NOTES following up on class:

As I mentioned in class, there is a theorem that states,

Theorem: Suppose $f: \mathbb{R}^n \to \mathbb{R}^m$ is continuous. If $C \subseteq \mathbb{R}^n$ is compact, then so is $f(C) \subseteq \mathbb{R}^m$.

The proof of this theorem that I know uses the alternative characterization of compactness that I alluded to in class. See if you can come up with a proof yourself!