TABLE OF CONTENTS

| J.BECKER, J.DENEF and L.LIPSHITZ Further remarks on the elementary theory of formal power series rings | 1 |
|---|-----|
| CHANTAL BERLINE Elimination of quantifiers for non semi-simple rings of characteristic p | 10 |
| M.BOFFA, A.MACINTYRE and F.POINT The quantifier elimination problem for rings without nilpotent elements and for semi-simple rings | 20 |
| ELISABETH BOUSCAREN Existentially closed modules: types and prime models | 31 |
| GREGORY CHERLIN Rings of continuous functions: decision problems | 44 |
| PETER CLOTE Weak partition relations, finite games, and independence results in Peano arithmetic | 92 |
| FRANÇOISE DELON Hensel fields in equal characteristic p > 0 | 108 |
| M.A.DICKMANN On polynomials over real closed rings | 117 |
| JEAN-LOUIS DURET Les corps faiblement algébriquement clos non séparablement clos ont la propriété d'indépendance | 136 |
| ULRICH FELGNER Horn-theories of abelian groups | 163 |
| PETR HÁJEK and PAVEL PUDLÁK Two orderings of the class of all countable models of Peano arithmetic | 174 |
| ANGUS MACINTYRE Ramsey quantifiers in arithmetic | 186 |

| KENNETH L.MANDERS | 211 |
|--|-----|
| Computational complexity of decision problems in elementary number theory | |
| KENNETH McKENNA Some diophantine Nullstellensätze | 228 |
| GEORGE MILLS A tree analysis of unprovable combinatorial statements | 248 |
| J.B.PARIS A hierarchy of cuts in models of arithmetic | 312 |
| C.SMORYŃSKI and J.STAVI Cofinal extension preserves recursive saturation | 338 |
| LOU VAN DEN DRIES Some model theory and number theory for models of weak systems of arithmetic | 346 |
| A.J.WILKIE Applications of complexity theory to \sum_0 - definability problems in arithmetic | 363 |
| GEORGE WIIMERS Minimally saturated models | 370 |
| B.I.ZILBER Totally categorical theories: structural properties and the non-finite axiomatizability | 381 |