Exercises

13.27 [165] Let $I \subset \mathbb{R}$ interval. Let $f : I \to \mathbb{R}$ such that there exists $\alpha > 1$ such that $\forall x, y, |f(x) - f(y)| \leq |x - y|^{\alpha}$ (i.e. f is Hölder continuous of order $\alpha > 1$): Show that f is constant.