Problems In Mathematics for Computer Science

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Preface

This is a research project in which I try to read the notes and solve all the problems from [1]

Contents

Part I

Notes

Chapter 1

What is a Proof?

1.1 Propositions

Definition 1.1. A *proposition* is a statement (communication) that is either true or false.

Claim 1.1.1. $\forall\ n \in \mathbb{N}$, $p ::= n^2 + n + 41$ *is prime*

Question: Is this claim true or false?

Claim 1.1.2. *No polynomial with integer coefficients can map all nonnegative numbers into primes, unless it's a constant.*

Question: Is this true or false?

Part II

Problems and Exercises

Chapter 1

What is a Proof?

Bibliography

[1] Eric Lehman, Tom Leighton, and Albert Meyer. *Mathematics for Computer Science*. MIT OCW, 2018.