



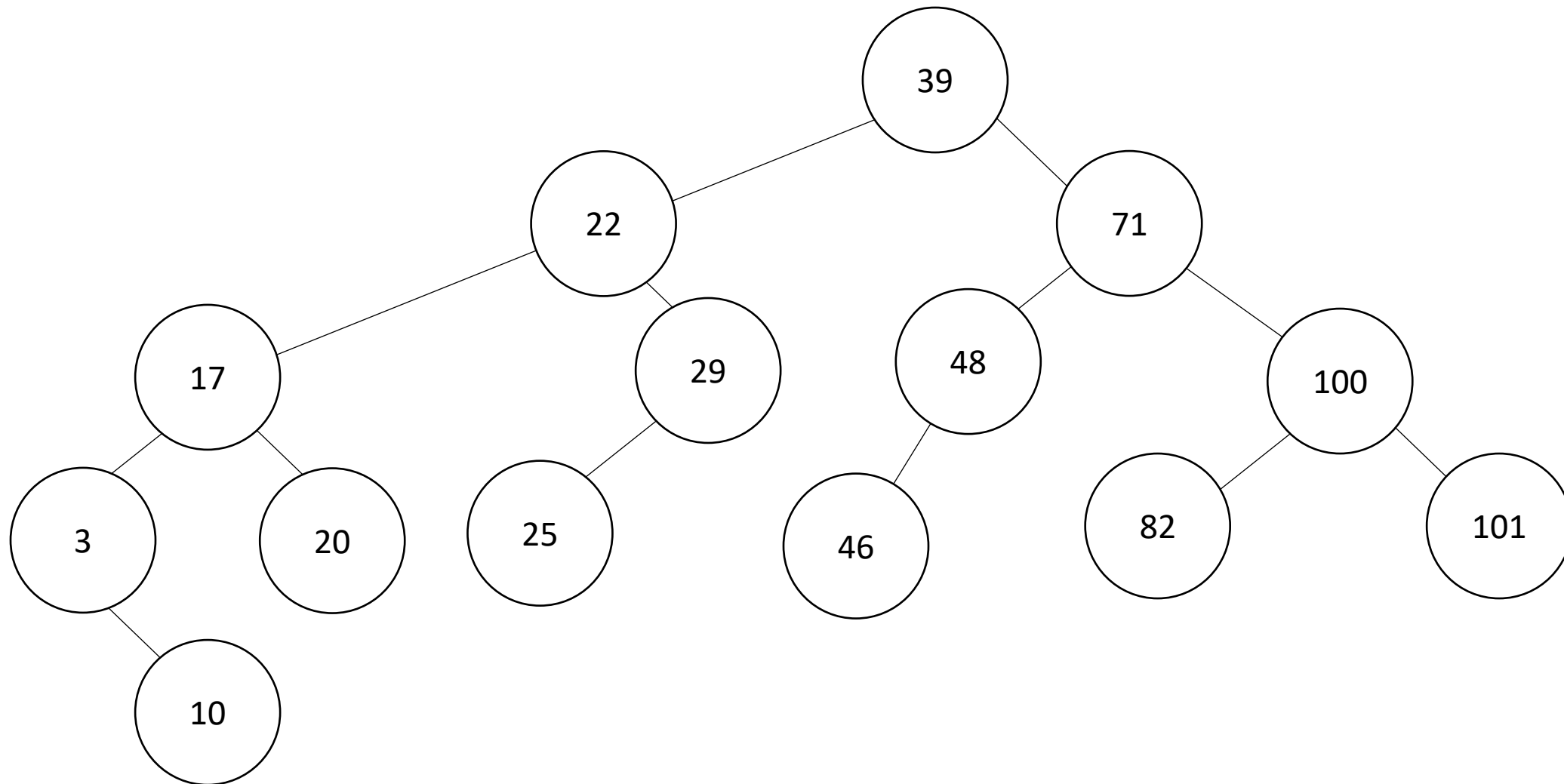
Balanceo de arboles

Luis Diego Orozco López

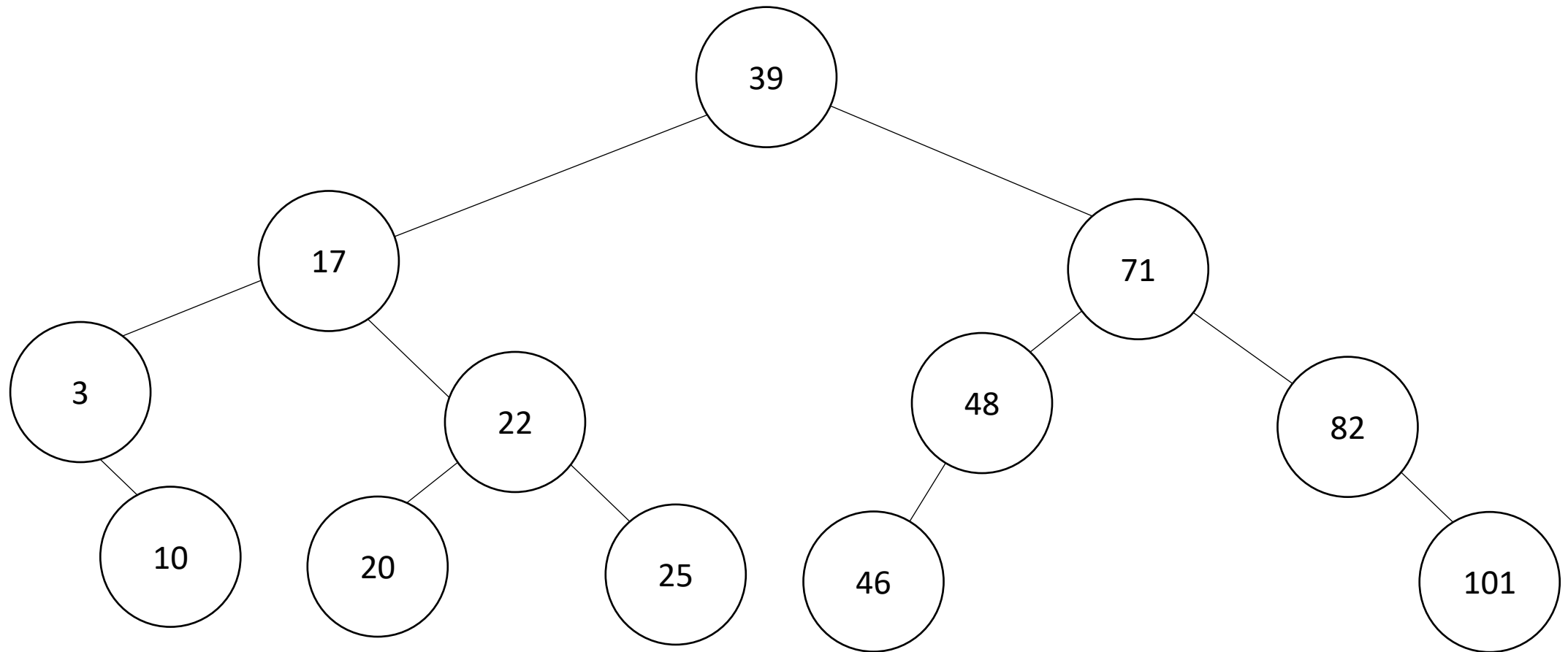
24011289

Ejercicio 1

a. Árbol AVL para: 100, 29, 71, 82, 48, 39, 101, 22, 46, 17, 3, 20, 25, 10:



