## 4th Homework sheet Model Theory

- Deadline: 6 March, 13:00 sharp.
- Submit your solutions by handing them to the lecturer or the teaching assistant at the *beginning of the lecture*.
- Good luck!

**Exercise 1** (100 points) Let T be the theory of discrete linear orders without greatest or smallest element (as on page 28 of the syllabus).

How many elements does  $S_2(T)$  have? How many  $p \in S_2(T)$  are isolated and how many are non-isolated? Justify your answers!