

Math 131  
Warm-up 19

Name:

Let  $\{x_n\}$  be a bounded sequence of reals, and let  $p = \limsup(x_n)$ . Suppose that  $\{x_{n_k}\}$  is a subsequence of  $\{x_n\}$  which converges to some  $b \in \mathbb{R}$ . Prove that  $b \leq p$ .