

Homework

November 22, 2019

1 Lecture 6

1. Given that f has Hölder-continuous gradient, i.e. for some $\nu \in [0, 1]$ and $L_\nu > 0$

$$\|\nabla f(x) - \nabla f(y)\| \leq L_\nu \|x - y\|^\nu,$$

find an upper bound for this function at a given point x .