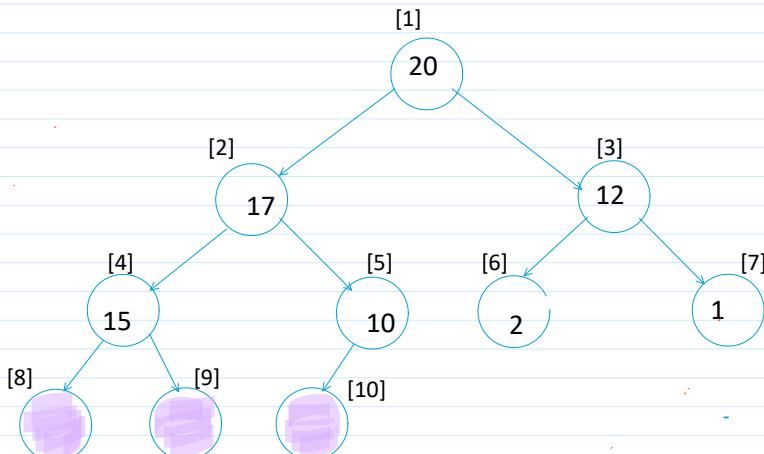


Delete 3 elements from the heap

OR

Find 3rd element

80 35 30



[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
0	80	17	35	15	10	20	30	12	2	1

Leaf nodes = $(n/2) + 1$ to n $(n \log n) \rightarrow \text{heapify}$ $(n \log n) \rightarrow \text{delete}$

heap sort = heapify + delete.

 $(2 * n \log n)$ heap sort = $(n \log n) \rightarrow 2$ is constant