MATH 280 Discrete Mathematical Structures Assignment #9
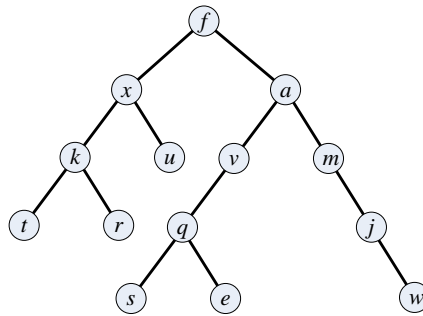
Name _____

The point values for each question is given within []. The total number of points for this assignment is 9.

Consider the binary tree rooted at f shown below:

[1] 1. What is the height of the tree?

[1] 2. What are the leaves of the tree.

[1] 3. What are the descendants of vertex x?

[1] 4. What are the ancestors of vertex k?

[1] 5. Provide the preorder traversal for the tree.

[1] 6. Provide the inorder traversal for the tree.

[1] 7. Provide the postorder traversal for the tree.

[1] 8. What is the maximum number of vertices in a binary tree of height h?

[1] 9. What is the minimum number of vertices in a binary tree of height h?