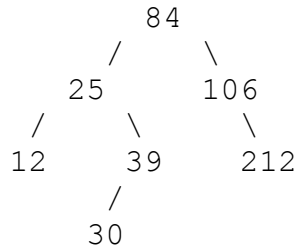


3) (10 pts) ALG (AVL Trees)

a) Show the result of inserting 37 into the following AVL tree:



- b) Using big-oh notation, give the **best-case** runtime for inserting a new element into an AVL tree with n nodes:
- c) Using big-oh notation, give the **worst-case** runtime for inserting a new element into an AVL tree with n nodes:
- d) Using big-oh notation, give the **best-case** runtime for inserting a new element into a binary search tree with n nodes:
- e) Using big-oh notation, give the **worst-case** runtime for inserting a new element into a binary search tree with n nodes: