AVL Trees

1. Insert the following values in the order given into AVL Tree
   \{42, 20, 11\}.

2. Balance the tree, specifying the type of rotation occurring around the node.

3. Insert the value \{47, 43\} into the AVL tree and draw the resulting tree.

4. Balance the tree, specifying the type of rotation occurring around the node.
5. Insert the value $48$ into the AVL tree and draw the resulting tree.

6. Balance the tree, specifying the type of rotation occurring around the node.

7. Insert the value 30 in the AVL tree and remove the value 43. Draw the resulting AVL tree.