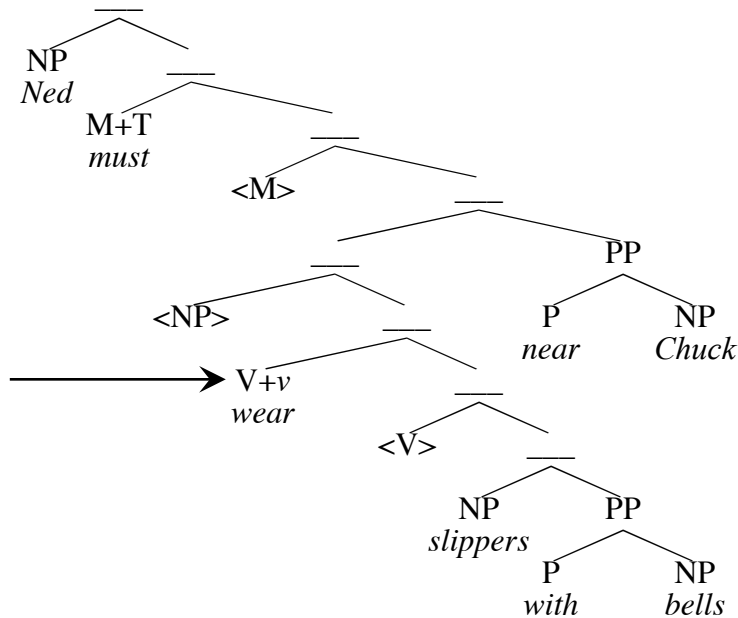**1. [8] Fill in the missing labels** for the nodes in the tree below. Where a node is the maximal projection of a lexical item, indicate it with the standard "X-bar" notation (e.g., NP for the maximal projection of a noun, *v'* for an intermediate projection of *v*). The sentence is *Ned must always wear slippers with bells near Chuck*. The arrow is for use in question 4.

> **50 points total, the number of points for each part is indicated a number in brackets.** *For planning purposes: this comes down to about a little under 2 minutes per point.*

2. [6] In the sentence for which the structure is given above:

a. Draw an arrow to the node in the specifier of *v*P.   *(draw above)*

b. Is *with bells* a constituent?   _____

c. Is *wear slippers* a constituent?   _____

d. Is *slippers with bells near Chuck* a constituent?   _____

e. Is *with bells* the complement of *slippers*?   _____

f. Does *v*P dominate the NP *Chuck*?   _____
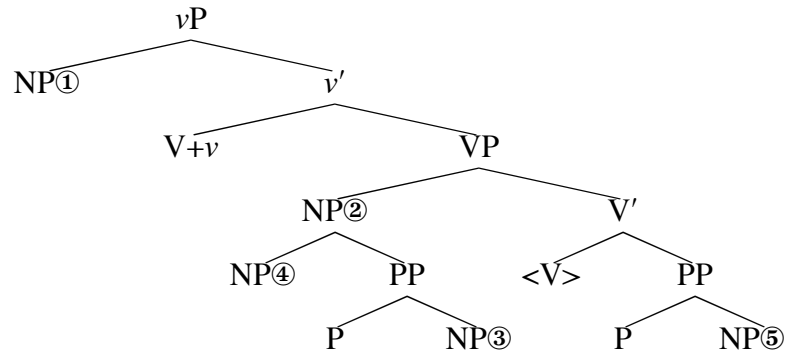
3. [2] Circle one: The verb shown in the structure above is

ditransitive / transitive / unergative / unaccusative

4. [2] Circle every node in the tree above c-commanded by the node designated by the arrow.

5. [2] Name the θ-role that [*slippers with bells*] has:

6. Suppose we start building a structure for a sentence, and at a certain stage we wind up with a *v*P as shown (abstractly) below.

```
                        vP
              ┌─────────┴─────────┐
            NP①                   v′
                        ┌─────────┴─────────┐
                      V+v                   VP
                              ┌─────────────┴─────────┐
                            NP②                       V′
                       ┌─────┴─────┐           ┌───────┴───────┐
                     NP④          PP         <V>              PP
                              ┌────┴────┐               ┌──────┴──────┐
                              P        NP③              P            NP⑤
```

a. [2] Name the θ-role that the NP② will have.

b. [2] If NP⑤ were an anaphor, which NPs could serve as an antecedent?
(That is: Which NPs could potentially bind NP⑤?)

c. [2] How many [*u*P] features were there, total, in these lexical items initially?

d. [3] Which of the following three sentences might plausibly include this kind of *v*P?

1. *I put mittens with tassles on Tommy.*
2. *I introduced Mary to John on Thursday.*
3. *I mail flowers to people with influence.*

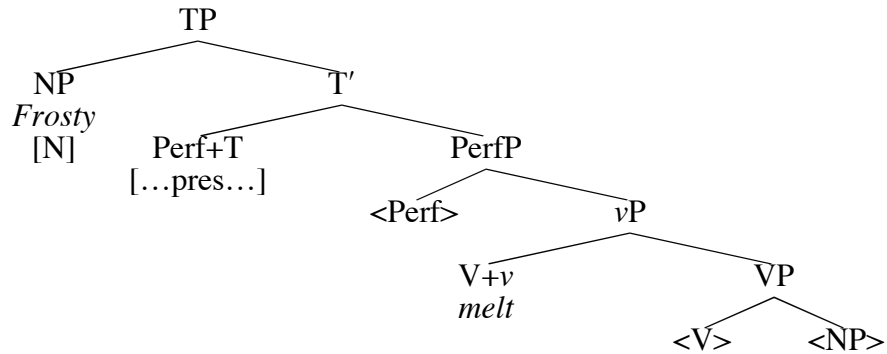**7. [2] Circle one:** The verb shown in the structure above is

ditransitive / transitive / unergative / unaccusative

8. Binding Theory. The sentence below is "trying to mean" *John told Mary that his mother admires her (Mary)*. Two questions, **about the sentence below**:

☞ *He$_i$ told Mary$_j$ that [John$_i$'s mother]$_k$ admires herself$_j$.

a. [3] Explain what is wrong with *John$_i$* here.

b. [2] Which Principle of Binding Theory is ***not*** violated in this sentence?

9. Suppose you had a sentence with the following abstract structure. I have provided two lexical items (the NP *Frosty* and the verb *melt*). *Fall 2011 note: You will need to change the verb form in part (c) to whatever is appropriate, "melt" here is intended to represent the basic uninflected form. Assume too that the T is a present tense (nonpast) T.*

```
                     TP
              _____|_____
            NP                 T'
          Frosty         _____|_____
           [N]        Perf+T          PerfP
                     [...pres...]   ____|____
                                 <Perf>      vP
                                         _____|_____
                                       V+v          VP
                                       melt       ___|___
                                                <V>     <NP>
```

a. **[2]** *Irrelevant for Fall 2011, asks about something we haven't covered yet.*

b. **[2]** *Irrelevant for Fall 2011, asks about something we haven't covered yet.*

c. **[3]** Write the sentence that this would be the structure for.

d. **[2]** What was the motivation to Merge T′ and NP? *Fall 2011 note: I plan to say something about this in the review session, I mentioned it in passing in class.*

e. **[2]** What was the motivation to Merge *v* and VP?

10. **[3]** What makes the following sentence ungrammatical, in terms of the system developed in class?

*Patricia should have put candles.