MA 341 Assignment 7, due Friday March 29 in class

Let $f : [a, b] \to \mathbb{R}$ be a continuous function. Prove that there is a point $x_{\min} \in [a, b]$ such that $f(x_{\min}) \leq f(x)$ for every $x \in [a, b]$.

Also complete the following questions from the textbook (Introduction to Real Analysis by Bartle and Sherbert **4th Edition**):

Section 4.1: 1, 9 (b) and (d), 10 (a), 12 (b)

Seciton 4.3: 5 (b) and (d)

Seciton 5.1: 3, 8, 10