

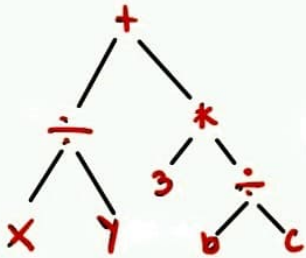
## CS-303 Assignment 4

(25 points)

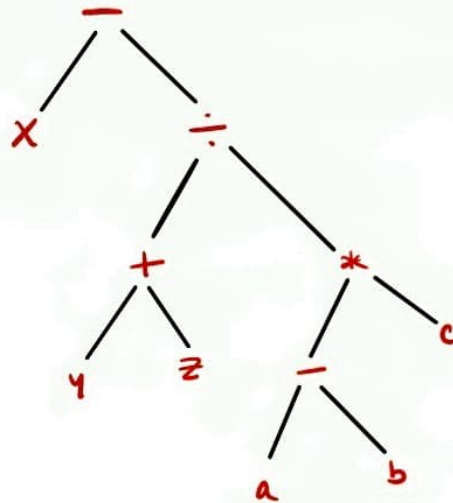
Q1 (15 points) Draw an expression tree corresponding to each of the following:

- a) Inorder traversal is:  $x / y + 3 * b / c$
- b) Postorder traversal is:  $x y z + a b - c * / -$
- c) Preorder traversal is:  $* + a - x y / c d$

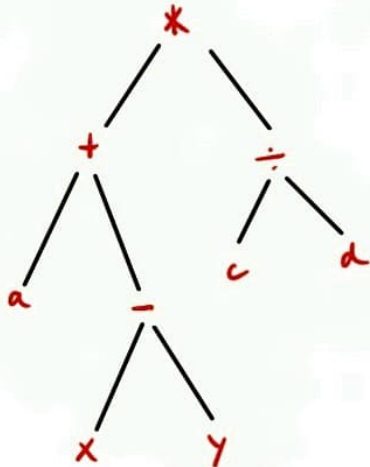
a)



b)



c)



Q2 (10 points) Considered the output of a to\_string method below and show the tree that would be built by the following data lines is the binary search tree.

30  
15  
4  
NULL  
NULL  
20  
18  
NULL  
19  
NULL  
NULL  
NULL  
35  
32  
NULL  
NULL  
38  
NULL  
NULL