b. Después de eliminar 29 y 100 del árbol



Ejercicio 2

Inserción de 1, 2, 3, 4, 5, 6, 7, 15, 14, 13, 12, 11, 10, 9 y 8 paso a paso

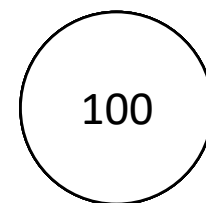
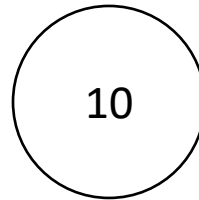
- Raíz (R) = 1
- $R(d) = 2$
- $2(d) = 3$
- Rotación derecha – derecha
 - $R = 2$
 - $R(i) = 1$
 - $R(d) = 3$
- $3(d) = 4$
- $4(d) = 5$
- Rotación derecha – derecha
 - $R(d) = 4$
 - $4(i) = 3$
 - $4(d) = 5$
- $5(d) = 6$
- Rotación derecha – derecha
 - $R = 4$
 - $R(i) = 2$
 - $2(d) = 3$
- $6(d) = 7$
- Rotación derecha – derecha
 - $R(d) = 6$
 - $6(i) = 5$
 - $6(d) = 7$
- $7(d) = 15$

- $7(i) = 14$
- Rotación derecha – izquierda
 - $7(d) = 14$
 - $14(d) = 15$
 - $6(d) = 14$
 - $14(i) = 7$
 - $14(d) = 15$
- $7(d) = 13$
- Rotación derecha – izquierda
 - $6(d) = 7$
 - $7(d) = 14$
 - $14(i) = 13$
 - $R(d) = 7$
 - $7(i) = 6$
- $13(i) = 12$
- Rotación derecha – derecha
 - $R = 7$
 - $7(i) = 4$
 - $4(d) = 6$
- $12(i) = 11$
- Rotación izquierda – izquierda
 - $14(i) = 12$
 - $12(d) = 13$
 - $12(i) = 11$

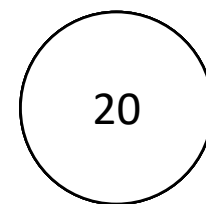
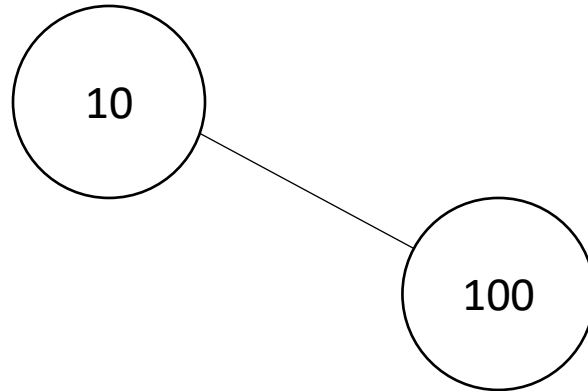
- $11(i) = 10$
- Rotación izquierda – izquierda
 - $R(d) = 12$
 - $12(d) = 14$
 - $14(i) = 13$
- $10(i) = 9$
- Rotación izquierda – izquierda
 - $12(i) = 10$
 - $10(d) = 11$
 - $10(i) = 9$
- $9(i) = 8$
- Fin

Ejercicio 3

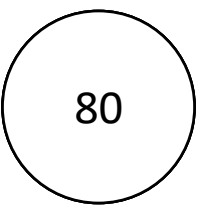
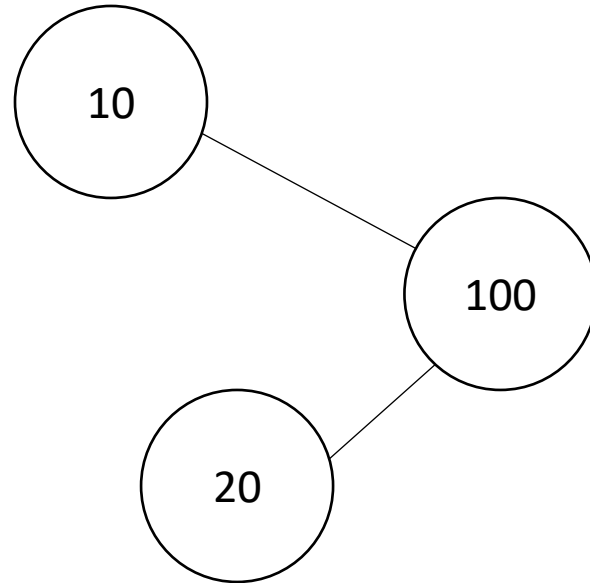
a. Inserir : 10, 100, 20, 80, 40, 70.



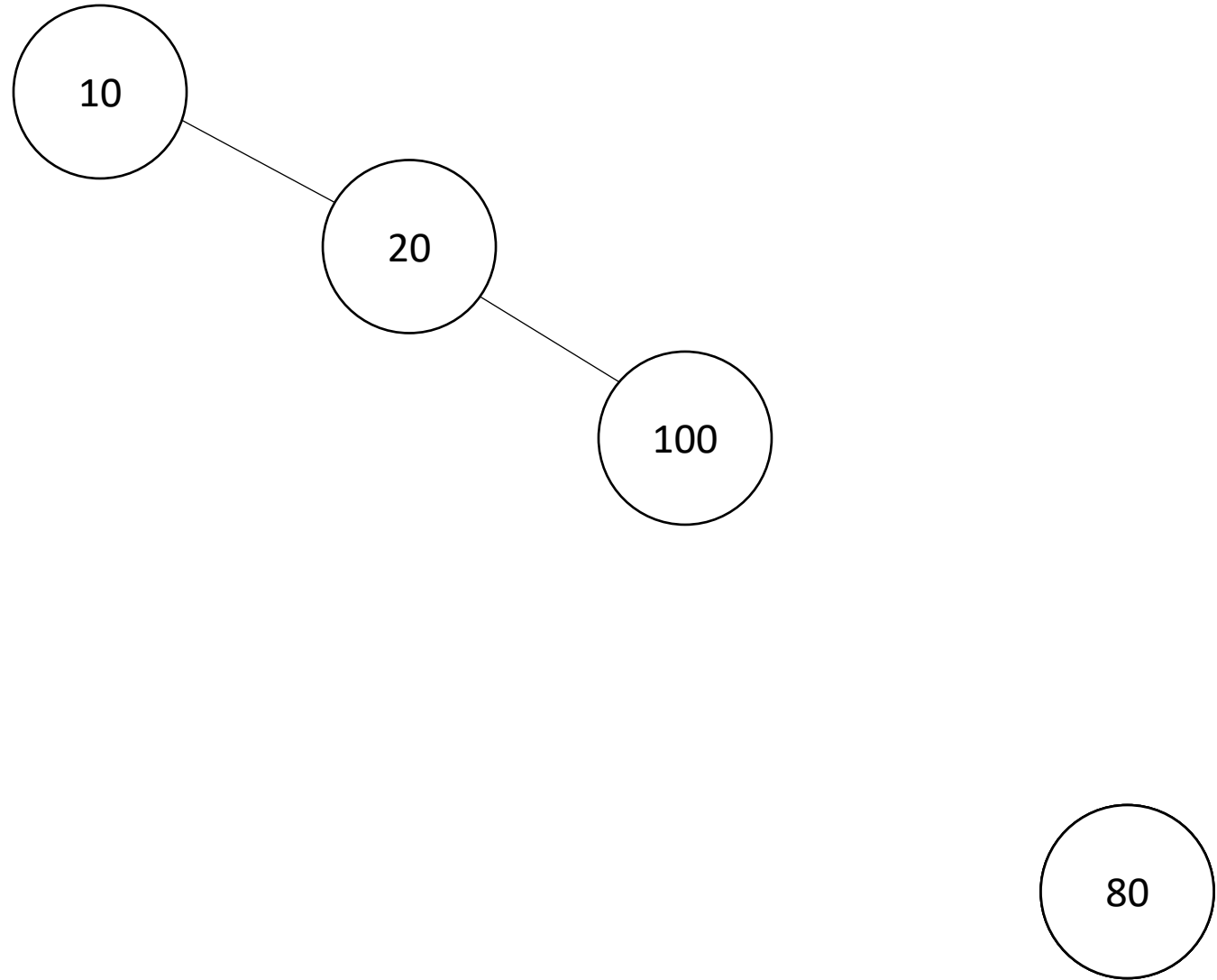
a. Insertar : 10, 100, 20, 80, 40, 70.



