

Names: \_\_\_\_\_

Worksheet #7

CS Logins: \_\_\_\_\_

## Trees and Traversals Activities

(write neatly please!)

As always, sit with a partner and work through these together.

Certain problems fit certain types of traversals especially well. With a partner/group, determine the best traversal to use for each of the following problems. You can choose from breadth-first, pre-order, post-order, in-order and Euler tour. There are certainly multiple valid ways to solve each problem, so make sure you discuss why you think that your answer is the best.

**Activity #1.** Decorate each node with the number of its descendants

**Activity #2.** Given the root of the tree, determine if it is perfect.

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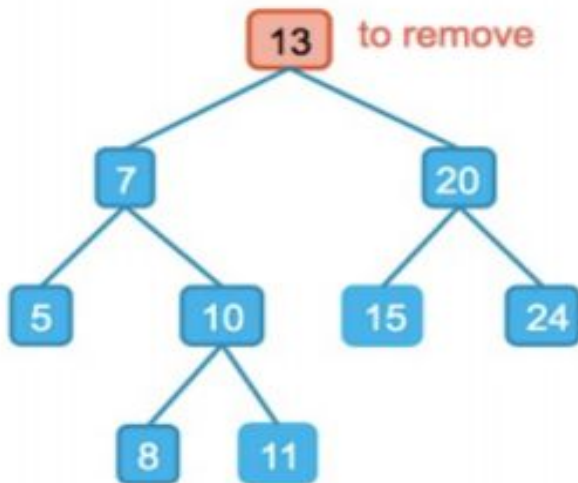
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## Binary Search Trees Activities

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**Activity #3:** To remove the root node, 13, we first need to find the node that will replace it. Find the root node's in-order predecessor and successor.



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