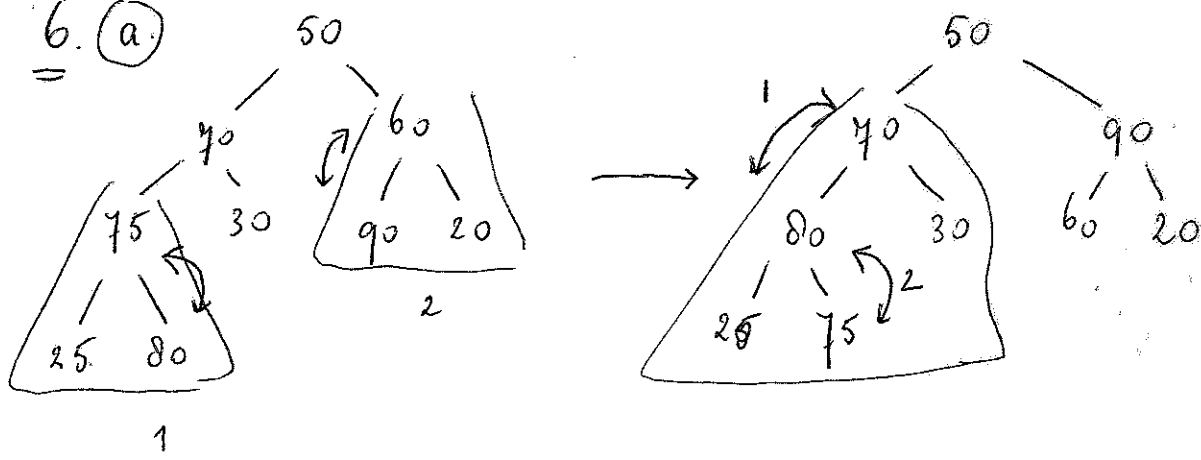



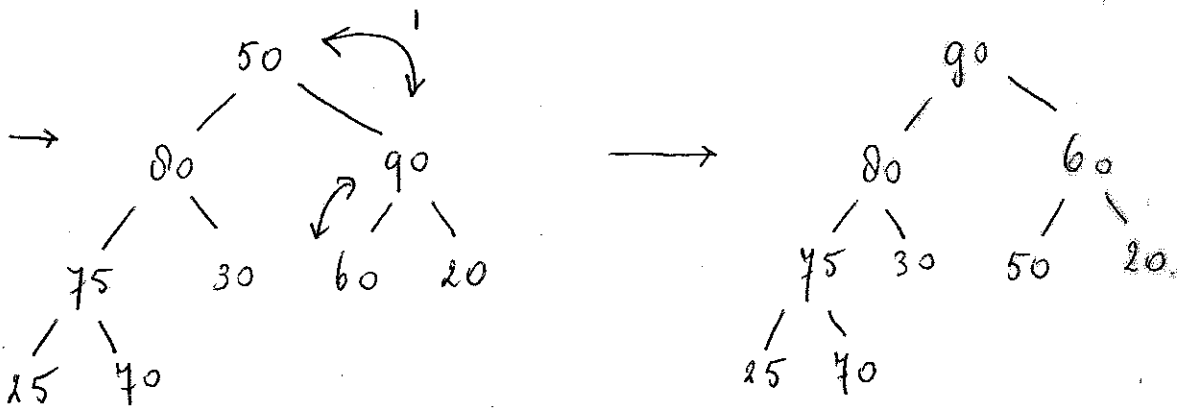


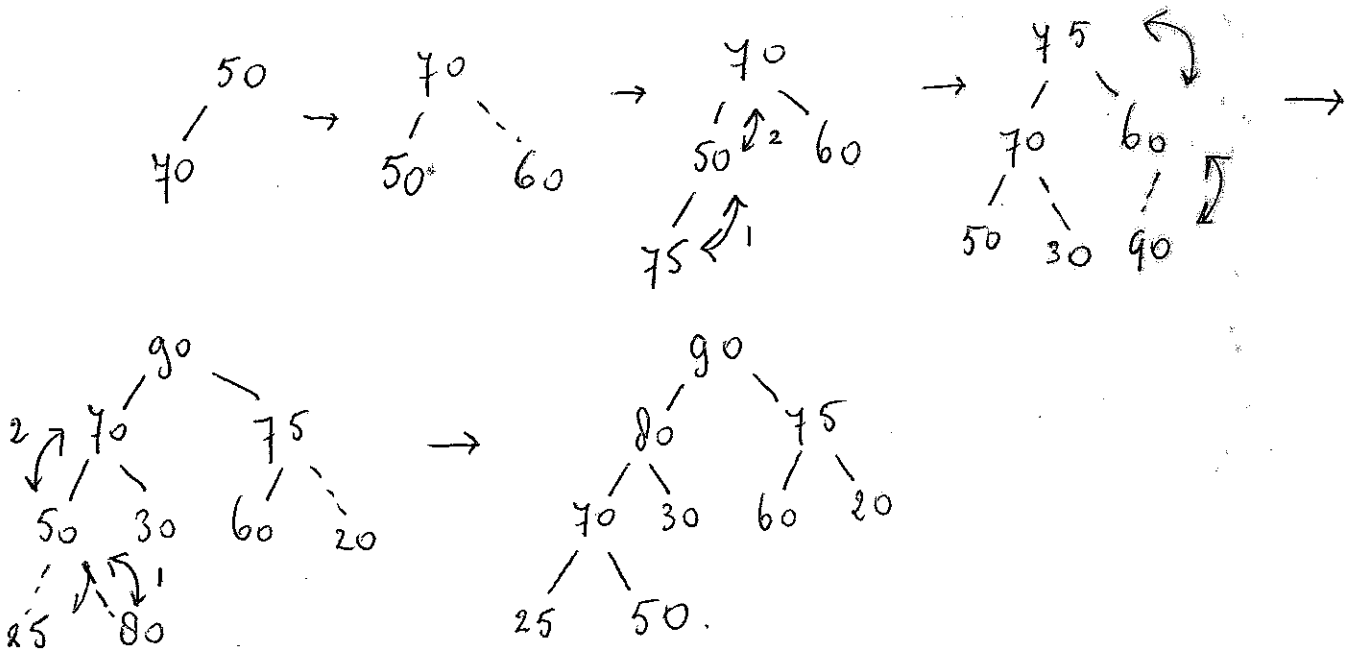
6. (a)



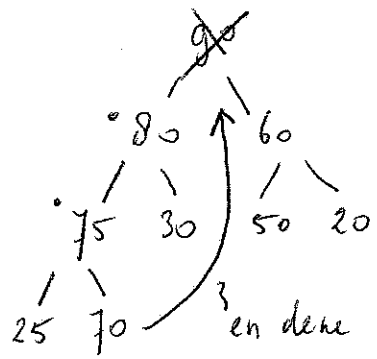
per subboom met  heap  heap  herhaald verwisselen met grootste kind



(b) Steeds een knoop meer erbij nemen en nieuwe knoop herhaald verwisselen met ouder.

