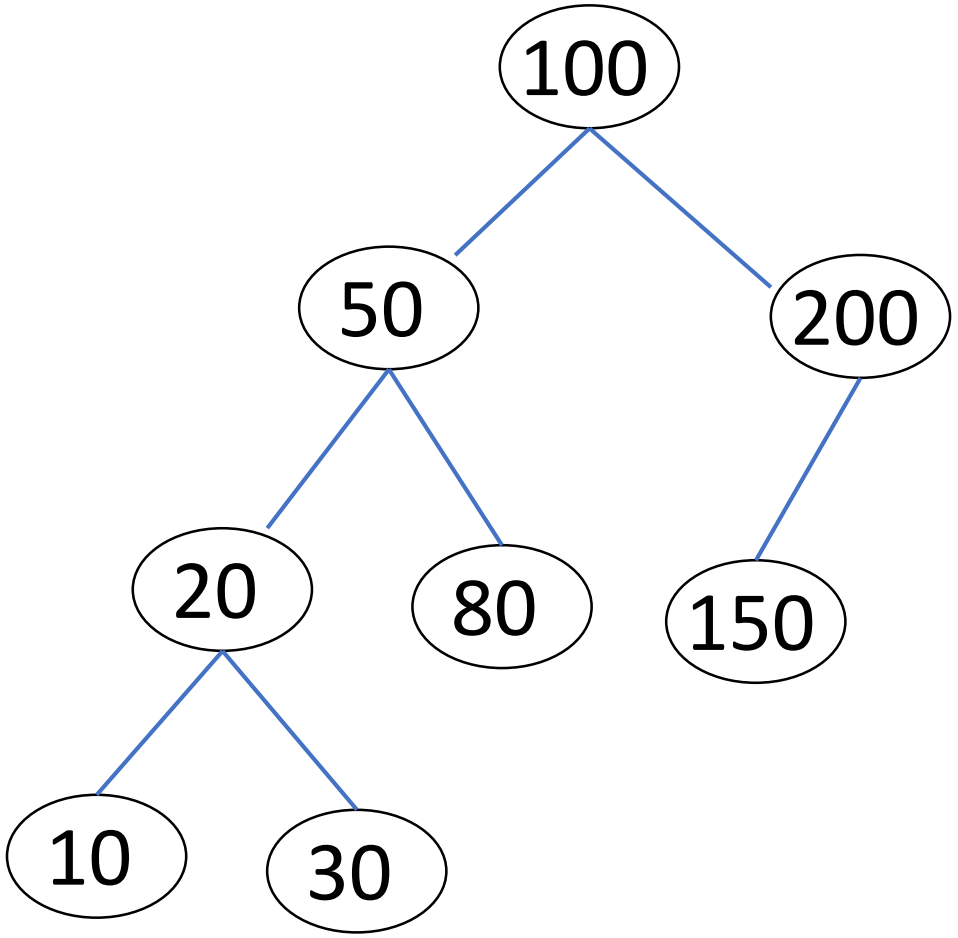
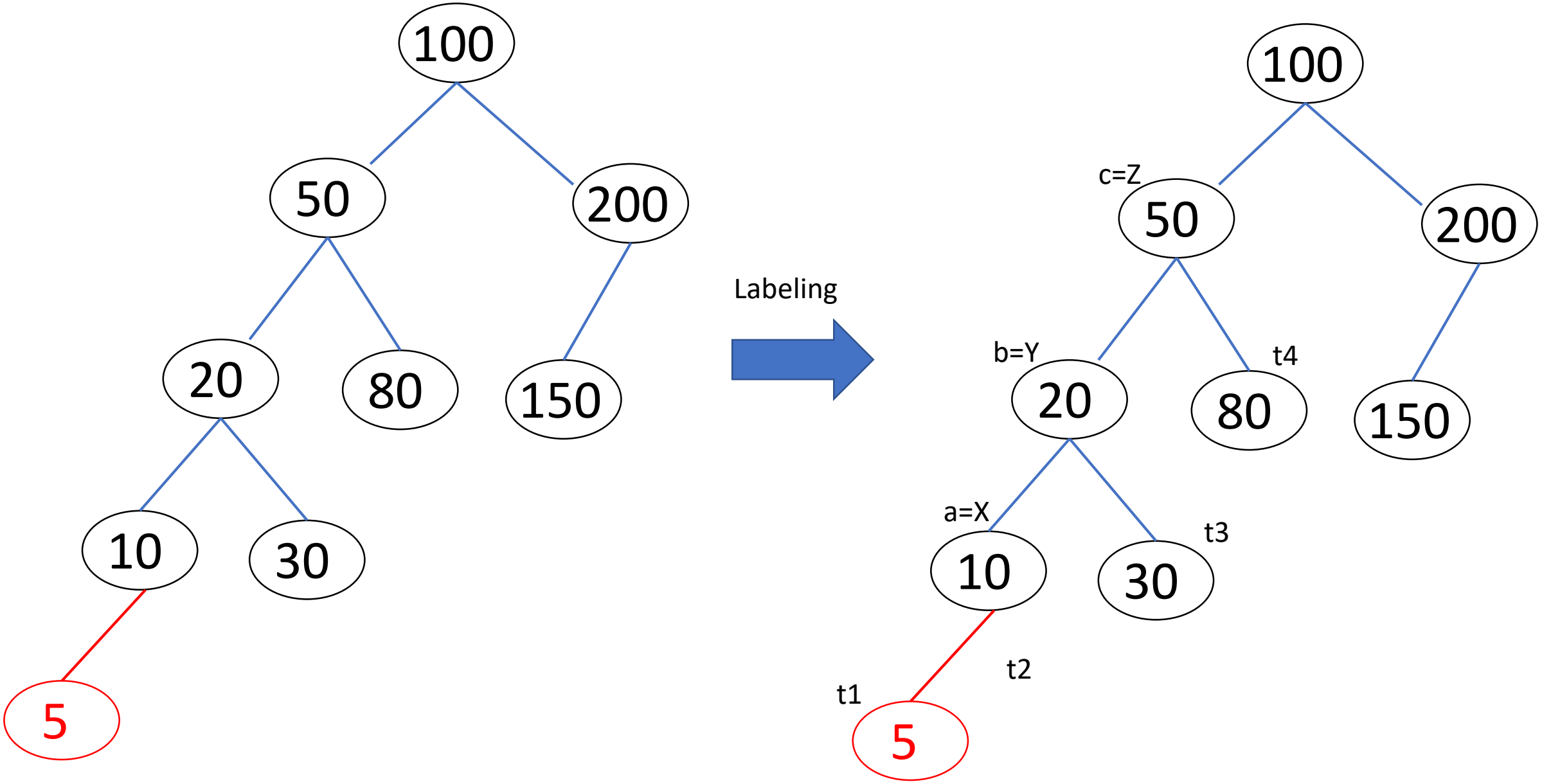
