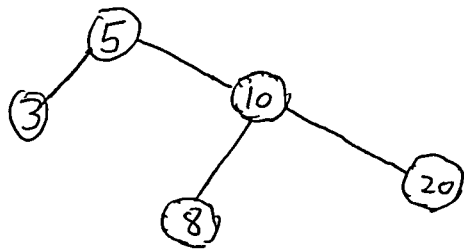# 3 Trees

a) I will disprove the claim with a counter example:

suppose we are searching "20" in the following Tree:

set $B = \{5, 10, 20\}$

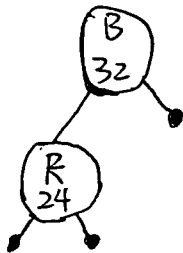set $A = \{3, 8\}$

set C = empty set

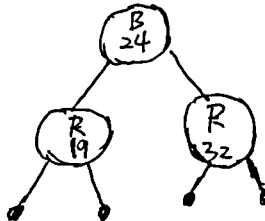As a result, $b > a > c$ which is not the case $a \leq b \leq c$.

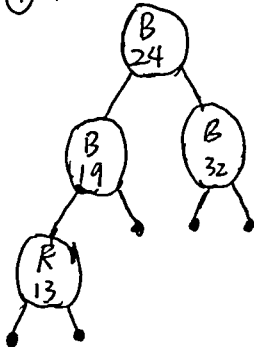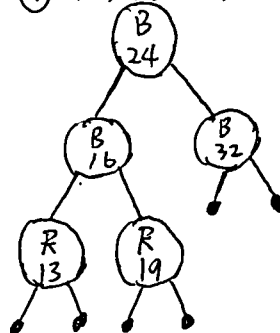b) ① insert (32) [B = Black, R = Red] ($\rightarrow\bullet$ = NIL)

② insert (24)

③ insert (19)

④ insert (13)

④ insert (16)

⑤ insert (9)