1. [8] Fill in the missing labels for the nodes in the tree below. Where a node is the maximal projection of a lexical item, indicate this with the standard “X-bar” notation (e.g., NP for the maximal projection of a noun, v′ for an intermediate projection of v). The sentence is *Daisy had not been dancing with Jimmy*. The arrow is for use in question 4.

(1)

2. [6] Yes or No. In the sentence for which the structure is given in (1)...

(a) Is *dancing with Jimmy* a constituent?  
(b) Is *had not been* a constituent?  
(c) Does the Perf *have* dominate the Neg *not*?  
(d) Does the PerfP dominate the ProgP?  
(e) In the PerfP, is ProgP the complement?  
(f) Is PP the specifier of the VP?
3. [1] **Circle one.** The verb shown in the structure in (1) above is...

   
   ditransitive / transitive / unergative / unaccusative

4. [1] **C-command.** The arrow in the tree above points to a node. Circle every node in the tree that node c-commands.

5. [1] **θ-role.** Name the θ-role that *Daisy* has in (1).

6. Suppose we start building a structure for a sentence, and at a certain stage we wind up with a vP as shown (abstractly) below in (2). *Note:* The superscripts are just for identification purposes—they aren’t part of the structure, I just need to be able to refer to the individual nodes.

   (2)
   
   ![Diagram of vP structure]

   (a) [1] Name the θ-role that the NP\(^b\) will have.

   (b) [1] Name the operation (Merge, Adjoin, Move) that connected PP\(^k\) and NP\(^d\).

   (c) [1] How many [\(uP\)] features were there—total—in these lexical items initially?

   (d) [1] Which of the following three sentences might plausibly include the vP in (2)?

   1. I sent letters to Chicago on Friday.
   2. I put crackers with cheese on plates.
   3. I send money to people with power.
7. [1] **Circle one.** The verb shown in the structure in (2) is...

ditransitive / transitive / unergative / unaccusative

8. Suppose you had a sentence with the abstract structure given below in (3). I have provided the pronunciation of two lexical items (the NP, John, and the bare (uninflected) form of the verb, *leave*).

(3)  
```
TP
   NP  T'
      M+T
      ...pres...
      MP
      PerfP
      Perf vP
      <NP>
      v' V+v <VP> 
      leave
```

(a) [1] Draw arrows in the tree that show, when things moved, where they moved from and to.

(b) [1] Write the sentence that this would be the structure for.

(c) [1] What was the motivation to Merge M and PerfP?

(d) [1] What was the motivation to Merge v' and NP?
9. [5] Binding Theory. One question, about the sentences in (4) and (5) below. The question (as you will explore in the real questions a–d below) is this: Why does (5b) have only one of the two interpretations you might expect? The background is this: There are two kinds of give sentences, the kind with the prepositional goal (4a), and the “double object construction” (4b). Both sentences in (4) seem to mean basically the same thing, and have the same options. Some male won a prize and Bill received the prize from Sue. The prizewinner can be Bill, or somebody else.

The similar-looking pair of sentences in (5) don’t have as many meaning possibilities. Bill won a prize, and some male received it from Sue. However, the one who receives the prize can be Bill or somebody else in (5a), but it cannot be Bill in (5b). The question here is asking you to explain why Bill can’t be the one who receives the prize from Mary in (5b). Hint: The title of this question is “Binding Theory”—expect to find yourself using the word “Principle” and one of the capital letters “A,” “B,” or “C.”

(4) a. Sue gave the prize that he won to Bill.
   b. Sue gave Bill the prize that he won.

(5) a. Sue gave the prize that Bill won to him.
   b. Sue gave him the prize that Bill won. ← him cannot be Bill.

(a) [1] In (4a), does he bind Bill if they have the same index? ___________________________

(b) [1] In (4b), does Bill bind he if they have the same index? ___________________________

(c) [1] Why doesn’t (4b) violate Principle B even when he and Bill have the same index?
_____________________________________________________________________________

(d) [2] Why can’t him be Bill in (5b)? ______________________________________________
It seems to me (right now, at least) that the two sentences together in (6) can in fact relate to two books written about Björk, one by John and the other by Björk herself. Notice that the second sentence is incomplete—the vP is left unpronounced, and is understood to mean the same thing as the vP in the preceding sentence (this kind of omission of the verb phrase is called “VP ellipsis”).

Here’s the question: Given what the second sentence means, explain why it is surprising that it is ok. (You can ignore too, but it is assumed to be adjoined to TP, very high in the tree.)

    b. She could too.