## Fake Quiz 1 Real Analysis $1 \quad$ 8/26/2002

Each problem is worth zero points. It's a fake quiz, after all.

1. Name a function which is continuous but not differentiable.
2. Name a function which is differentiable but not continuous.
3. Name two sequences which diverge, but whose sum converges.
4. What's the limit of the function $f(x)=1 / x$ as $x$ approaches infinity? How do you know?
5. How many prime numbers are there? How do you know?
