

Math 131
Warm-up 24

Name:

Consider the rationals with the usual metric. Let $a, b \in \mathbb{Q}$ such that $a < b$. Let $[a, b]_{\mathbb{Q}} = \{x \in \mathbb{Q} \mid a \leq x \leq b\}$. Determine whether or not $[a, b]_{\mathbb{Q}}$ is compact. Prove your conclusion.