

1. Construct all (non-isomorphic) trees of heights from one to four, that have five vertices. [1]. Note that there is one of height one, four of height two, three of height three, and one of height four.
2. Construct two non-isomorphic rooted trees both having twelve vertices, six leaves, and height four [1].
3. Calculate the minimum height of a ternary rooted tree with ten leaves.

References

- [1] N. Biggs. *Discrete Mathematics*. Oxford science publications. OUP Oxford, 2002.