

Homework Assignment #7
Due: October 12, 9:30 a.m.

1. Let $A = \{x \in \mathbf{R} : 0 \leq x < 1\}$ and let $B = \{x \in \mathbf{R} : x \geq 0\}$. Show that $|A| = |B|$.
2. Prove that the union of two countable sets is countable.