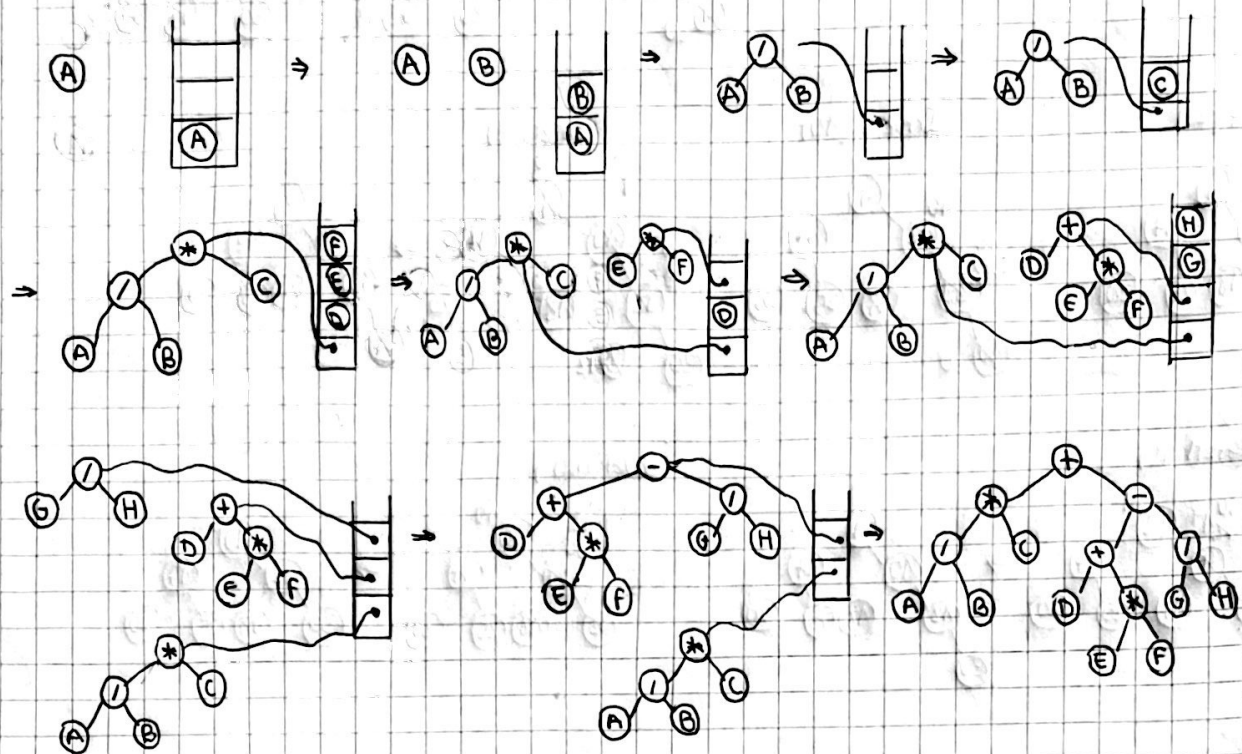


Parcial 1

Ejercicio 2



Ejercicio 3

a. Grado $K=4$
 Altura $h=?$ } $N = (K^h + K - 2) / (K - 1)$

$K=4$ $h=?$ $N=22$

$(4^h + 4 - 2) / (4 - 1) = 22$

$(4^h + 2) / 3 = 22$

$4^h + 2 = 66$

$4^h = 64$

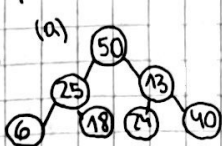
$\log_4 64 = \log_4 4^3$

$h = 3 \Rightarrow \text{Opción (b)}$

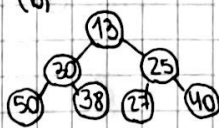
b. 15, 7, 55, 6, 33, 11, 13, 51, 23, 38, 9 $\Rightarrow \text{Opción (c)}$

c. Opción (b)

d.

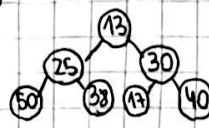


(b)

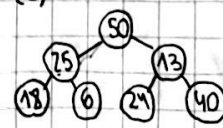


Min-Heap.

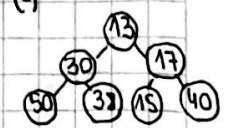
(c)



(d)



(e)

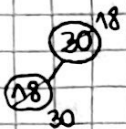


Ejercicio 4

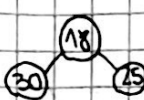
a. Insert(30)



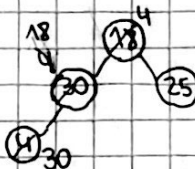
Insert(18)



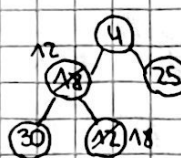
Insert(25)



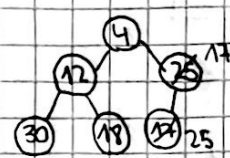
Insert(4)



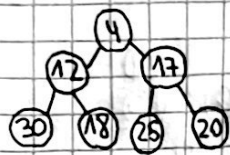
Insert(12)



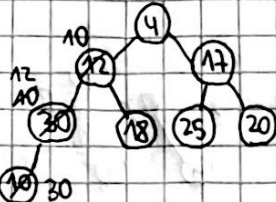
Insert(17)



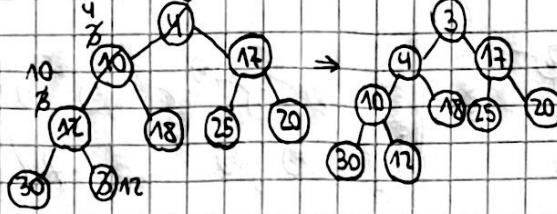
Insert(20)



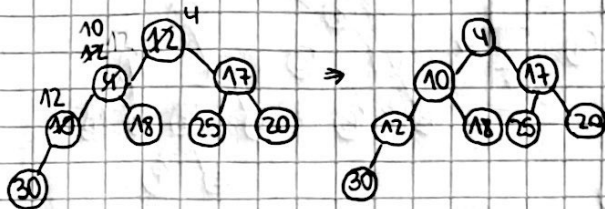
Insert(10)



Insert(3)



b. Delete(12)



Delete(10)

