Analysis 1
Quiz 2

Name:_____

You have 10 minutes to complete this quiz. If you have a question raise your hand and remain seated. In order to receive full credit your answer must be **complete**, **legible** and **correct**. Show your work, and give adequate explanations.

1. Give an example of a subset of $\mathbb{Q}$ that has an upper bound, but has no least upper bound.

$\emptyset$.

2. Is the ordered field $\mathbb{Q}$ an Archimedean? Give a reason for your answer.

Yes, since for every $q \in \mathbb{Q}$ there is some n such that $q < n$. (If $q = \frac{k}{m}$, then one can take $n = |k| + 1$.)