1. (2 points) Exercise 18 on page 576.
2. (4 points) Exercise 20 on pages 576-577. **Note: part (c) should say that postorder scan is LRN, not RLN.**
3. (4 points) Exercise 21 on page 577.
4. (2 points) Exercise 23 on page 577.
5. (4 points) Exercise 26 on page 578. Note: the tree is a binary search tree, and the original tree is to be used for each part.
6. (3 points) Exercise 27 on page 578. Note: the sequence given is the sequence of insertions into the binary search tree.

Answer the following questions. **Note: the resulting binary trees are not search trees.**

7. (3 points) The preorder scan output of a character binary tree produced

   A D F G H K L P Q R W Z

   and the inorder scan output of the same binary tree produced

   G F H K D L A W R Q P Z

   Draw the binary tree.

8. (3 points) The postorder scan output of a character binary tree produced

   F G H D A L P Q R Z W K

   and the inorder scan output of the same binary tree produced the same output as in the previous question. Draw the binary tree. **(Note: this tree is not the same as the tree in the previous problem. These exercises show that multiple trees can produce the same inorder scan, but combined with a preorder or postorder scan, one can determine a particular tree.)**