1. True/False
   
a. **False.** The information imparted by the expense of the advertisement, not the message itself, is the more reliable signal of high quality. The producer of a product who knew that consumers would be unlikely to buy its product a second time would gain little by spending millions to induce them to try it.

   b. **True.** Because charging non-buyers for advice is often impractical, the market generally provides less than the socially optimal amount of retail service.

   c. **False.** The best-attired lawyer will not always be the best lawyer. You should only follow this selection strategy only when you have no more reliable information about the quality of the lawyers.

   d. **True.** The benefit of searching in a large city is greater, because there is a great range of potential spouses to choose from.

2. Since consumers value non-defective cars at $10,000, the only used cars for sale will be defective ones. The used car price of $2,500 is thus the value to consumers of a defective car. For a risk-neutral buyer, the reservation price for a new car will be the value of a good car times the probability of getting a good car, plus the value of a bad car times the probability of getting a bad car. To find x, we use the following equation:

\[
5000 = (1-x)(10000) + x(2500) \Rightarrow x = \frac{2}{3}
\]

3. Carlos will hire the realtor, because he will sell the house for $250,000 and pay the realtor for $12,500 for a net price of $237,500, which is well above Whitney’s $140,000. Without the realtor, total economic surplus would have been only $20,000 ($10,000 each to Carlos and Whitney). But with the realtor, total surplus is $107,000 to Carlos, $50,000 to the buyer, and $10,500 to the realtor (his $12,500 commission minus his $2,000 opportunity cost of negotiating the transaction).