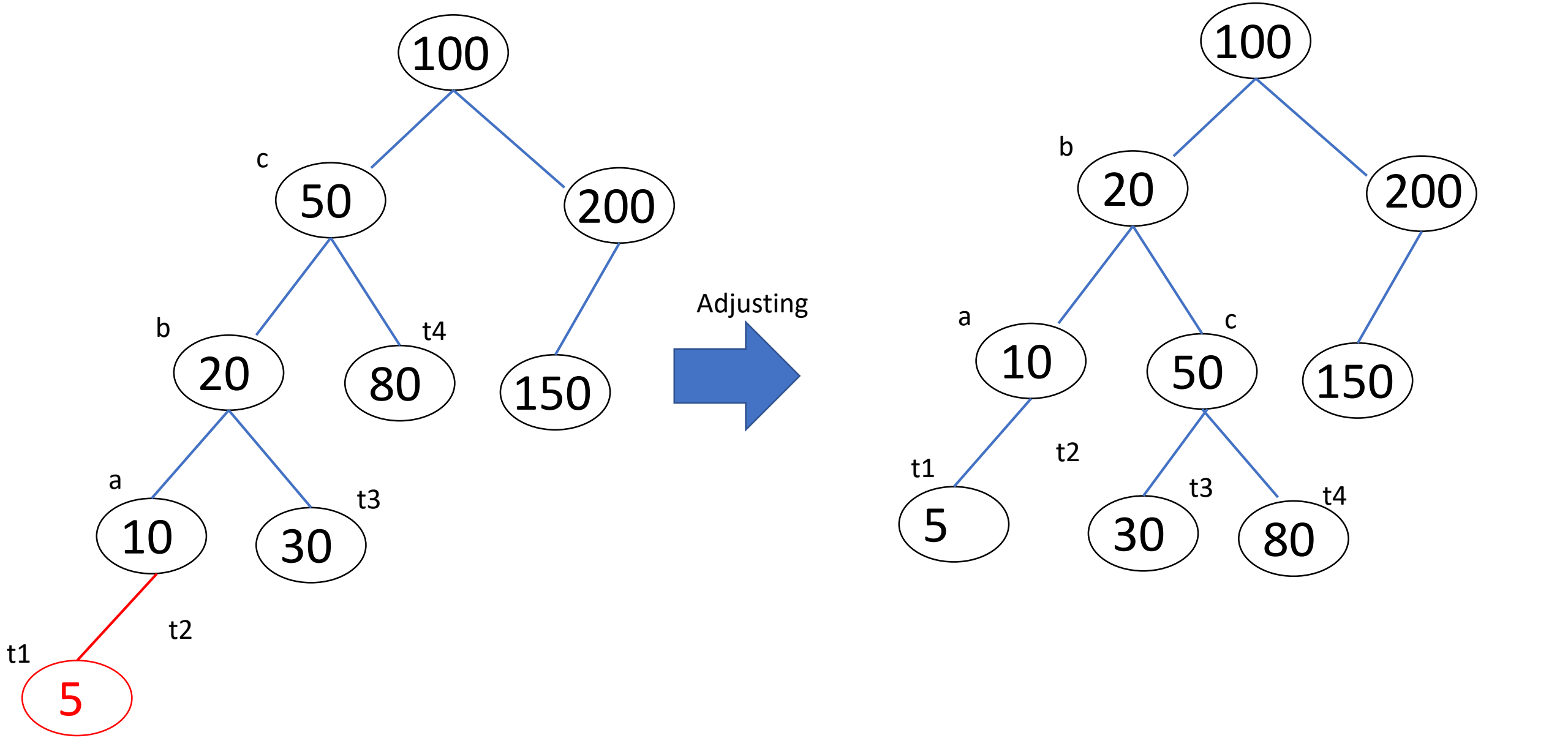
Two Examples of the AVL Adjustment Algorithm

