Exercises

E6.26 *(Solved on 2022-11-24)* Let a_n be a real-valued sequence, for $n \in I$ a set of indexes; let $r > 0, t \in \mathbb{R}, \rho < 0$; show [0B6] that

$$\sup_{n \in I}(a_n + t) = t + \sup_{n \in I} a_n \ , \ \sup_{n \in I}(ra_n) = r \sup_{n \in I} a_n \ , \ \sup_{n \in I}(\rho a_n) = \rho \inf_{n \in I} a_n \ .$$

Solution 1. *[22W]*