

Quiz 5

Name: _____

Math 4548

February 14, 2014

1. Define $f : [0, 1] \rightarrow \mathbb{R}$ by

$$f(x) = \begin{cases} 0 & \text{if } x \text{ is irrational;} \\ x & \text{if } x \text{ is rational.} \end{cases}$$

Show (i.e. prove) that f is not Riemann integrable.