Example A

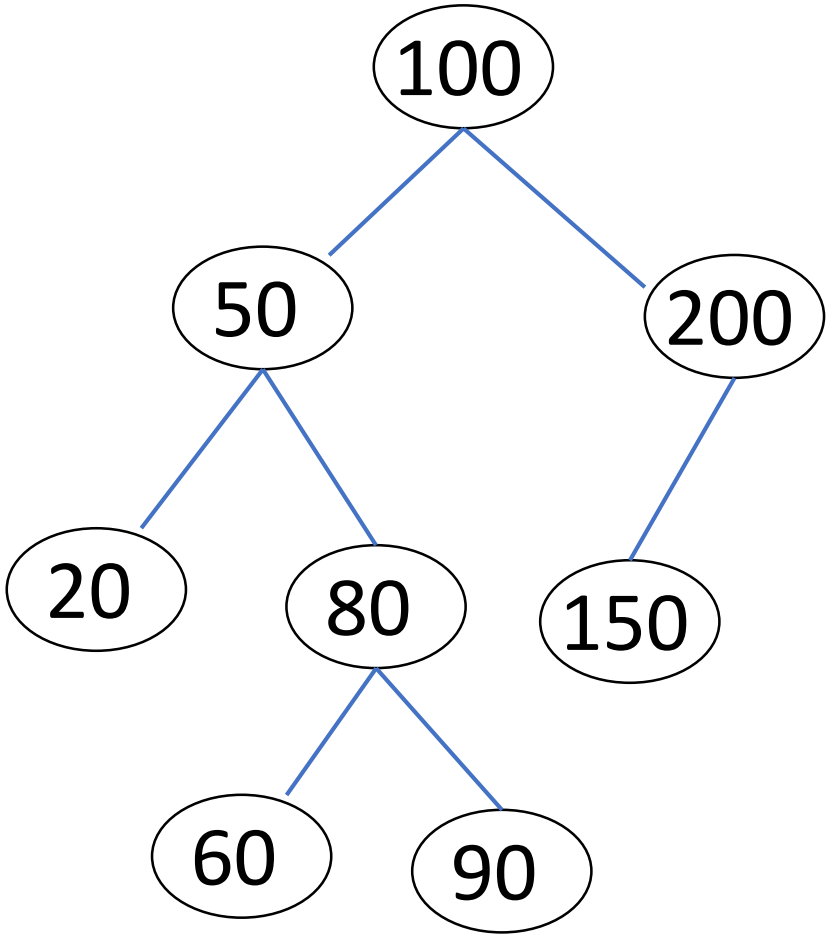


This is a balanced AVL tree. Now insert 5 into it.

