

## TABLE OF CONTENTS

Acknowledgments . . . . .	vii
Introduction . . . . .	1
1. Set-theoretic operations for first-order logic with equality . . . . .	5
2. First algebraization . . . . .	21
3. First algebraization continued . . . . .	31
4. Augmented cylindric theory for sets of finite sequences . . . . .	46
5. Completeness . . . . .	67
6. Algebras of sets and algebras of theories . . . . .	79
7. Second algebraization . . . . .	101
8. Augmented cylindric theory for sets of $\omega$ -sequences . . . . .	112
9. A theory of transformational and of Boolean operations . . . . .	119
10. Theory of transformational relations . . . . .	149
11. Some cases of incompleteness . . . . .	173
Bibliography . . . . .	182
Index of symbols . . . . .	184
Index of names, phrases, subjects . . . . .	193