Practice Exercise 4

1. Which of the following trees are correct/incorrect according given the following set of PS rules?

   \[
   \begin{align*}
   S & \rightarrow NP \ VP \\
   NP & \rightarrow (\text{Det}) \ Adj^* \ N \\
   NP & \rightarrow NP \ PP \\
   VP & \rightarrow V \ (NP) \\
   VP & \rightarrow VP \ PP \\
   PP & \rightarrow P \ NP
   \end{align*}
   \]

   You may assume that there are suitable rules for all of the words in the trees; for example, a rule “N -> John” for the noun John.

   For this exercise, you should not worry about whether the meanings given by the trees are plausible or implausible. You should just mechanically check that the trees can be generated by the phrase structure rules above. To help avoid confusion on this point, I’ve made sure that all of the correct trees have (somewhat) plausible meanings.

   a.

   b.
c. The boy likes the girl with the glasses.

d. John reads the book.

e. John saw the man with the telescope.
2. Draw trees for the following sentences under their most plausible interpretations (use the phrase structure rules from question 1):

   a. John boarded the train to New York.
   b. The small man with the telescope ate the large cake with a fork.
   c. Some large animals frighten people with their sharp claws.

   For (c), you may take “some” and “their” to be determiners (Det).

3. Give the subcategorization features of the following verbs (e.g. *kiss* has the feature \[\_NP\]).

   *talk*
   *meet*
   *put*
   *think*
   *persuade*