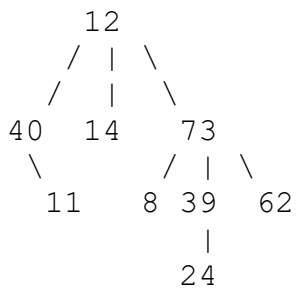
1) (5 pts) ALG (Binary Trees)

Consider the following tree, which is a *ternary* tree (i.e., a tree where each node can have up to three children: a *left child*, a *middle child*, and a *right child*):



Give the preorder and postorder traversals of that tree. Follow the same general algorithms you use for giving the preorder and postorder traversals of a binary tree, but extend those ideas to work for a ternary tree without upending the fundamental principles behind those traversal algorithms.

Preorder traversal: 12 40 11 14 73 8 39 24 62

Postorder traversal: 11 40 14 8 24 39 62 73 12

Grading: **2 pts for correct pretraversal, 1 pt if > ½ items are in correct slots, 0 otherwise**
2 pts for correct posttraversal, 1 pt if > ½ items are in correct slots, 0 otherwise
1 pt added if both answers are correct.