tcp.1 Introduction

This section should be rewritten.

We have the following:

1. A definition of what it means for a function to be representable in Q (??)
2. a definition of what it means for a relation to be representable in Q (??)
3. a theorem asserting that the representable functions of Q are exactly the computable ones (??)
4. a theorem asserting that the representable relations of Q are exactly the computable ones (??)

A theory is a set of sentences that is deductively closed, that is, with the property that whenever $T$ proves $\varphi$ then $\varphi$ is in $T$. It is probably best to think of a theory as being a collection of sentences, together with all the things that these sentences imply. From now on, we will use Q to refer to the theory consisting of the set of sentences derivable from the eight axioms in ??.

Remember that we can code formula of Q as numbers; if $\varphi$ is such a formula, let $\#\varphi\#$ denote the number coding $\varphi$. Modulo this coding, we can now ask whether various sets of formulas are computable or not.

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Bibliography