December 2 – Introduction to Gödel’s Theorem

1. TH(\mathcal{V})
2. Computably axiomatized theories
3. Theorem 6.1.4 – the relationship of the complexity of the axiom set to the complexity of the theory.
4. (One form of) Gödel’s First Incompleteness Theorem.
5. The arithmetization of syntax (and everything else)
6. Gödel-numbering FOL
7. Representability in theories

Homework

- Read Section 6.1.
- Do problems 6.1.1-4.