

Consider the tree drawing method covered in class (slide 40).

1. Let $x(v)$ be the *pre-order* rank of v (rather than the in-order rank of v), and draw the tree in slide 40 accordingly.
2. Draw the tree if $x(v)$ is the *post-order* rank of v .
3. Let T be any binary tree. Show that if $x(v)$ is the pre-order rank of v and $y(v)$ is the depth of v , for all nodes v of T , then the resulting drawing of T has no edges crossings.