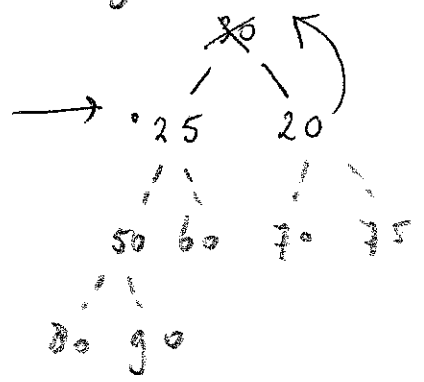
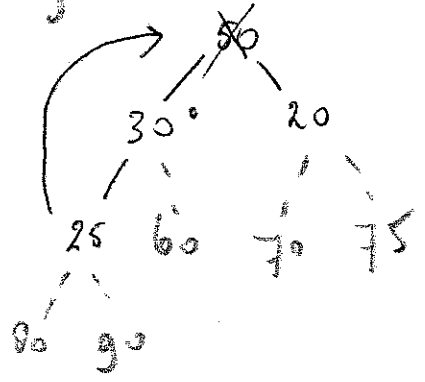
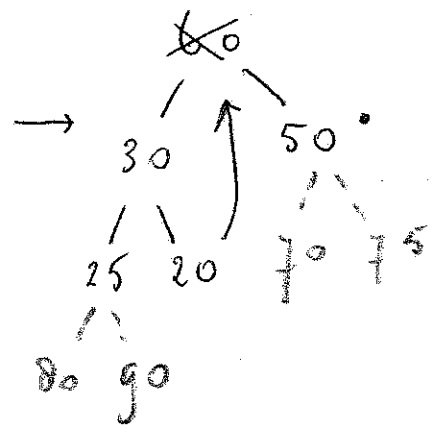
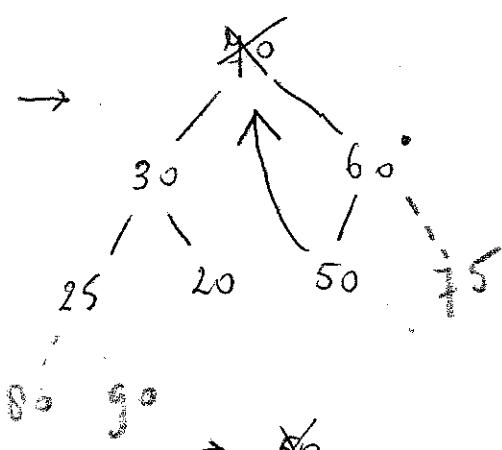
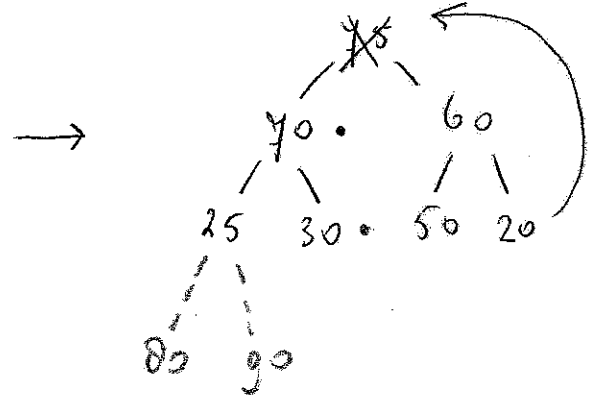
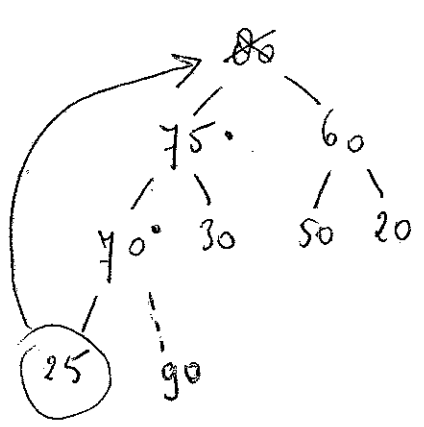


4. 50, 70, 60, 75, 30, 90, 20, 25, 8 correspondeert met de complete bin. boom uit 6. Heapify levert

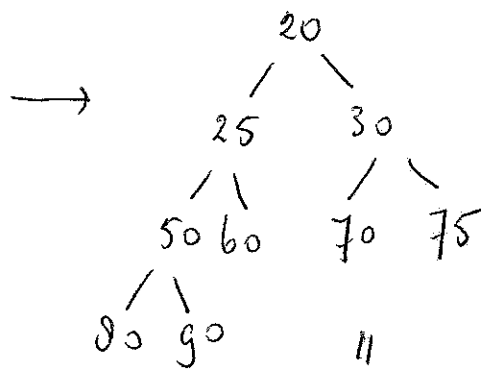
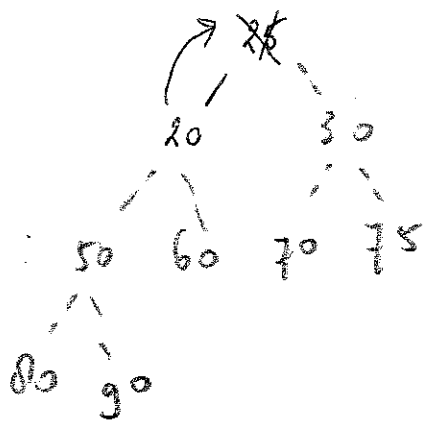