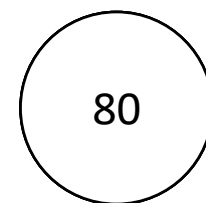
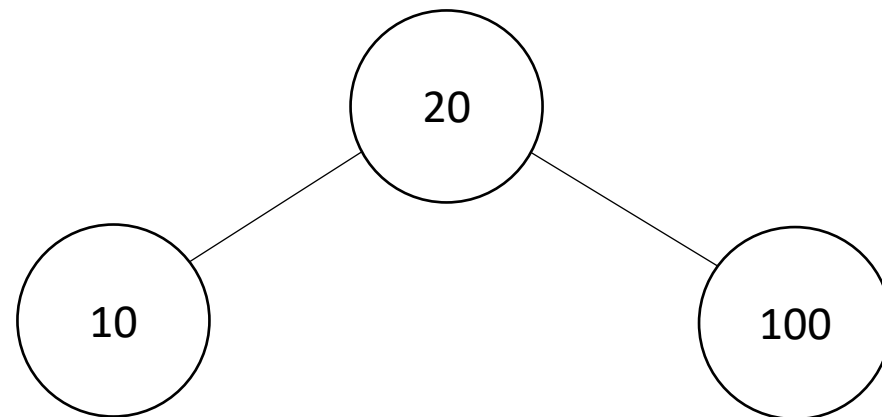
a. Insertar : 10, 100, 20, 80, 40, 70.



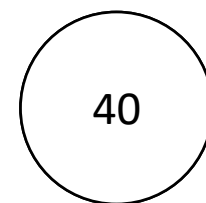
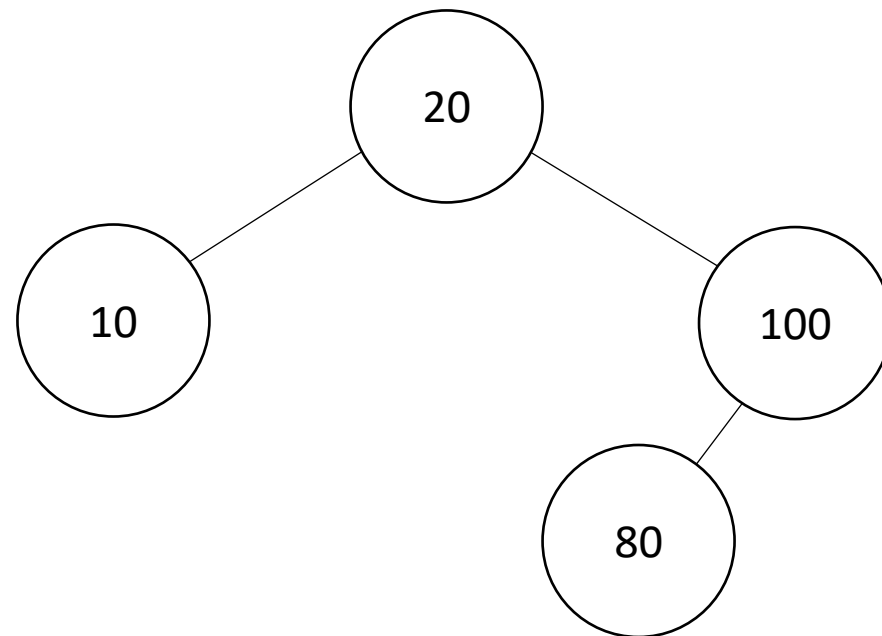
a. Insertar : 10, 100, 20, 80, 40, 70.



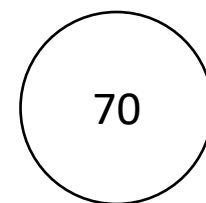
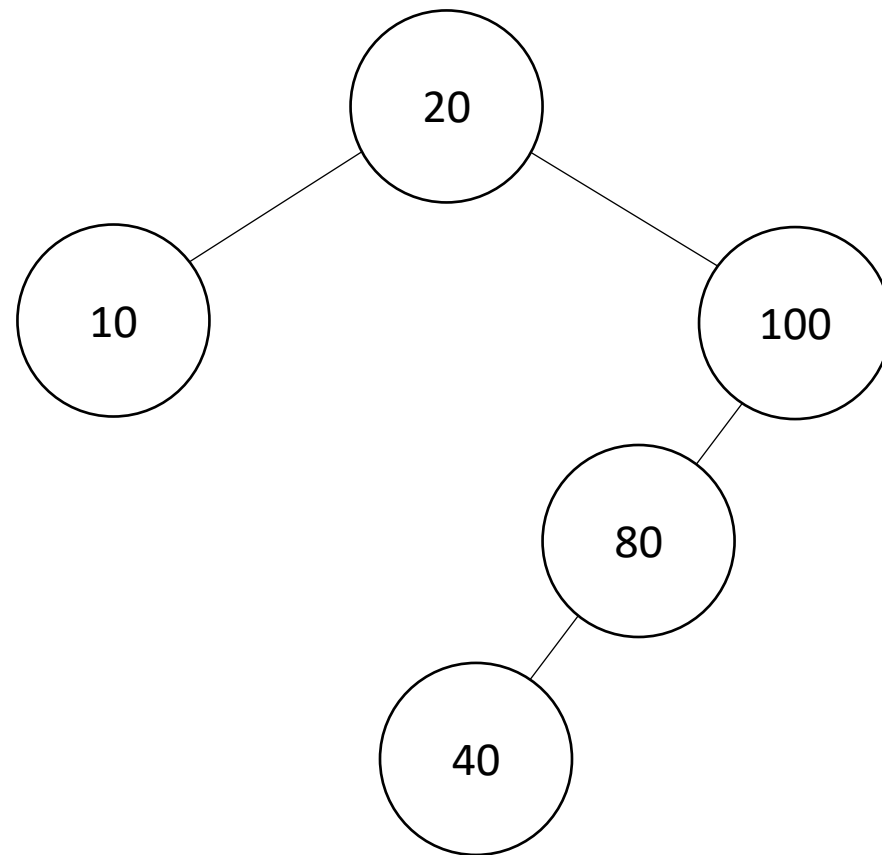
a. Inserir : 10, 100, 20, 80, 40, 70.



