1

The right side of the root node = 0 since min(y,3,1,6)=y=0. This means X needs to be >= 0 since the root node is maximizing. However, the root of the left side is <= 3 because of one of its children = 3. The right side of the left side can therefore be pruned, since it is max(5,6)=6 which is > 3. Since the parent of x is maximizing, x needs to be >= its sibling which is min(2,1,7)=1 This means that x needs to be <=3, and >=1.

2

Since x=0, it can be pruned as it sibling is greater (min(2,1,7)=1). The parent of x (1) is smaller than its siblings (min(3,1, (max(5,6))))=1. The left side of the tree is therefore = 1. A will be max(6,min(3,1))=max(6,1)=6. Y therefore needs to be = 6 in order to become the same value as the right side. We now have 1 on the left, and 6 on the right side. Max(1,6)=6. Y is now equal to the root node (6).

3

Pruning A (=6) means that we need a better (smaller, since the parent of A is minimizing) value earlier on (assuming earlier means more left, if traversal starts on the left side) in the tree. This means that the left side of the tree must be >= y. This is because it will then not be necessary to look for smaller values than y inside A, since the root node will then have a better (higher) value on its left side.

X needs to be >= y when y = [1,3].