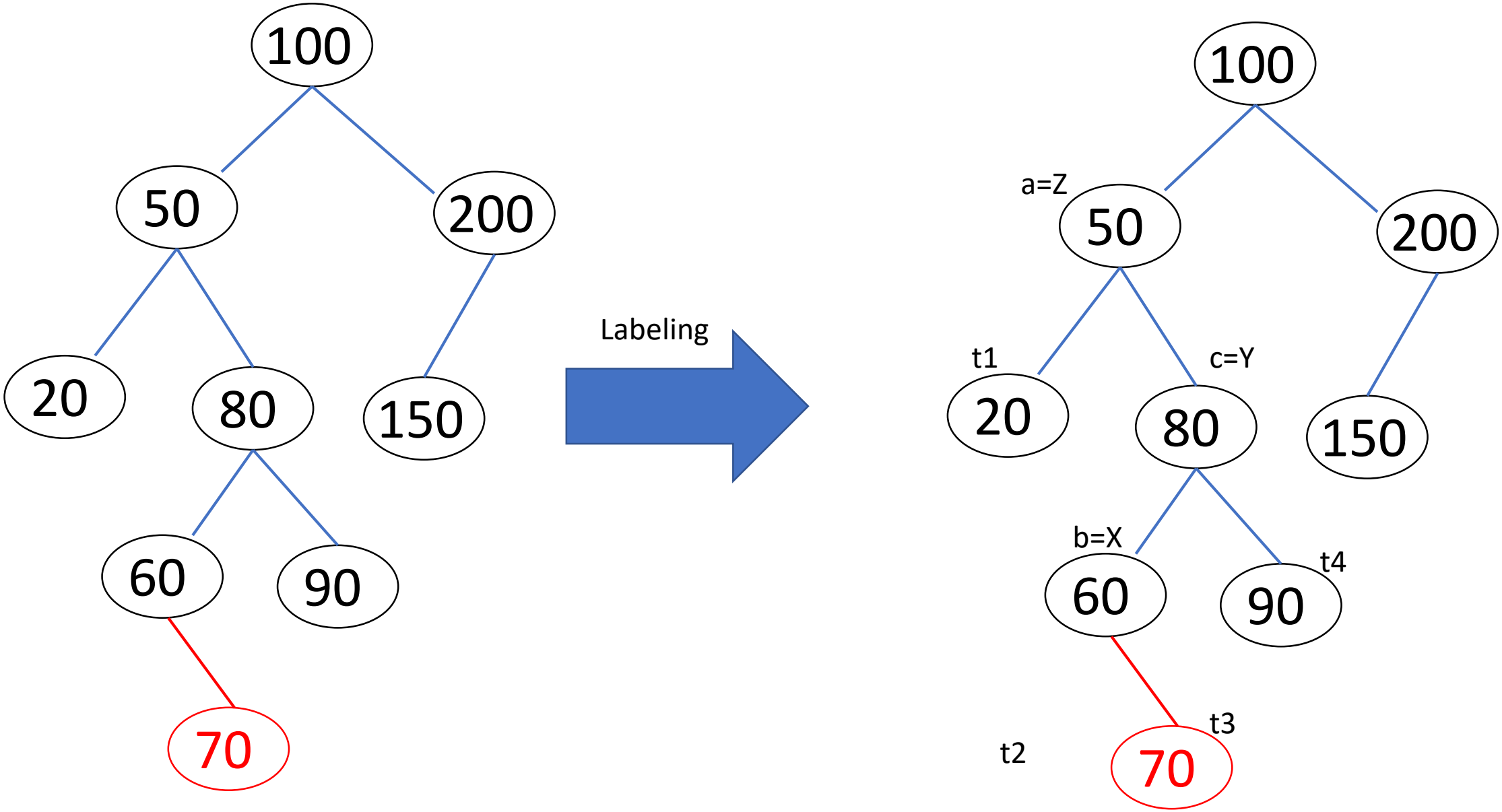

100
50
200
20
80
150
10
30
5
Labeling
100
c=Z
50
200
b=Y
t4
20
80
150
a=X
t3
10
30
t2
t1
5

