

Exercises

E13.2 [150] Let be given a function $g : [0, \infty) \rightarrow [0, \infty]$ such that $g(0) = 0$ and $\lim_{x \rightarrow 0+} g(x) = 0$; then there exists a continuous and monotonic function $f : [0, \infty) \rightarrow [0, \infty]$ such that $f(0) = 0$, $\lim_{x \rightarrow 0+} f(x) = 0$, and $f \geq g$.