

## Exercises

3.132 [21P] Given two totally ordered non-empty sets  $(X, \leq_X)$  and  $(Y, \leq_Y)$ , suppose there exists a strictly increasing monotonic bijective function  $f : X \rightarrow Y$ : show that then its inverse  $f^{-1}$  is strictly increasing, and consequently  $(X, \leq_X)$  and  $(Y, \leq_Y)$  are *equiordinate*.

**Solution 1.** [21T]