

79. $|f(x)| \leq g(x) \Rightarrow -g(x) \leq f(x) \leq g(x)$

Since $\lim_{x \rightarrow a} g(x) = 0$, therefore $0 \leq \lim_{x \rightarrow a} f(x) \leq 0$.

Hence, $\lim_{x \rightarrow a} f(x) = 0$.

If $\lim_{x \rightarrow a} g(x) = 3$, then either $-3 \leq \lim_{x \rightarrow a} f(x) \leq 3$ or $\lim_{x \rightarrow a} f(x)$ does not exist.