

## Exercises

E3.81 [263] Prerequisites: [08Z], [02H]. (Solved on 2022-10-13) Let  $X$  be ordered (partially). Show that these are equivalent

- (a) in each non-empty subset  $A \subseteq X$  there is at least one minimal element;
- (b) there are no strictly decreasing functions  $f : \mathbb{N} \rightarrow X$ .

**Solution 1.** [07Y]