Tufts University
Department of Mathematics

Math 235 **Groupwork #2 : Due on 9/22**[1] **Fall, 2023**

Problem Let $f : \mathbb{R} \to \mathbb{R}$ be a function.

(a) Prove that the set C of all points x at which f is continuous is a measurable set. **(Hint: Is C a G_δ set?**

(b) Use the first part to prove that there exists no function $g : \mathbb{R} \to \mathbb{R}$ that is only continuous on the rationals.