So Since $n \geq N$ and $a_n \geq N$ and $\epsilon > 0$

$\Rightarrow$ $\left| \frac{1}{a_n} - 0 \right| < \frac{1}{a_n} < \frac{1}{a_N} < \epsilon$

$\therefore$ by definition it must be that $\lim_{n \to \infty} \frac{1}{a_n} = 0$