AVL Tree Worksheet

* 1. What is the worst-case ordering for an initially empty BST inserting 7 distinct elements?

In order (or reverse order, or one of a number of others). In order will result in one long straight branch.

* 1. Insert those elements into an initially empty AVL tree.

This will vary based on your order of insertion, of course.

1. Starting from an initially empty AVL tree. Use the back side.

For this I’ll only show some intermediate states.

* 1. Insert 29, 23, 18, 22, 20, 7
  2. Delete 18
  3. Insert 21, 20.5 [Note: when I resort to non-integers, it usually means I didn’t plan ahead]
  4. Delete 23
  5. Delete 29, 22