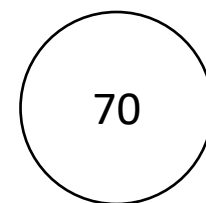
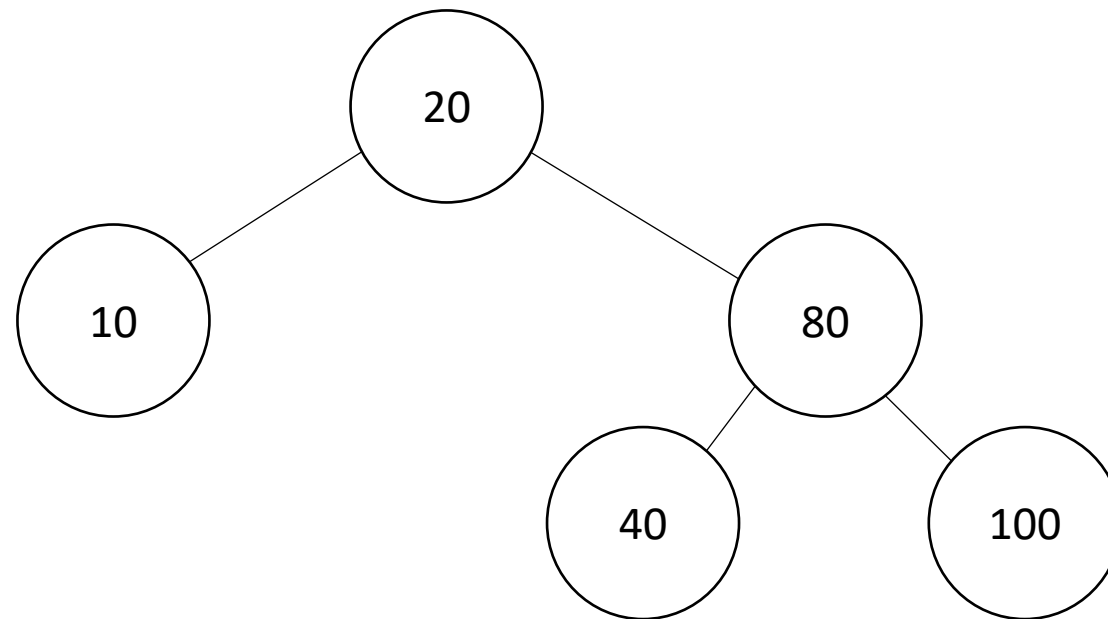
a. Insertar : 10, 100, 20, 80, 40, 70.



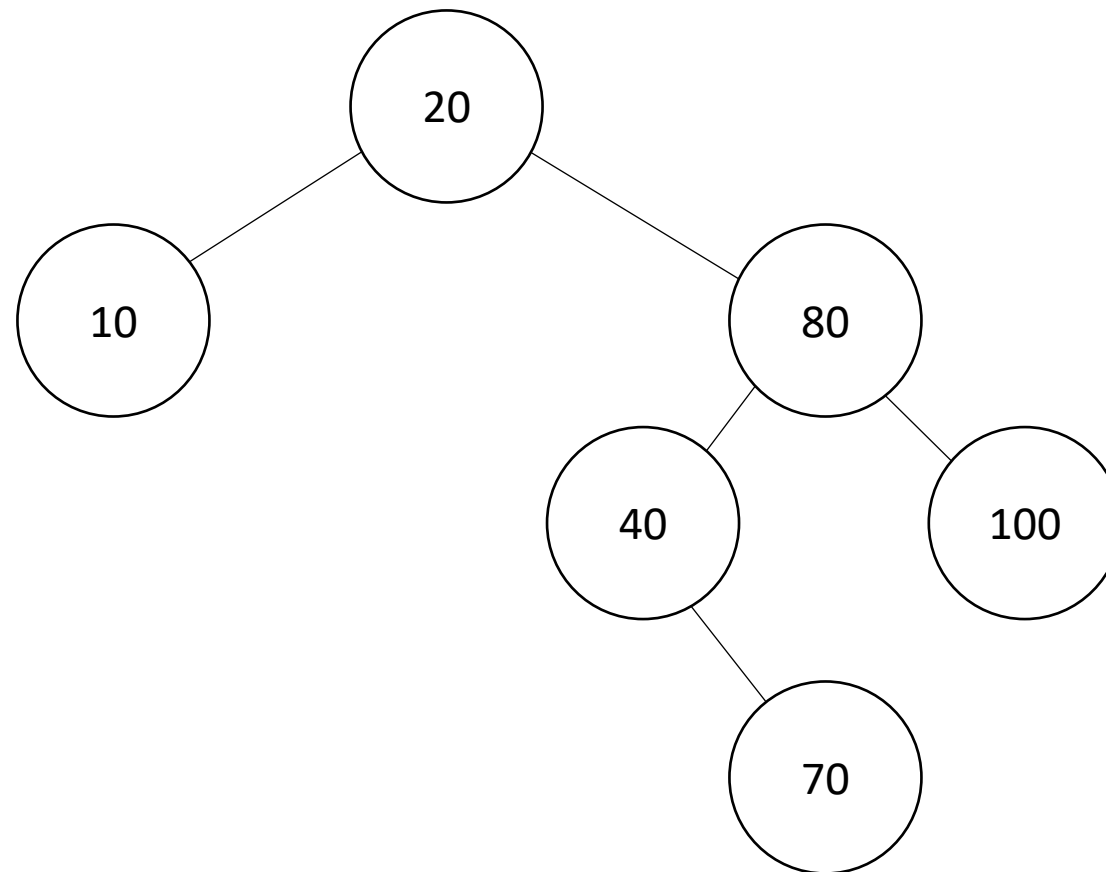
a. Inserir : 10, 100, 20, 80, 40, 70.



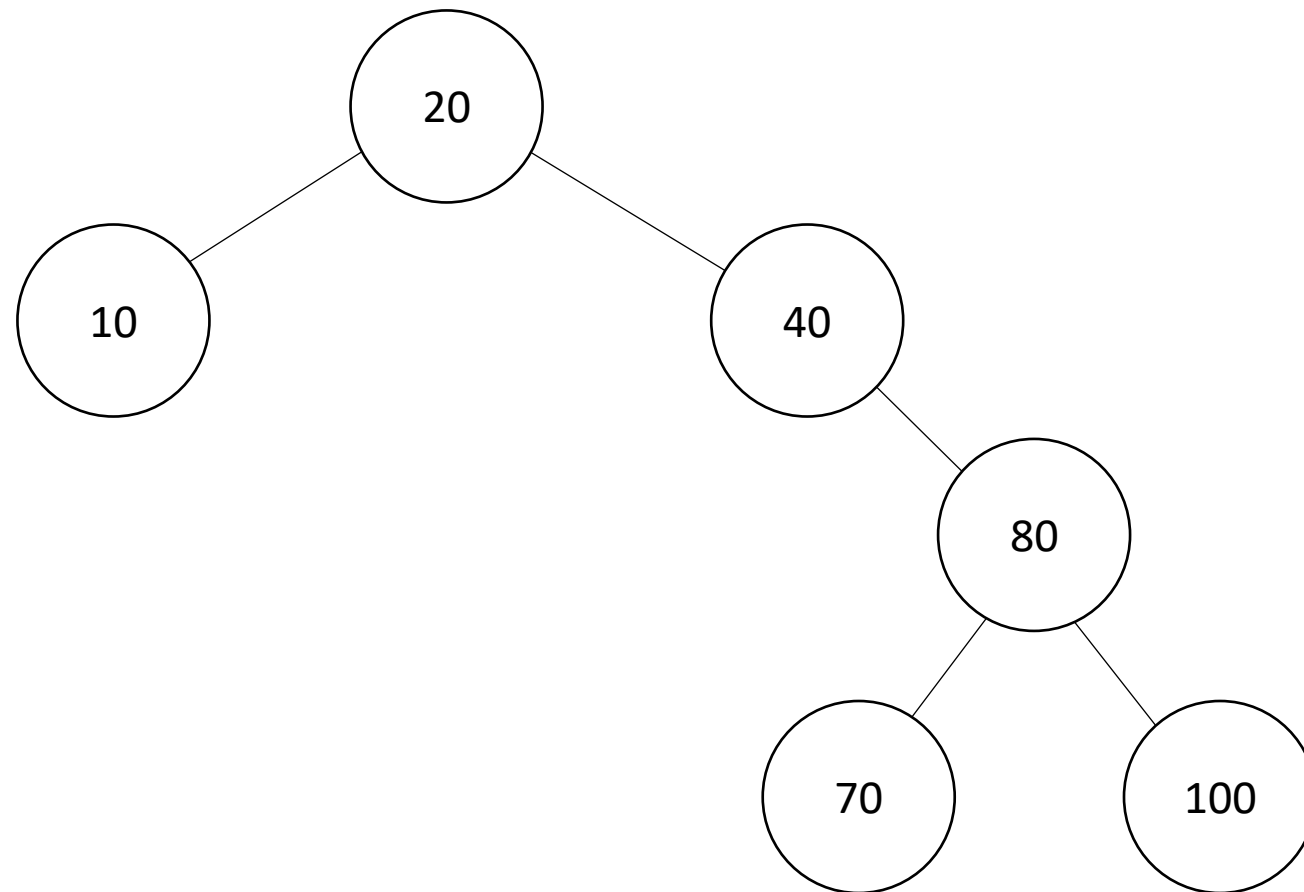
a. Inserir : 10, 100, 20, 80, 40, 70.



