Problem 3. Assume a dependency grammar with *unlabeled* arcs.

a. (8 points) Draw dependency structures that correspond to the two structures from Problem 1. Use dependency graphs similar to those in Jurafsky and Martin Figure 14.1, but without the labels.

United diverted flights to Houston

(meaning: flights landed in Houston) | *(meaning: flights did not land in Houston)*

b. (4 points) Assume a dependency parser is parsing the above string, as in Jurafsky and Martin, section 14.4. At what point in the parser's operation does it reach an ambiguity? Show the parser's configuration at that point.

Stack	Word list	Relations

c. (2 points) At the above point, which parser action corresponds to each of the structures from part (a)?

Meaning: *flights landed in Houston* | *flights did not land in Houston*

Action:

d. (6 points) What is the difference between the above structures that allows the *training algorithm* (Jurafsky and Martin section 14.4.1) to learn the correct action for each structure?