Please print out this form (two-sided, if you can) and write your answers *legibly* in the spaces provided. If you can't write legibly, type.

1. Consider a delete operation in which the deleted node has two children. Let x be the deleted node and y be the node that takes its place in the tree. Explain why $key(y) > key(left(y))$ when the operation completes.

2. Given a node in the binary search tree, describe an algorithm to find the node with the next smaller key.

3. Perform a split at node b in the binary search tree on the left side of Figure 1 of *JST*20. Show the subtrees s_1 and s_2 after each step.