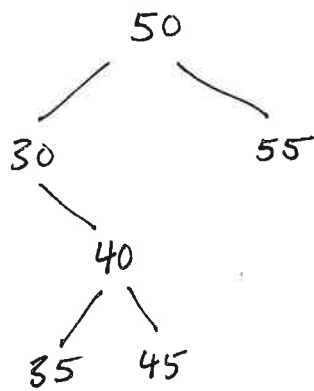


Give the pre-, post-, and in-order traversals for the following binary tree:



pre:

post:

in:

Suppose we print the pre-, post-, and in-order traversals for some binary tree, but we subsequently lose the tree and any indication of which traversal was which. Can you determine which one must be pre-, in-, or post-order?

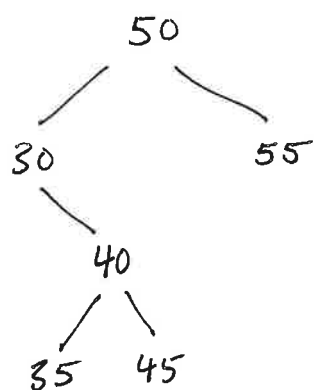
_____ 14 12 31 20 6 19

_____ 14 31 6 19 20 12

_____ 12 14 20 31 19 6

Solutions on following page...

Give the pre-, post-, and in-order traversals for the following binary tree:



pre: 50 30 40 35 45 55

post: 35 45 40 30 55 50

in: 30 35 40 45 50 55

Suppose we print the pre-, post-, and in-order traversals for some binary tree, but we subsequently lose the tree and any indication of which traversal was which. Can you determine which one must be pre-, in-, or post-order?

in 14 12 31 20 6 19

post 14 31 6 19 20 (12)

pre (12) 14 20 31 19 6

↗ We used a process of elimination argument to find these.
Note that the inorder traversal is not sorted because this is just a regular binary tree — not a binary search tree.