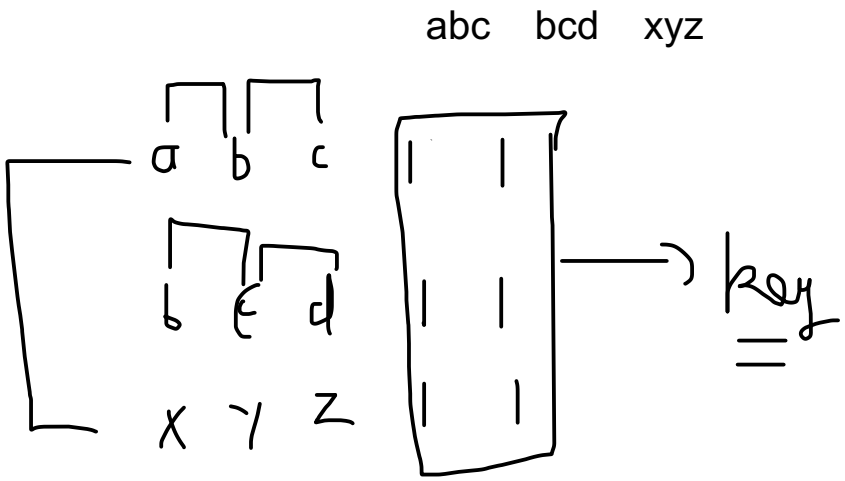
Group Shifted Strings

1 2 3

a b c d e f g h i j k l m n o p q r s t u v w x y z

26

