Exercises

3.241 [03F] Prerequisites:[01P].*(Proposed on 2022-12)* Show that cardinalities are always comparable: given two sets A, B either $|A| \leq |B|$ or $|B| \leq |A|$ holds. (Use Zorn's lemma and the construction explained in the exercise [01P]).

Solution 1. *[03G]*

[(Present as theorem 1.19 in the notes)]

This statement is equivalent to the Axiom of Choice, see [15].