

Fake Quiz 1 Real Analysis 1 8/23/2004

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

1. Give a function (if one exists) which is continuous but not differentiable.
2. Give a function (if one exists) 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?