Contents

ce	viii
ce	ix
nts	xi
RODUCTION	1
Predicate Logic and Propositional Logic, 1	
MBOLIZATION	5
Singular Statements, 5 General Statements: I and O, 7 <i>Exercise</i> , 11 General Statements: A and E, 11 Résumé, 15 <i>Exercises</i> , 16	
	ce ce nts RODUCTION Predicate Logic and Propositional Logic, 1 MBOLIZATION Singular Statements, 5 General Statements: I and O, 7 Exercise, 11 General Statements: A and E, 11 Résumé, 15 Exercises, 16

three /	PR	DOFS	20
	3.1 3.2	Universal Quantifier Out, 20 Exercises, 25 Existential Quantifier Out, 27 Exercises, 31	
four /	мо	RE PROOFS	34
	4.1	Quantifier Exchange, 34 Exercises, 42	
five /	NO	NSTANDARD PROBLEMS	46
	$\begin{array}{c} 5.1 \\ 5.2 \end{array}$	Symbolization, 46 Proofs, 53 Exercises, 57	
six /	DIA	GRAMS	67
	$\begin{array}{c} 6.1 \\ 6.2 \end{array}$	Diagraming Statements, 67 Testing Arguments, 76 Exercises, 84	
seven /	EXI	STENTIAL IMPORT	90
	7.1	Penevalid Arguments, 90 Exercises, 95	
eight /	MU	LTIPLE QUANTIFICATION	97
	8.1 8.2	Symbolization, 97 Proofs, 100 <i>Exercises, 105</i>	
nine /	INT	ERPRETATIONS	111
	9.1 9.2	Introduction, 111 Multiple Quantification, 117 Exercises, 118	

	Contents / vii
ten / RELATIONAL STATEMENTS	124
 10.1 Symbolization, 124 10.2 Properties of Relations, 130 <i>Exercises</i>, 133 10.3 Definitions, 137 	
eleven / RELATIONAL ARGUMENTS	142
 11.1 Proofs, 142 11.2 Interpretations, 149 Exercises, 153 	
twelve / NATURAL ARGUMENTS	162
 12.1 Introduction, 162 12.2 Examples, 164 12.3 Postscript, 175 Exercises, 176 	
appendix one / PROPOSITIONAL LOGIC: A BRIEF REVIEW	183
appendix two / AN EXPANDED SET OF INFERENCE RULES	188
appendix three / PARTIAL SOLUTIONS TO STARRED EXERCISES	190
index	199
the ten primitive propositional inference rules	203
the eight derived propositional inference rules	204
the three predicate inference rules	. 205