



1. The tree above is a rooted binary tree. What is its depth? What are the children of node 65? What is the parent of node 41?
2. There are six non-isomorphic trees with six vertices. Draw all of them.
3. There are nine non-isomorphic rooted trees with five vertices. Draw all of them.
4. A *binary tree* is a rooted tree where each vertex has at most two children. How many non-isomorphic five vertex binary trees are there?
5. What is the maximum possible number of vertices in a binary tree of height n ?
6. What is the relationship between the number of vertices of a tree and the number of edges?