

THE CALCULUS OF COMPUTATION:  
Decision Procedures with  
Applications to Verification

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# PART I: FOUNDATIONS

1. Propositional Logic (1)
2. First-Order Logic (2)
3. First-Order Theories (1)
4. Induction (2)
5. Program Correctness: Mechanics (2)
6. Program Correctness: Strategies (1)

## PART II: ALGORITHMIC REASONING

7. Quantified Linear Arithmetic (1)
8. Quantifier-Free Linear Arithmetic (2)
9. Quantifier-Free Equality and Data Structures (2)
10. Combining Decision Procedures (1)
11. Arrays (2)
12. Invariant Generation (1)