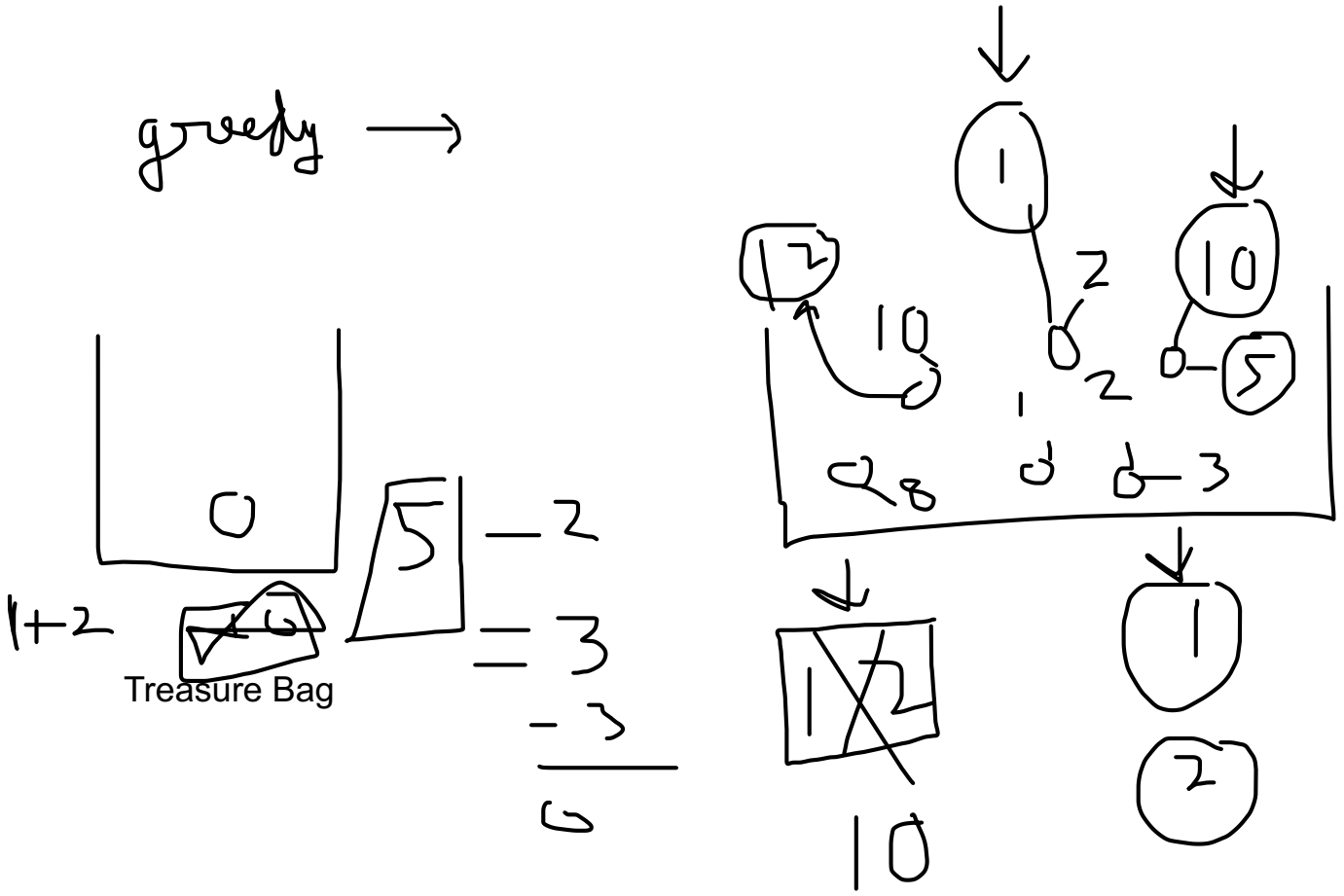


$$\begin{bmatrix} a & 2 \\ b & 4 \end{bmatrix}$$

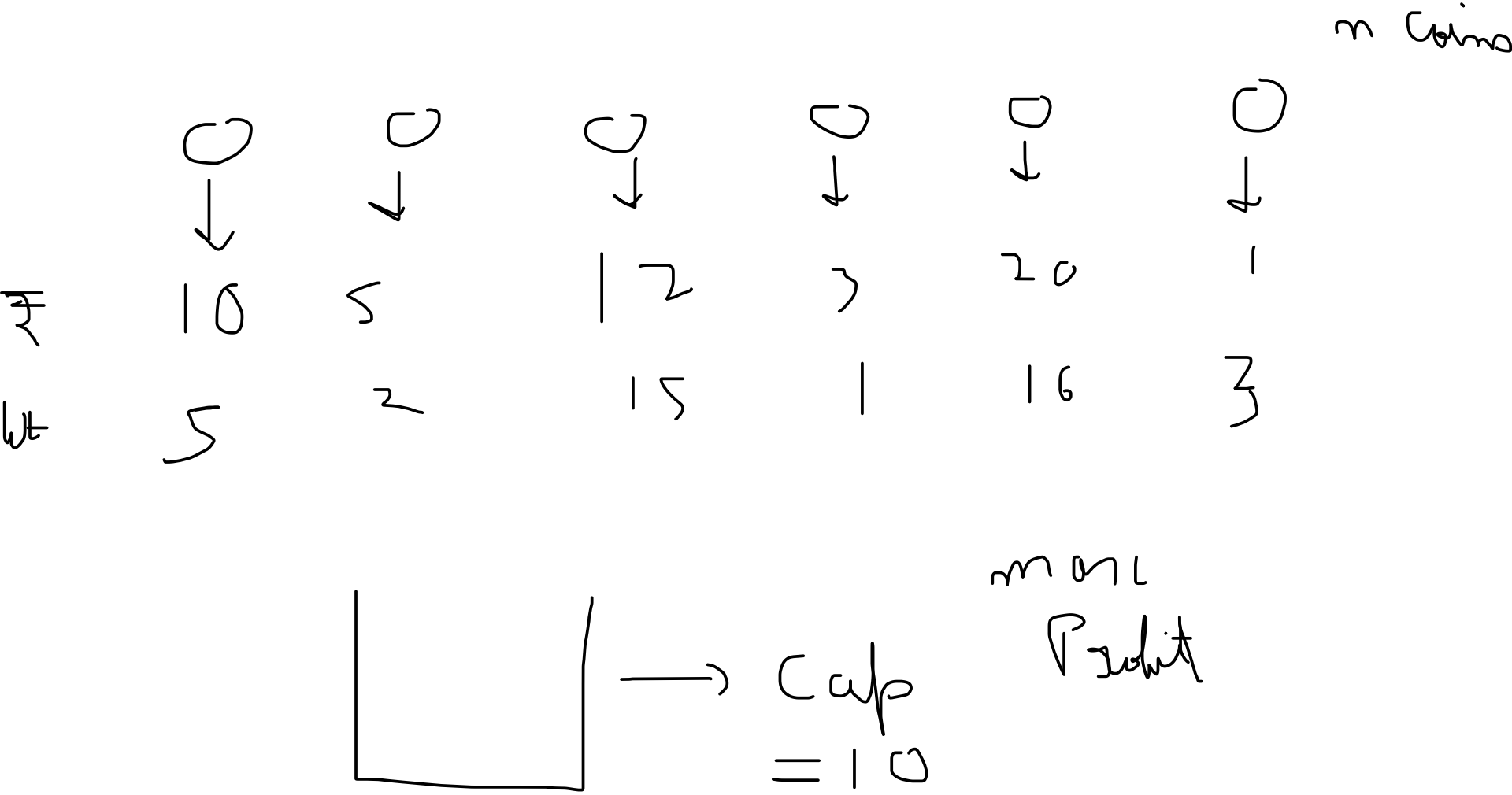
(a)

