A weird limit

Find an example of a function $f : \mathbb{R} \to \mathbb{R}$ (i.e., the domain is the real numbers and every value is a real number) such that the limit

$$\lim_{x \to 0+} f(x)$$

is not a real number, does not go to ∞, and does not go to $-\infty$. (That is, $\lim_{x \to 0+} f(x)$ DNE.)