

54. $\lim_{x \rightarrow 0^+} f(x) = L$

(a) If f is even, then $f(-x) = f(x)$.

Hence, $\lim_{x \rightarrow 0^-} f(x) = L$.

(b) If f is odd, then $f(-x) = -f(x)$.

Therefore, $\lim_{x \rightarrow 0^-} f(x) = -L$.