Assignment 1

The following problems are due at the beginning of class on Monday, Jan. 30. Please follow all guidelines as described in the “Homework” section of the course syllabus. Also remember that homework can and should be worked on and discussed with others. However, the write-up should be independent.

Please turn in Sec. 1.2 #6(a),(b) and Sec 1.3, #1(i)–(m). Also turn in the following two problems:

**Problem 1:** On a fictional island, all inhabitants are either knights, who always tell the truth, or knaves, who always lie. You arrive on the island and come across two natives named Alice and Bob.

Alice says: “If Bob is a knave, then I am a knave.”

What are Alice and Bob?

**Problem 2:** Suppose that on the same island you later come across two natives named Carol and Daniel.

Carol says: “If Daniel is a knave, then I am a knight.”
Daniel says: “We are different.”

What are Carol and Daniel?

(In problems 1 and 2 above, write out a truth table justifying your reasoning and clearly explain in complete sentences why you came to the conclusion that you did.)