Math 330 (Number Systems), Section 3 (Dmytro Savchuk) Spring 2010 Homework assignment 10 (due Friday, April 9)

1. Find $\sup \{x \in \mathbb{R}: 0<x<3\}$. Justify your answer.
2. Let $A=\left\{-\frac{1}{n}: n \in \mathbb{N}\right\} \subset \mathbb{R}$. Find (and justify your answer)
(a) $\sup A$
(b) $\inf A$
(c) $\max A$ if it exists. If it does not exist, prove this.
(d) $\min A$ if it exists. If it does not exist, prove this.
