

QUIZ 8:

NAME: _____

1) (3pts) State the Monotone Convergence Theorem.

2) (6pts) Prove that if $\lim a_n < \lim b_n$ then there exists $N \in \mathbb{N}$ such that $n \geq N$ implies $a_n < b_n$.

3) (6pts) Prove if $a_n \rightarrow L$ and $b_n \rightarrow M$ then $a_n + b_n \rightarrow L + M$.