

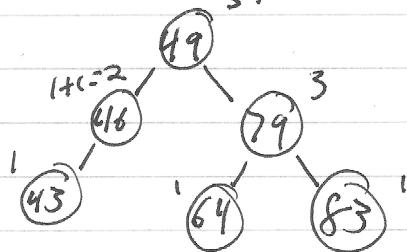
h : height of tree
insertion w/ check $O(h)$ time

find-min() \Rightarrow keep going left until you hit a leaf
 $O(h)$ complexity

New requirement: Rank(t): how many planes are scheduled to land at times $\leq t$

Augment the BST structure

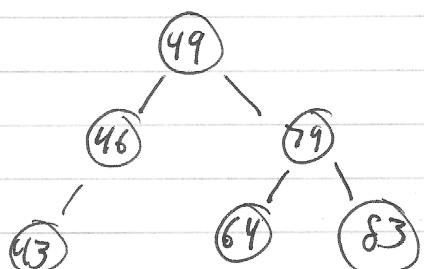
$$5+1=6$$



Insert or delete modify "size" numbers
subtree sizes

How to compute Rank(t) from subtree counts
 $\leq t$

What lands before T ? $O(h)$



1. Walk down tree to find desired time.
2. As you walk down add in the nodes that are smaller
3. Add in the subtree size to the left