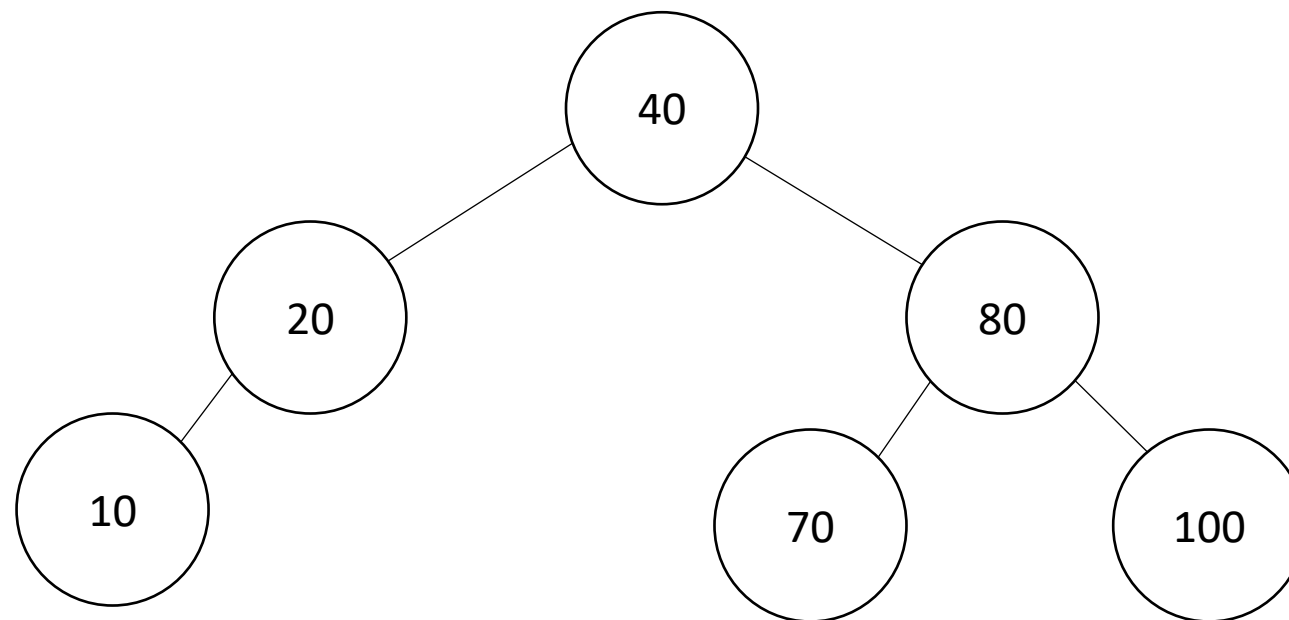
a. Insertar : 10, 100, 20, 80, 40, 70.



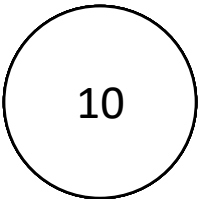
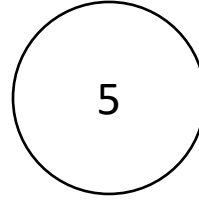
a. Insertar : 10, 100, 20, 80, 40, 70.



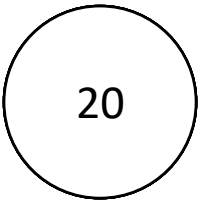
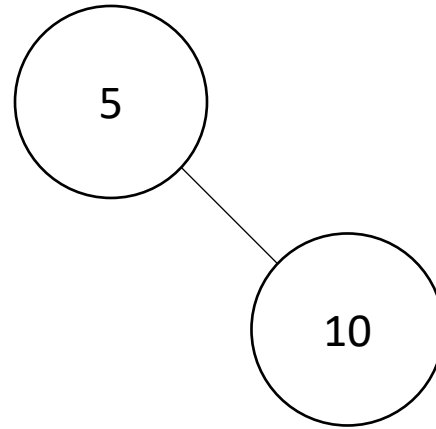
a. Insertar : 10, 100, 20, 80, 40, 70.



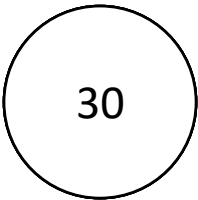
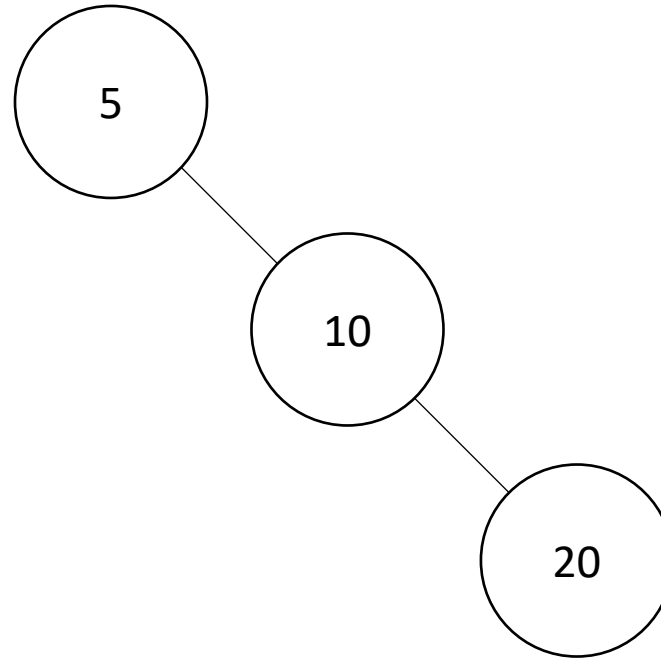
b. Insertar : 5, 10, 20, 30, 40, 50, 60



