

Exercise 10

Task 1

Repeat the following topics from the lecture:

- Church's Theorem and register machines
- Trachtenbrot's Theorem
- Gödel's Theorem ($\text{Th}(\mathbb{N}, +, \cdot)$ is undecidable)
- Automatic structures and automatically presentable structures
- Theorem of Khoussainov/Nerode
- Tarski's Theorem ($\text{Th}(\mathbb{R}, +, \cdot)$ is decidable)