## Exercise 7

## Task 1

Check whether  $(\mathbb{N}, \leq) \models \exists x \forall y (x \leq y)$  holds by applying the technique from the proof of the Theorem of Khoussainov and Nerode.

## $Task \ 2$

Show that  $\operatorname{Th}(\mathbb{C}, +, \cdot)$  is decidable.