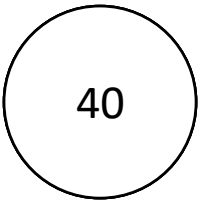
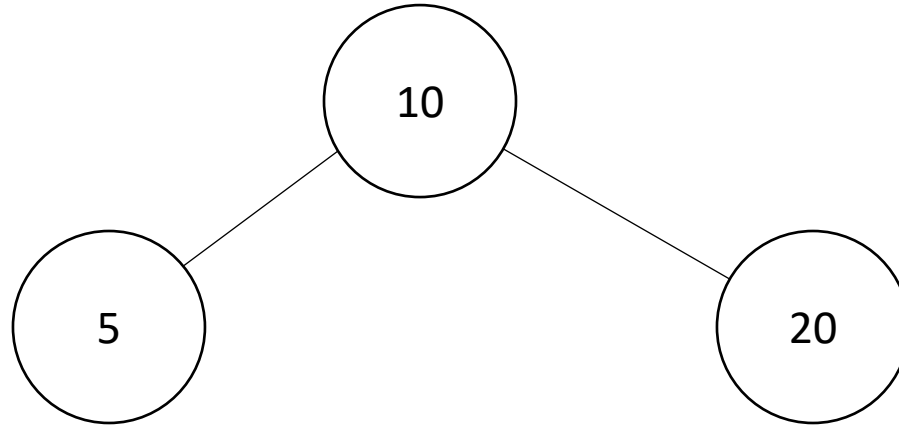
b. Insertar : 5, 10, 20, 30, 40, 50, 60



