Quiz 22

Due Jun 13 at 11:59pm **Points** 5 **Questions** 5
Available until Jun 13 at 11:59pm **Time Limit** None

Instructions

Answer the following questions.

This quiz is no longer available as the course has been concluded.

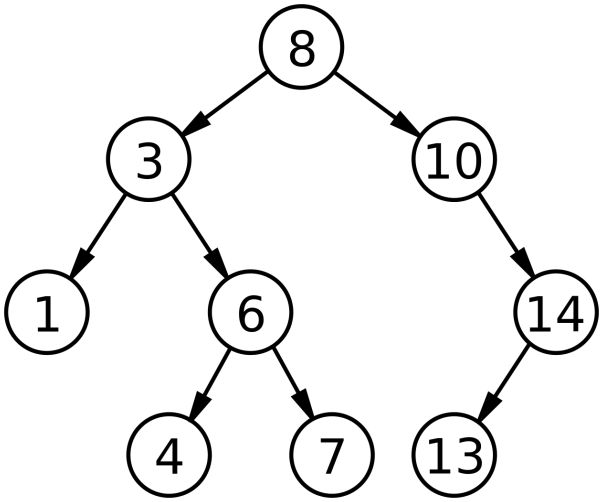
Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	29 minutes	5 out of 5

Score for this quiz: **5** out of 5
Submitted Jun 13 at 7:26pm
This attempt took 29 minutes.

Question 1 — 1 / 1 pts

Consider the following BST.



If node 14 is removed, how the tree changes?

Node 13 becomes the right subtree of node 8, and node 10 is moved to the left subtree of node 13.

Correct!

Node 13 becomes the right subtree of node 10.

Node 10 moves to the root, node 13 becomes node 10's right subtree, and node 8 becomes node 13's left subtree.

Question 2

1 / 1 pts

Consider BST from previous question. If node 8 is removed, then how the tree changes?

- Node 13 becomes the new root.

Correct!

- Node 10 becomes the new root
- Node 14 becomes the new root.
- Node 6 becomes the new root.

Question 3

1 / 1 pts

Considering the BST from the previous question, what would be the order of nodes being visited in in-order traversal?

- 8, 3, 1, 6, ,4, 7, 10, 14, 13
- 1, 4, 7, 6, 3, 13, 14, 10, 8
- 8, 3, 10, 1, 6, 14, 4, 7, 13

Correct!

- 1, 3, 4, 6, 7, 8, 10, 13, 14

Question 4

1 / 1 pts

Assume that an ordered list of items 2, 5, 8, 12, 15, 16, 29 is inserted into an empty BST one by one. What would be the height of the resulting BST?

Correct!

- (•) 6
- ( ) 4
- ( ) 3
- ( ) 7

Question 5

1 / 1 pts

A binary tree *T* has subtrees *S1* and *S2*. If heights of S1 and S2 are *n* and *m*, respectively, then what is the height of *T*?

- ( ) max(n, m)
- ( ) n + m
- ( ) n +m + 1

Correct!

- (•) 1 + max(n, m)

Quiz Score: **5** out of 5