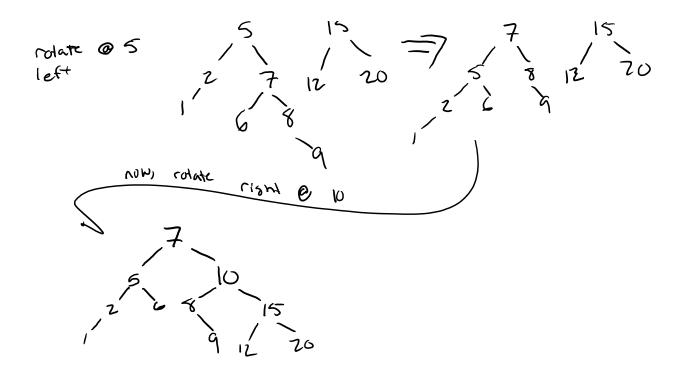


We must correct this sign change before we can do our rotation. (This requires another rotation somewhere else in the tree)



## Recap

- A single left rotation only balances a tree when the balance factor of <u>right</u> child is <u>positive</u>
- A single right rotation only balances a tree when the balance factor of <u>left</u> child is <u>negative</u>
- When the balance factor of imbalanced node is **positive** and its right child is **negative** 
  - Rotate <u>right</u> at imbalance's <u>right</u> child
  - o Then, we would rotate **left** at imbalance
- When the balance factor of imbalanced node is **negative** and its left child is **positive** 
  - o Rotate left at imbalance's left child
  - o Then, we would rotate **right** at imbalance