Chapter 8

8.1 Recall that wealth in different states are different commodities and that the state in which consumer i alone has an accident is different than that in which only consumer $j \neq i$ does. Verify the hypotheses of the First Welfare Theorem and conclude that the competitive outcome of Section 8.1 is efficient in the sense described there.

8.6 For (a), suppose not. Could demand for used cars equal supply?

8.11 First show that $\sum_{l=k}^{L}(\pi_l(0) - \pi_l(1)) > 0$ for all $k > 0$ by writing the sum instead as $\sum_{l=k}^{L}\left(\frac{\pi_l(0)}{\pi_i(1)} - 1\right)\pi_l(1)$ and arguing by contradiction. Finally, apply the following identity: $\sum_{l=0}^{L} a_l b_l \equiv \sum_{k=0}^{L}\left(\sum_{l=k}^{L} a_l\right)(b_k - b_{k-1})$ for every pair of real sequences $\{a_l\}_{l=0}^{L}, \{b_l\}_{l=0}^{L}$, and where $b_{-1} \equiv 0$.