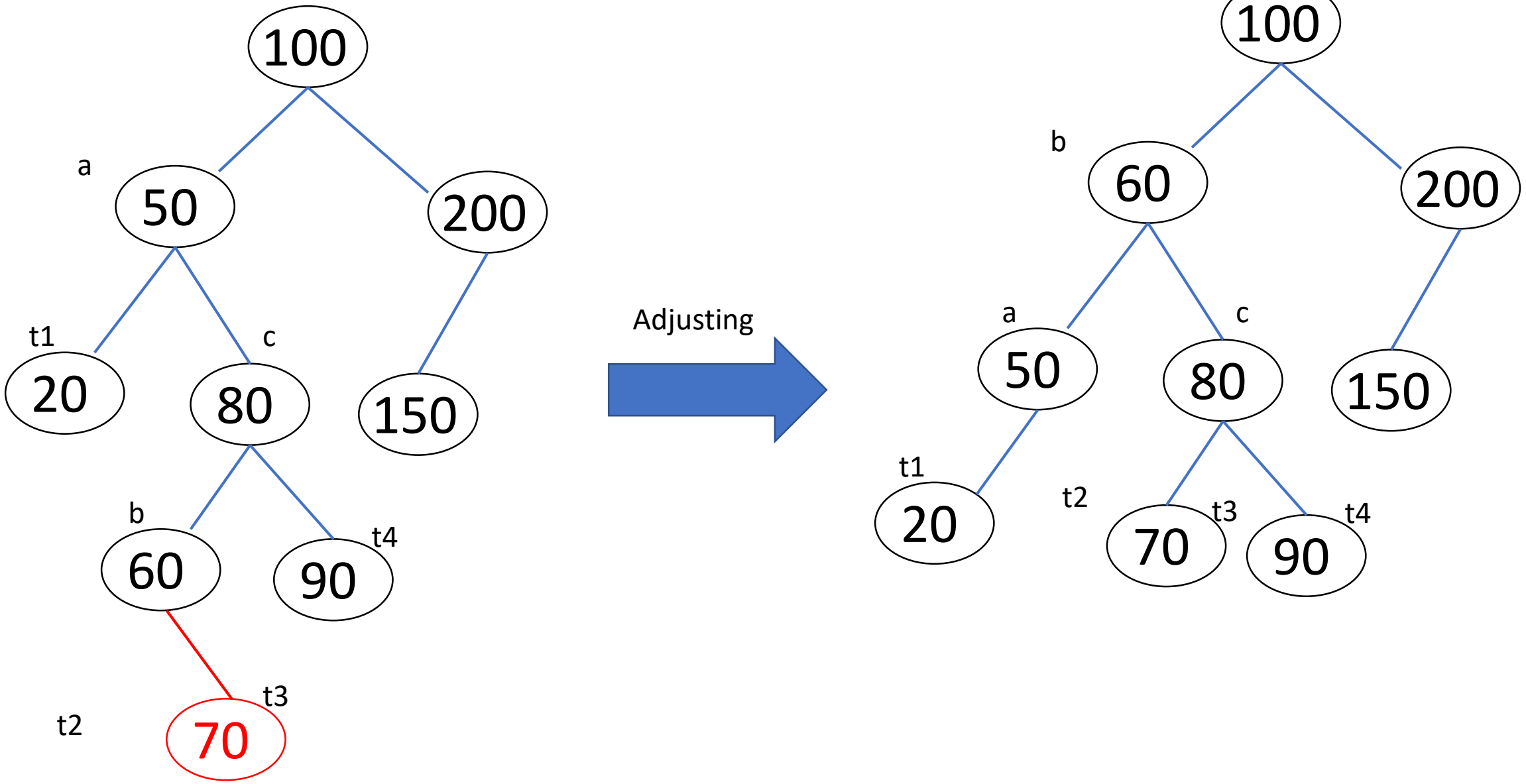

100
c
50
200
b
20
t4
80
150
a
10
t3
30
t2
t1
5
Adjusting
100
b
20
200
a
10
c
50
150
t1
5
t2
t3
30
t4
80

Example B



This is a balanced AVL tree. Now insert 70 into it.


100
50
200
20
80
150
60
90
70
Labeling
100
a=Z
50
200
t1
c=Y
20
80
150
b=X
t4
60
90
t3
t2
70


100
a
50
200
t1
c
20
80
150
b
t4
60
90
t2
t3
70
Adjusting
100
b
60
200
a
c
50
80
150
t1
t2
t3
t4
20
70
90