

## Exercises

13.27 [16K] Find a function  $f : \mathbb{R} \rightarrow \mathbb{R}$  such that

$$|f(x) - f(y)| < |x - y| \quad \forall x, y \in \mathbb{R}$$

but for which there is no "fixed point" (that is a point  $x$  for which  $f(x) = x$ ).

**Solution 1.** [16M]