

Math 366: Honors Analysis II

Name: _____

Quiz 1 *February 2, 2001*

1. Define

a) lim sup

b) limit point

Prove two of the following:

2. A is compact $\Rightarrow A$ is closed and bounded.

3. f is continuous $\Rightarrow f^{-1}(A)$ is open for all open sets A .

4. If f_n is continuous and $f_n \rightarrow f$ uniformly in D , then f is continuous in D .