

28. To be proved: $\lim_{x \rightarrow 1^-} \frac{1}{x-1} = -\infty$. Proof: Let $B > 0$ be given. We have $\frac{1}{x-1} < -B$ if $0 > x-1 > -1/B$, that is, if $1-\delta < x < 1$, where $\delta = 1/B$. This completes the proof.