Grading Scheme for Problem 3, Pset 2, 6.854

3 Points: Explaining how reverse bits are maintained through rotations. If there was an explanation, but it was not correct, the student was given 1 or 2 points depending on the level of correctness.

2 Points: Explain how access walks down the tree, looking at the size of the left subtree and recursing in either the left subtree, picking the node, or recursing in the right subtree with a modified subtree size to find.

2 Points: Reverse(i,j) is achieved by splitting on i and j, then reversing the mark bit, then merging back together. Should also have a good explanation of insert to receive full credit.

2 Points: Using a mark bit and the size of the tree as augmentations, and explaining how they do not affect the asymptotic run time.

1 Point: Level of detail for the explanations.