Math 413 Analysis I
Bonus Problems 8

Due: Friday December 5

Bonus Problem 8 Is there a continuous function $f : \mathbb{R} \to \mathbb{R}$ such that for each $y \in \text{img}(f)$ there are exactly two $x_1, x_2 \in \mathbb{R}$ with $f(x_i) = y$. Give an example or prove there is no such function.