## Exercises 3.211 [OTX] Prerequisites: [OBZ]. (Solved on 2023-01-17) (Proposed on 2022-12) Let X be totally ordered set. Show that these are equivalent:

(a) X is well ordered;

(b) there are no strictly decreasing functions  $f: \mathbb{N} \to X$ .

(This is a special case of [263])