

# CONTENTS

Preface	iii
Contributors	vii
The Redei-Reichardt Theorem: Another Proof Hershy Kisilevsky	1
Automorphs of Ternary Quadratic Forms Wilhelm Plesken	5
On a Theorem of Gauss Concerning the Number of Integral Solutions of the Equation $x^2 + y^2 + z^2 = m$ Hans Peter Rehm	31
Two Facts Concerning Rational $2 \times 2$ Matrices Leading to Integral Ternary Forms Representing Zero Olga Taussky	39
On the 1st and 2nd Quadratic Form B. L. van der Waerden	49
Characteristics Polynomials of Symmetric Matrices Alfred Weiss	59
Gauss' Theory of Ternary Quadratic Forms, An Example of the Theory of Homogeneous Forms in Many Variables, with Applications Hans J. Zassenhaus	75