Exercises

E9.93 [OT3] Let $f : \mathbb{R} \to \mathbb{R}^n$ continue; show that these two conditions are equivalent

- $\lim_{t\to\infty} |f(t)| = +\infty$ and $\lim_{t\to-\infty} |f(t)| = +\infty$;
- f is **proper**, i.e. for every compact $K \subset \mathbb{R}^n$ we have that the counterimage $f^{-1}(K)$ is a compact of $\mathbb{R}$.