↔ 90, 80, 60, 75, 30, 50, 20, 25, 70

en deze verwisselen met grootste kind



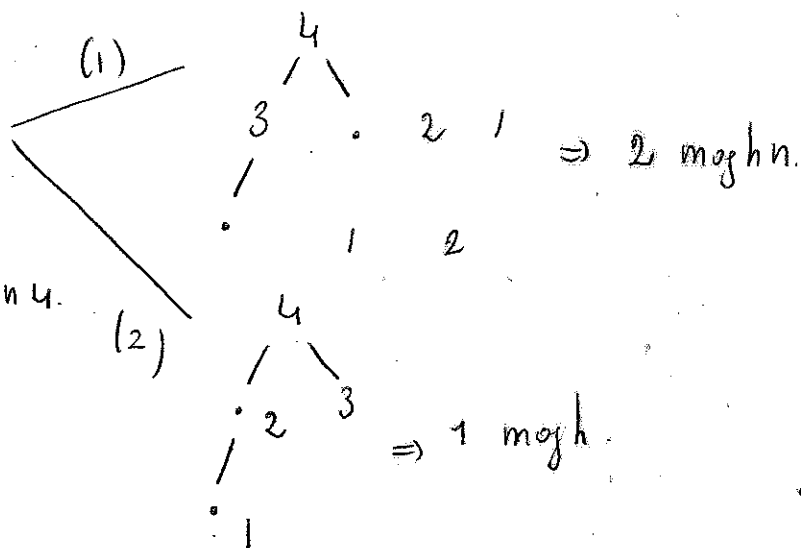
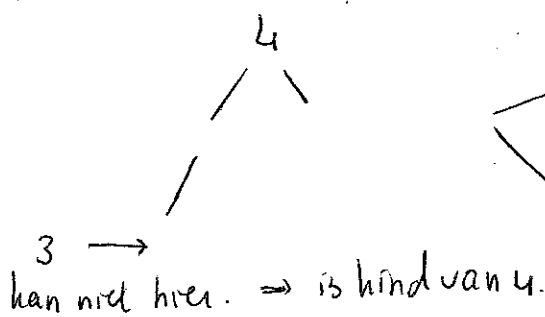
vervolg opgave 4.



20, 25, 30, 50, 60, 70, 75, 80, 90

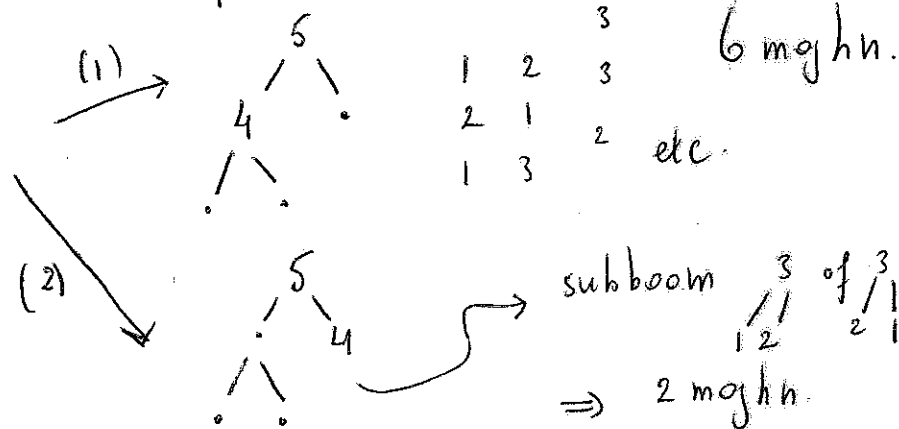
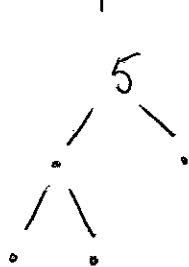
Opgave 5

1|1|4 : 4 moet in de wortel.



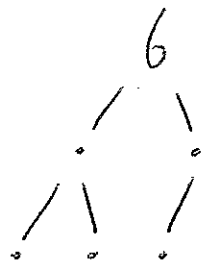
Samen dus 3 heaps.

1|1|5 : zelfde soort redenering.

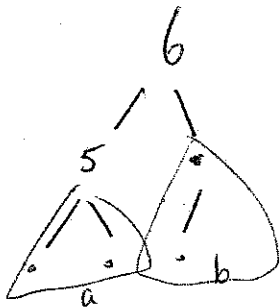


Totaal 0 heaps.

1 + 1/m 6 :



(1)

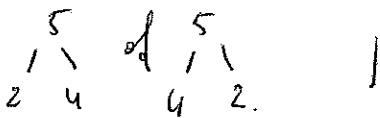


$\binom{4}{2}$ om 2 te kiezen.
6 " manieren die links moeten

↓
dan ligt subboom b vast (nl. grootste in wortel van b)

en voor a zijn er dan 2 manieren

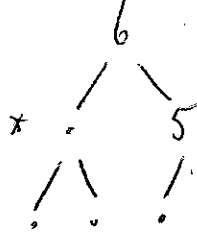
(bijv als 2, 4 links dan



↓

$$6 \times 2 = 12$$

(2)



↑
4 manieren om deze te kiezen (1, 2, 3 of a)

van de overige 3 zit de grootste in * en de andere 2 kunnen op 2 manieren

↓

$$4 \times 2 = 8$$

Totaal dus 20 mogelijke heaps.