE NUMBER OF LABELED 2-DIMENSIONAL TREES
Lowell W. Beineke and John W. Moon 11

ON THE CHROMATIC NUMBER OF PERMUTATION GRAPHS
Gary Chartrand and Joseph B. Frechen 21

THE EXPANDING UNICURSE
Blanche Descartes 25

PROBLEMS AND RESULTS IN CHROMATIC GRAPH THEORY
P. Erdős 27

FORBIDDEN SUBGRAPHS
Dennis Geller 37

A PROOF TECHNIQUE IN GRAPH THEORY
Dennis Geller and Stephen Hedetniemi 49

INDEPENDENCE AND COVERING NUMBERS OF LINE GRAPHS AND TOTAL GRAPHS
R. P. Gupta 61

THE DECLINE AND FALL OF ZARANKIEWICZ'S THEOREM
Richard K. Guy 63

On the Intersection Number of a Graph
Frank Harary 71

On Endomorphisms of Graphs and Their Homomorphic Images
Z Hedrlín 73

Counterexamples in the Theory of Well-Quasi-Ordered Sets
T. A. Jenkyns and C. St. J. A. Nash-Williams 87

On the Existence of Certain Minimal Regular n-Systems with Given Girth
W. Kuich and N. Sauer 93

Reconstruction of Unicyclic Graphs
Bennet Manvel 103

The Group of a Graph Whose Adjacency Matrix Has All Distinct Eigenvalues
Abbe Mowshowitz 109

Extremal Nonseparable Graphs of Diameter 2
U. S. R. Murty 111

A Class of Strongly Regular Graphs
E. A. Nordhaus 119

The Exponentiation Group as the Automorphism Group of a Graph
Edgar M. Palmer 125

Remarks on the Heawood Conjecture
Gerhard Ringel and J. W. T. Youngs 133

Indifference Graphs
Fred S. Roberts 139

Enumeration of Euler Graphs
Robert W. Robinson 147

A Graph-Theoretical Model for Periodic Discrete Structures
James Turner 155

Even and Odd 4-Colorings
W. T. Tutte 161

A Theorem on Tait Colorings with an Application to the Generalized Petersen Graphs
Mark E. Watkins 171

The Möbius Function in Combinatorial Analysis and Chromatic Graph Theory
Herbert S. Wilf 179

Key-Word Indexed Bibliography of Graph Theory
James Turner 189