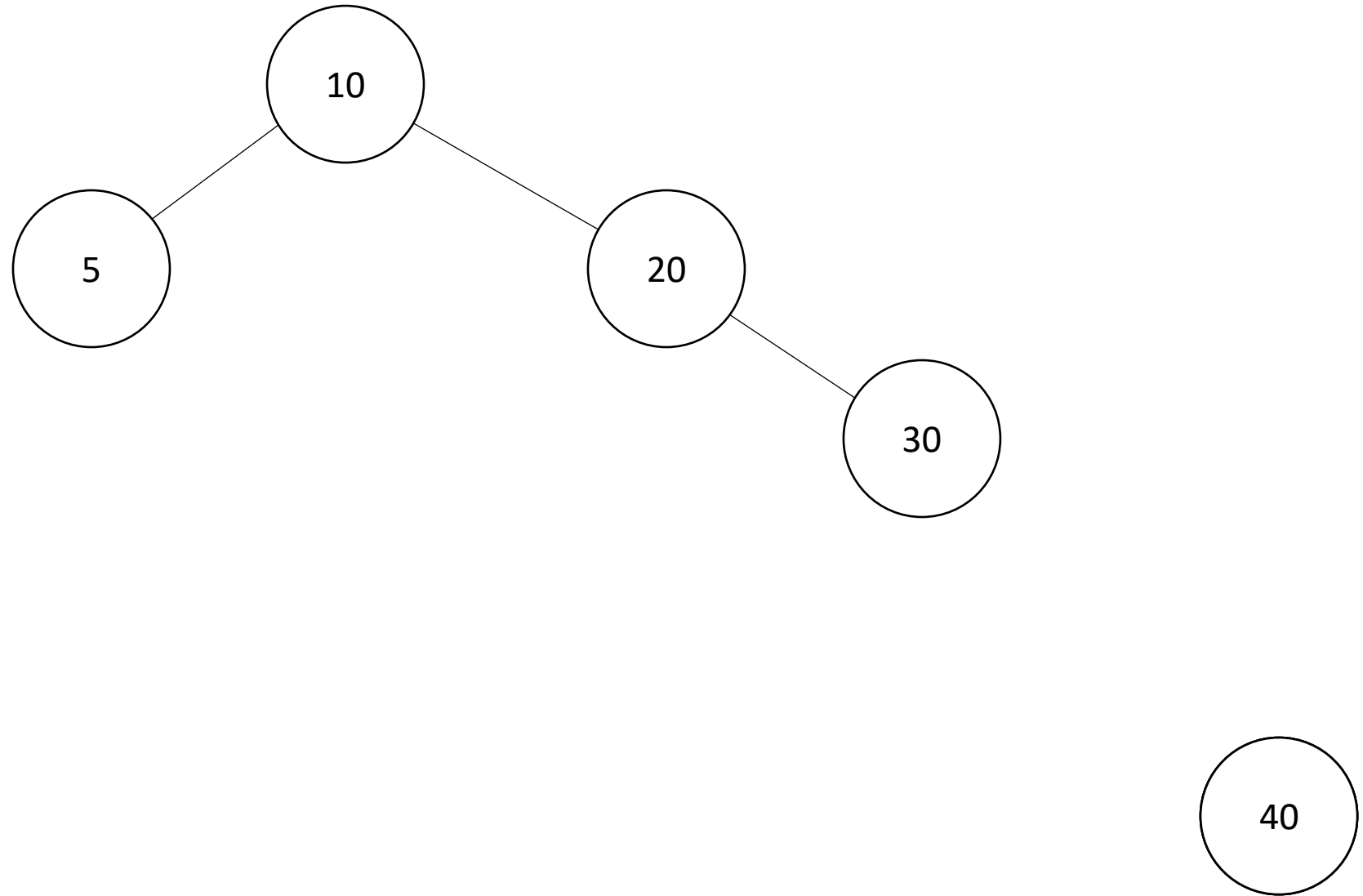
b. Insertar : 5, 10, 20, 30, 40, 50, 60



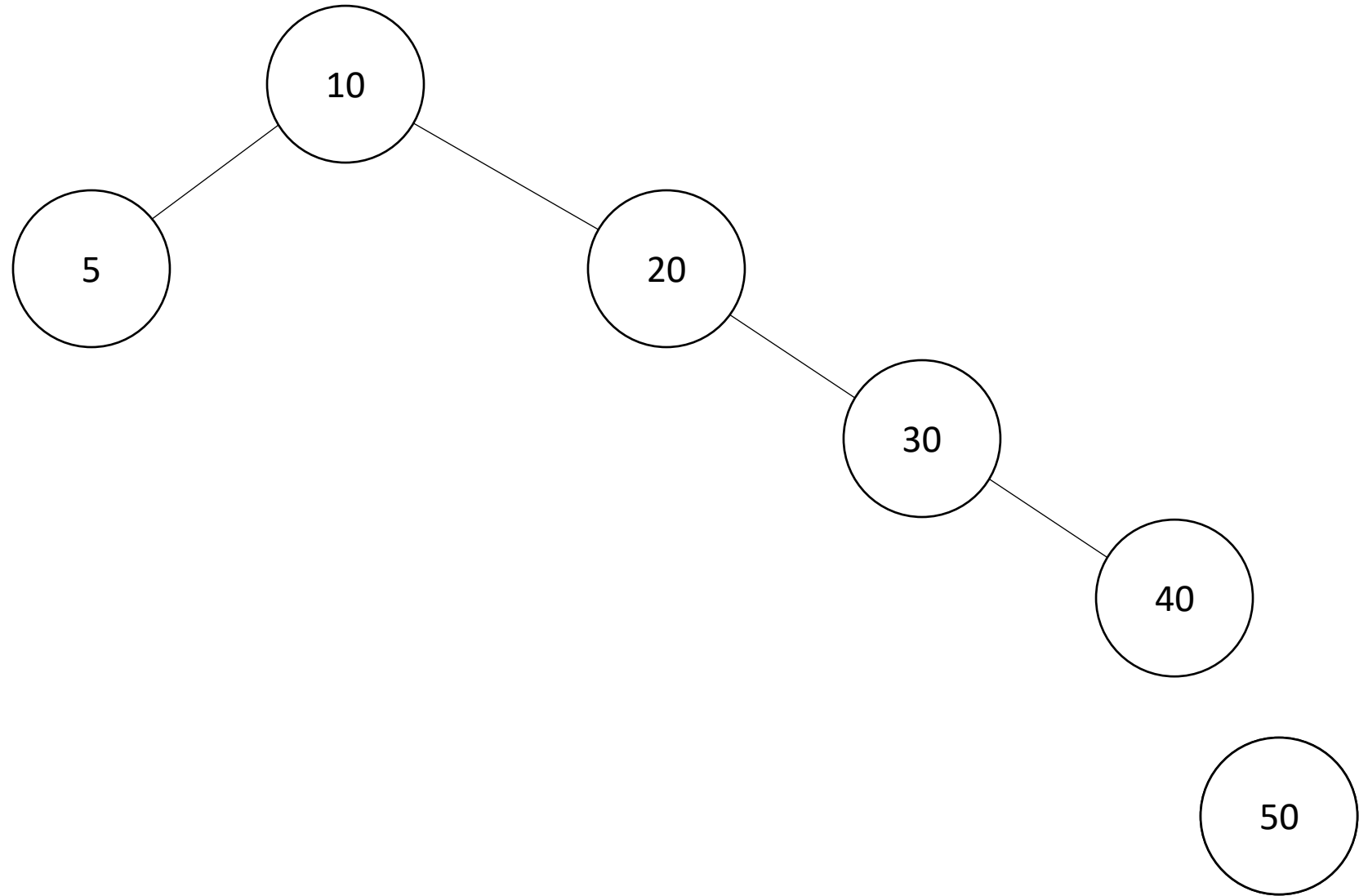
b. Insertar : 5, 10, 20, 30, 40, 50, 60



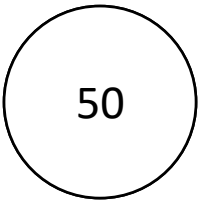
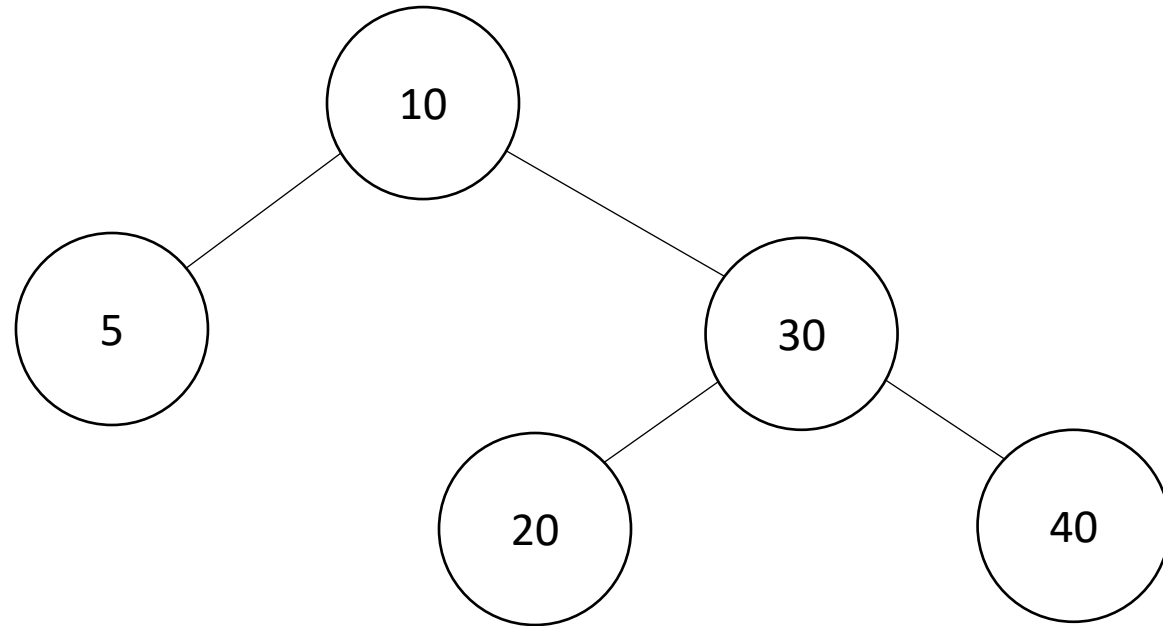
b. Insertar : 5, 10, 20, 30, 40, 50, 60



