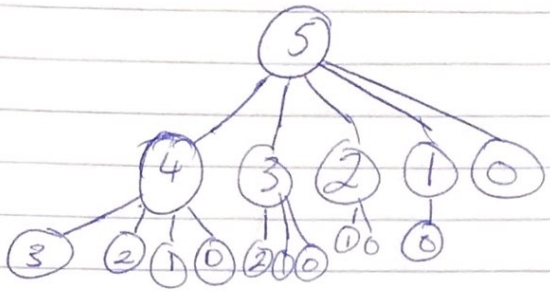
a) Tree for len 5



b) counter example =

example $n=4$

i =	length 1	2	3	4
price	1	20	[illegible]	[illegible] 26
	1	10	11	9

with greedy we choose $i=3$ where total
$i=1$ $= \$34$
and in optimal we should
use 2 length 2 rods
$= \$40$