

Do one of the following (the one you were assigned in class).

1. Suppose $f : D \rightarrow \mathbb{R}$ and a is an accumulation point of $D \cap (a, +\infty)$ then $\lim_{x \rightarrow a^+} f(x) = L$ if and only if for all sequences $\{a_n\} \subseteq D$ with $a_n > a$ if $\lim_{n \rightarrow \infty} a_n = a$ then $\lim_{n \rightarrow \infty} f(a_n) = L$.
2. Suppose $f : D \rightarrow \mathbb{R}$ and a is an accumulation point of $D \cap (a, +\infty)$ then $\lim_{x \rightarrow a^+} f(x) = +\infty$ if and only if for all sequences $\{a_n\} \subseteq D$ with $a_n > a$ if $\lim_{n \rightarrow \infty} a_n = a$ then $\lim_{n \rightarrow \infty} f(a_n) = +\infty$.