

55. $\lim_{x \rightarrow 0+} f(x) = A, \quad \lim_{x \rightarrow 0-} f(x) = B$

a) $\lim_{x \rightarrow 0+} f(x^3 - x) = B$ (since $x^3 - x < 0$ if $0 < x < 1$)

b) $\lim_{x \rightarrow 0-} f(x^3 - x) = A$ (because $x^3 - x > 0$ if $-1 < x < 0$)

c) $\lim_{x \rightarrow 0-} f(x^2 - x^4) = A$

d) $\lim_{x \rightarrow 0+} f(x^2 - x^4) = A$ (since $x^2 - x^4 > 0$ for $0 < |x| < 1$)