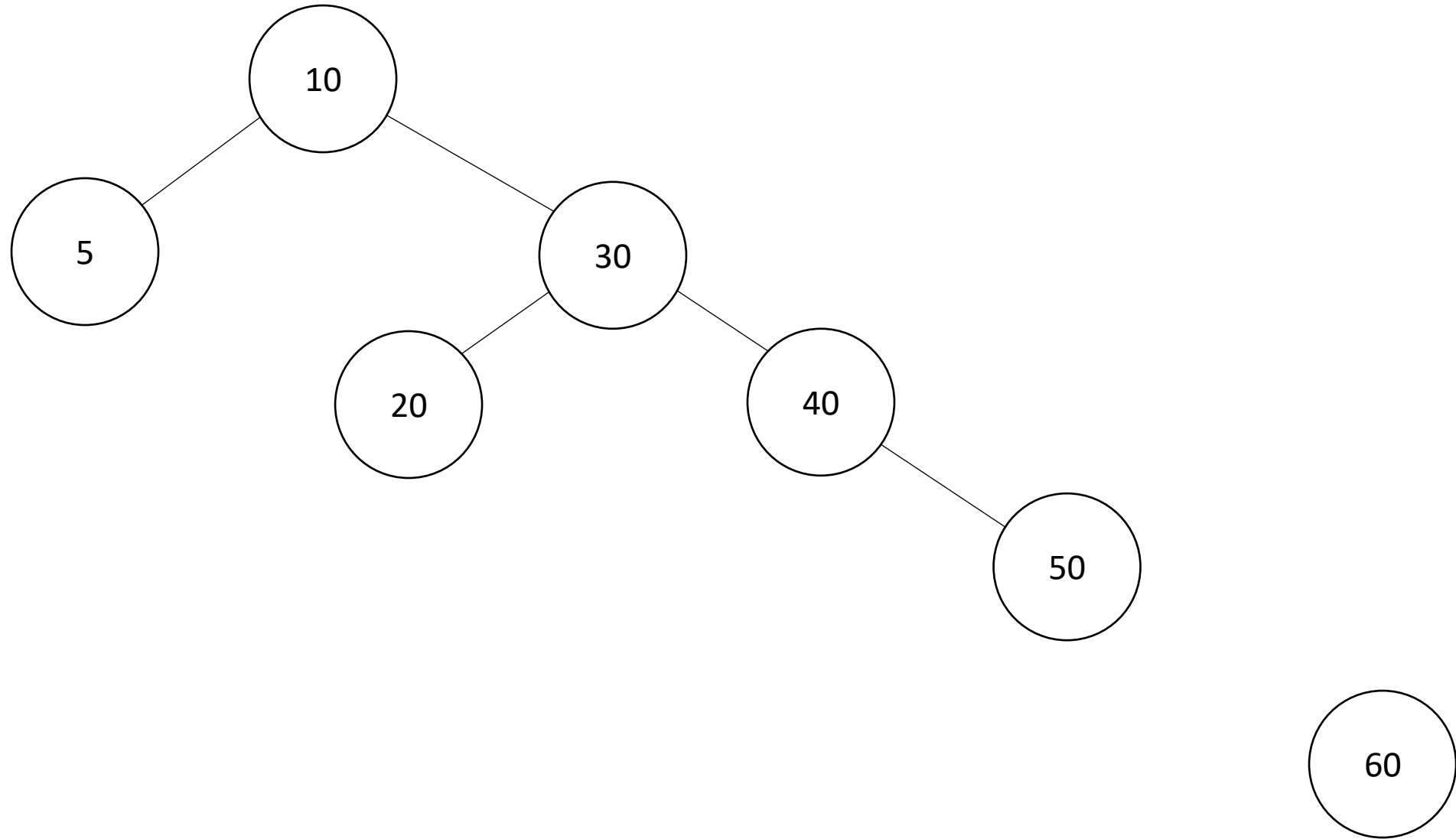
b. Insertar : 5, 10, 20, 30, 40, 50, 60



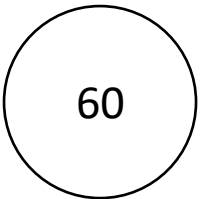
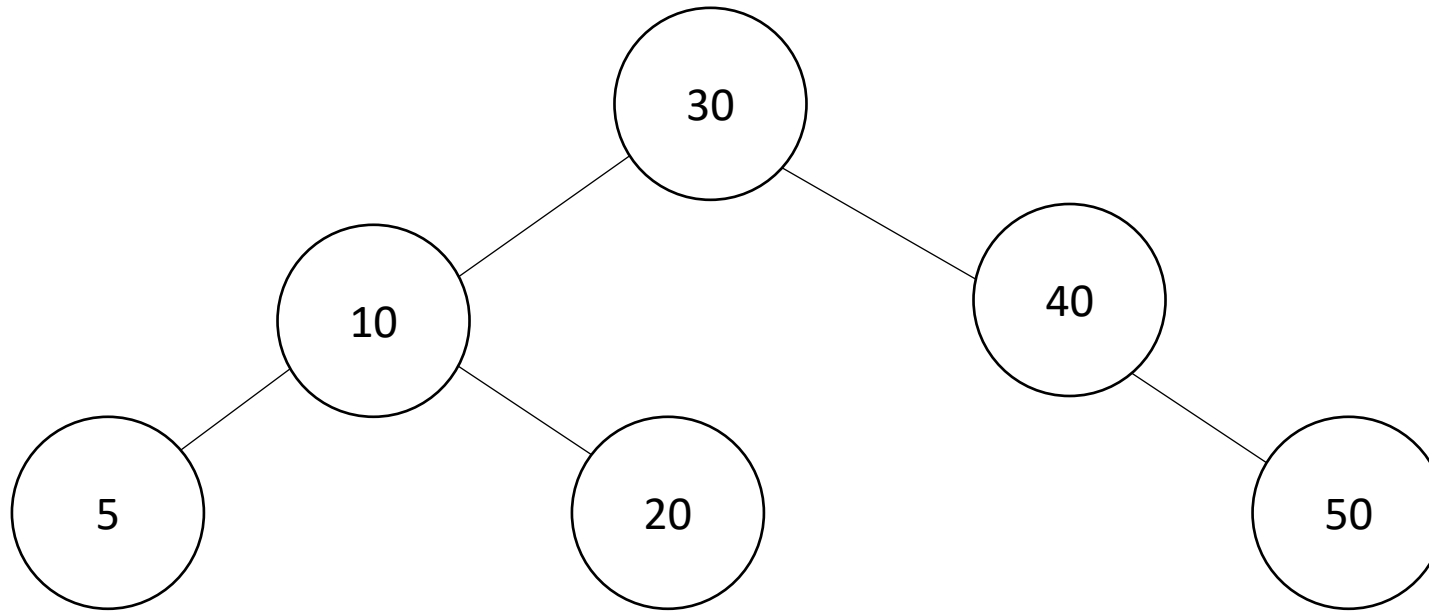
b. Insertar : 5, 10, 20, 30, 40, 50, 60



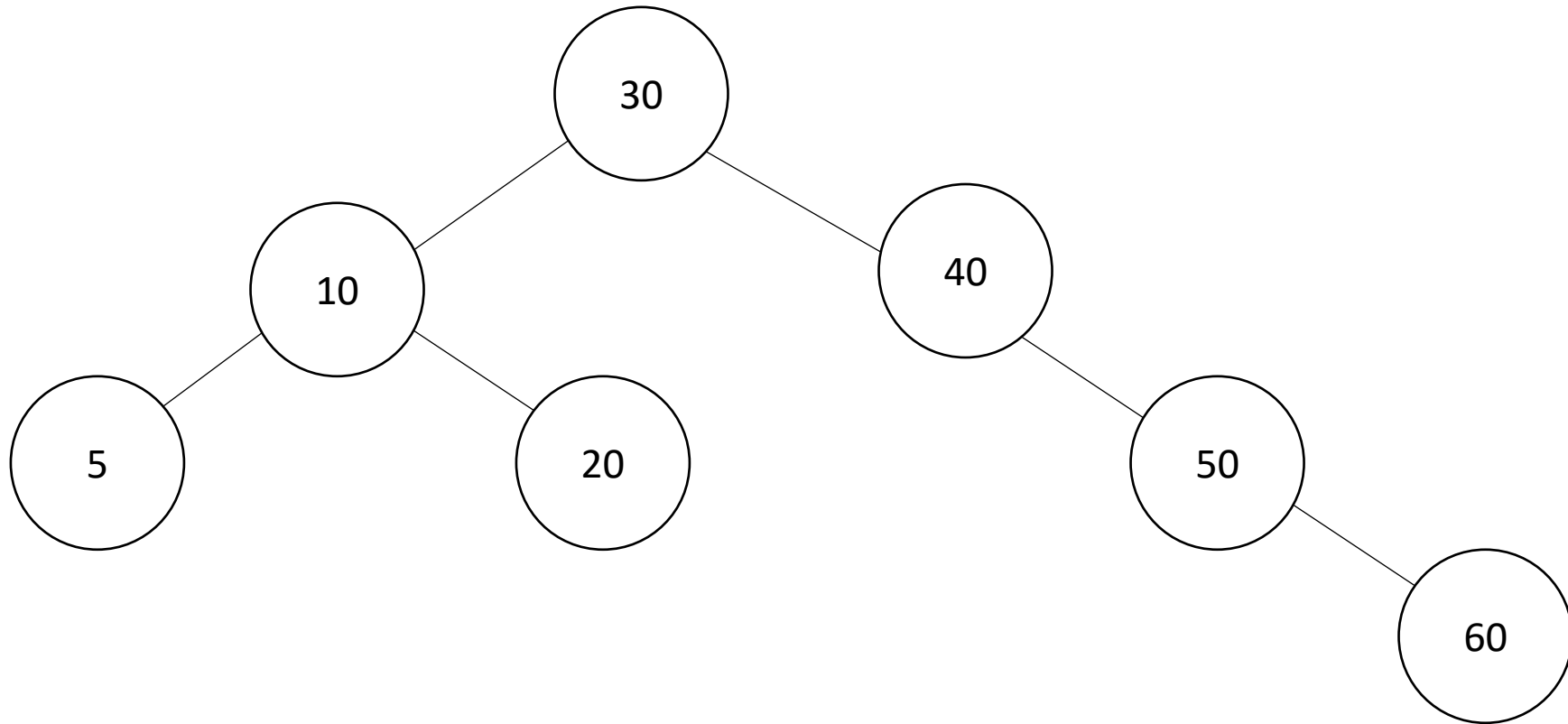
b. Insertar : 5, 10, 20, 30, 40, 50, 60



b. Insertar : 5, 10, 20, 30, 40, 50, 60



b. Insertar : 5, 10, 20, 30, 40, 50, 60



b. Insertar : 5, 10, 20, 30, 40, 50, 60

