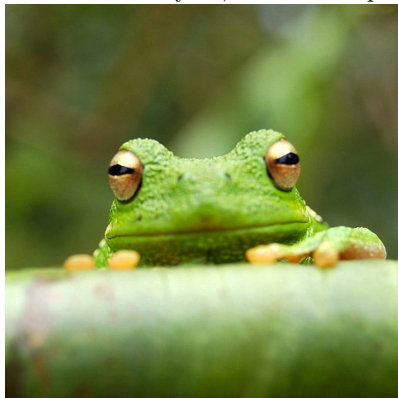


Folland Reading Group: 2nd week hw

Due on February 12, 2014 at 3:10pm



Chapter 1

Problem 1

- a. • if f is infinite on a set E with positive measure then

$$\int f d\mu \geq \int N \chi_E d\mu = N \cdot \mu(E)$$

for any integer N and simply letting $N \rightarrow +\infty$ gives us what we want.

- if f is simple then the theorem is trivial. For the general, due to p case there must exist an increasing sequence of simple functions $\{\phi_n\}_0^\infty$ that converge to f pointwise asdfasdfasdf