Using phrase structure grammars

Consider the following phrase structure grammar:

1. S → NP V (NP (NP)) (PP)

2. NP → Det (Adj) N (PP)

3. NP → Pron

4. PP → P NP

5. S → S Conj S

6. NP → NP Conj NP

7. Adj → {big, small}

8. Conj → {and}

9. Det → {a, her, his, my, the}

10. N → {banana, bride, corner, daughter, dog, friend, groom, melon, mokey, parents, piano, shop, restaurant, son, street}

11. NP → {George}

12. Pron → {me}

13. Prep → {at, to, of}

14. V → {ate, gave, is, plays, saw, sings}

Draw the phrase structure trees assigned by the grammar to the following sentences:

1. The monkey ate a banana and a big melon.

2. The small monkey gave me a banana.

3. The monkey gave a banana to me.

4. George saw the big dog of my friend.

5. The shop is at the corner of the street.

6. The parents of the groom and the bride ate at the restaurant. [two analyses]

7. His son sings and her daughter plays the piano.