$-2s + 26 = 1$

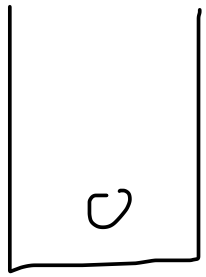
Greedy Algorithm



Fractional Knapsack



```
10
33 14 50 9 8 11 6 40 2 15
7 2 5 9 3 2 1 10 3 3
5
```



50
14 11
6

10 − 5 = 5 − 2 = 3 − 1 = 2

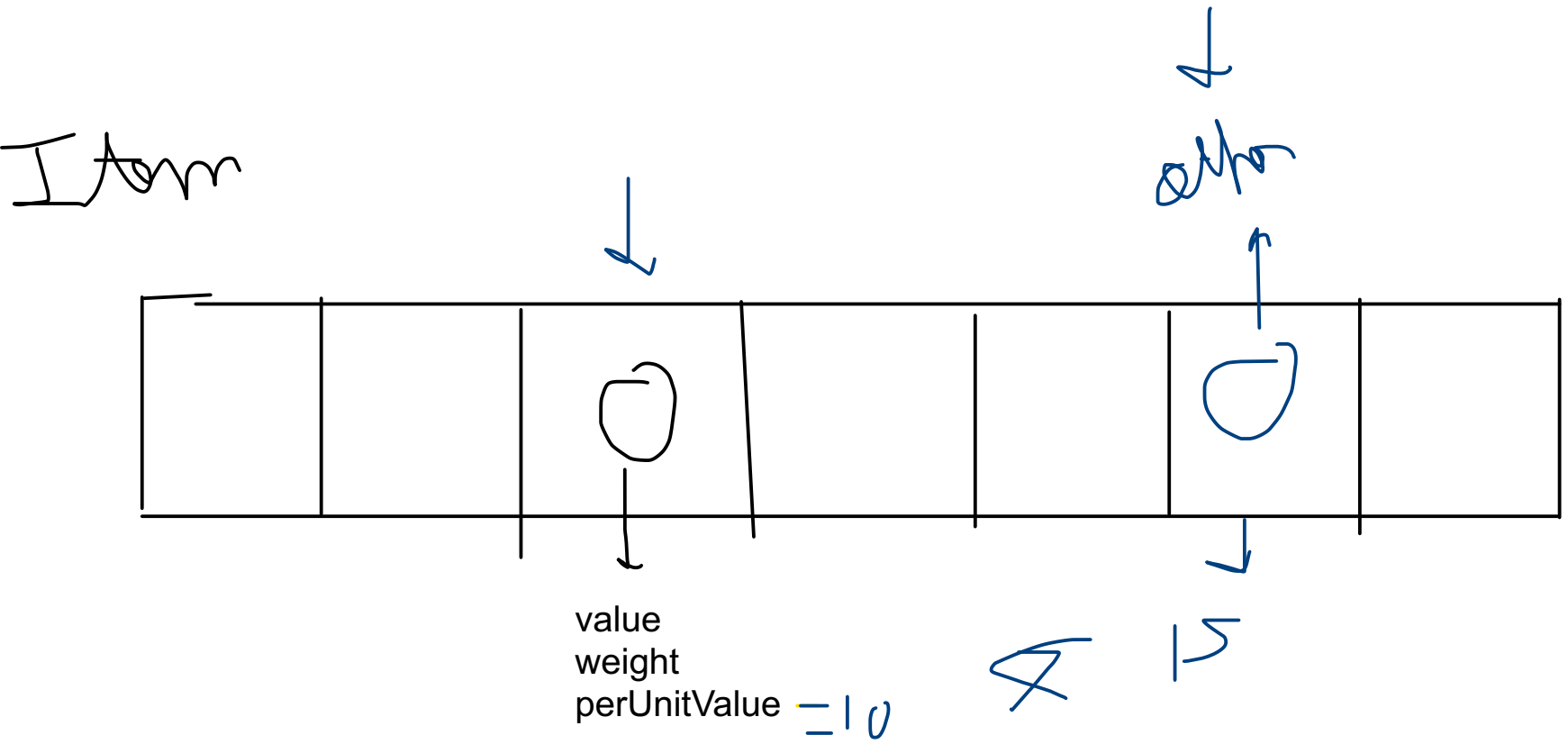
−2
0

2

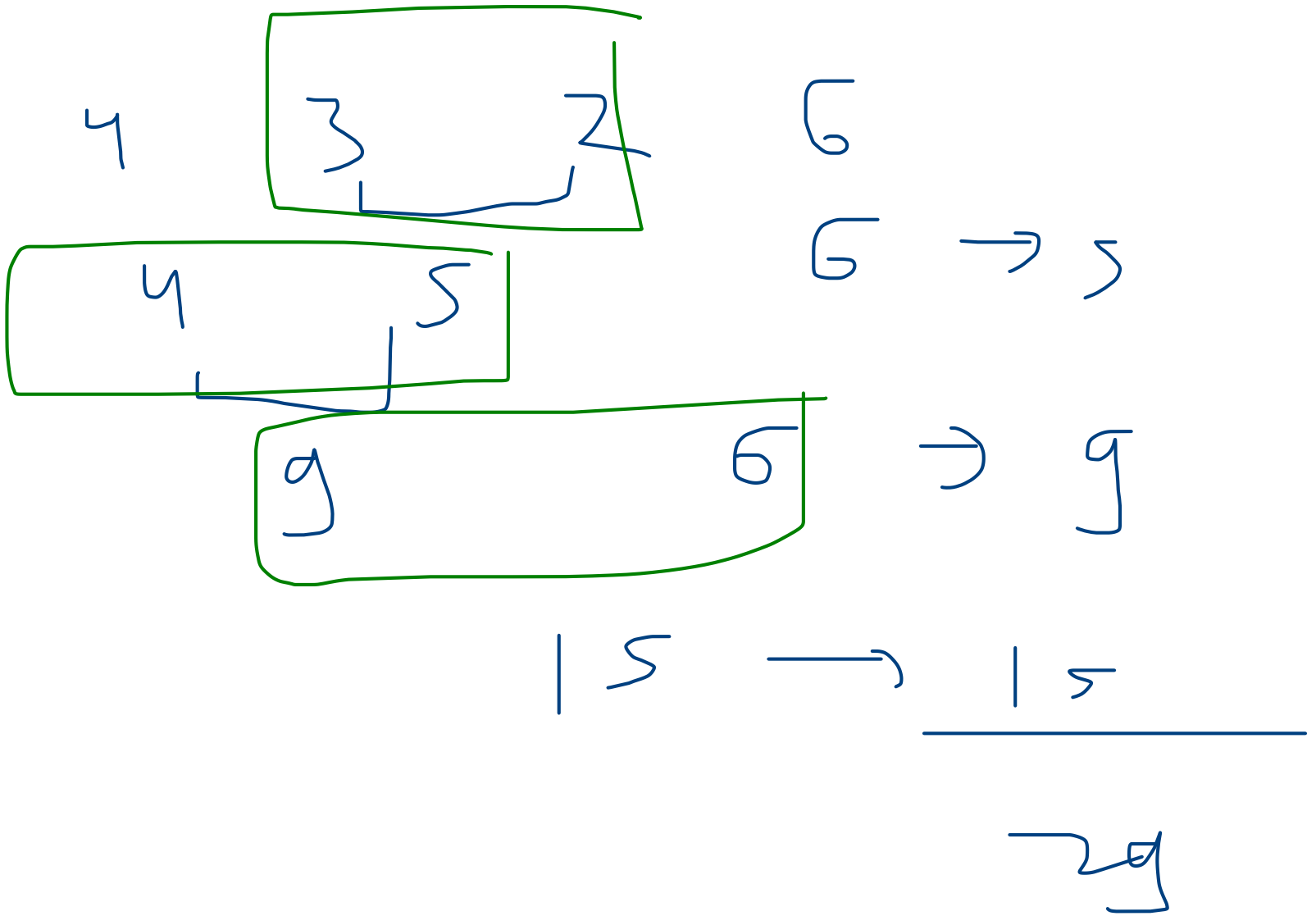
greedy = max value = 70(10)

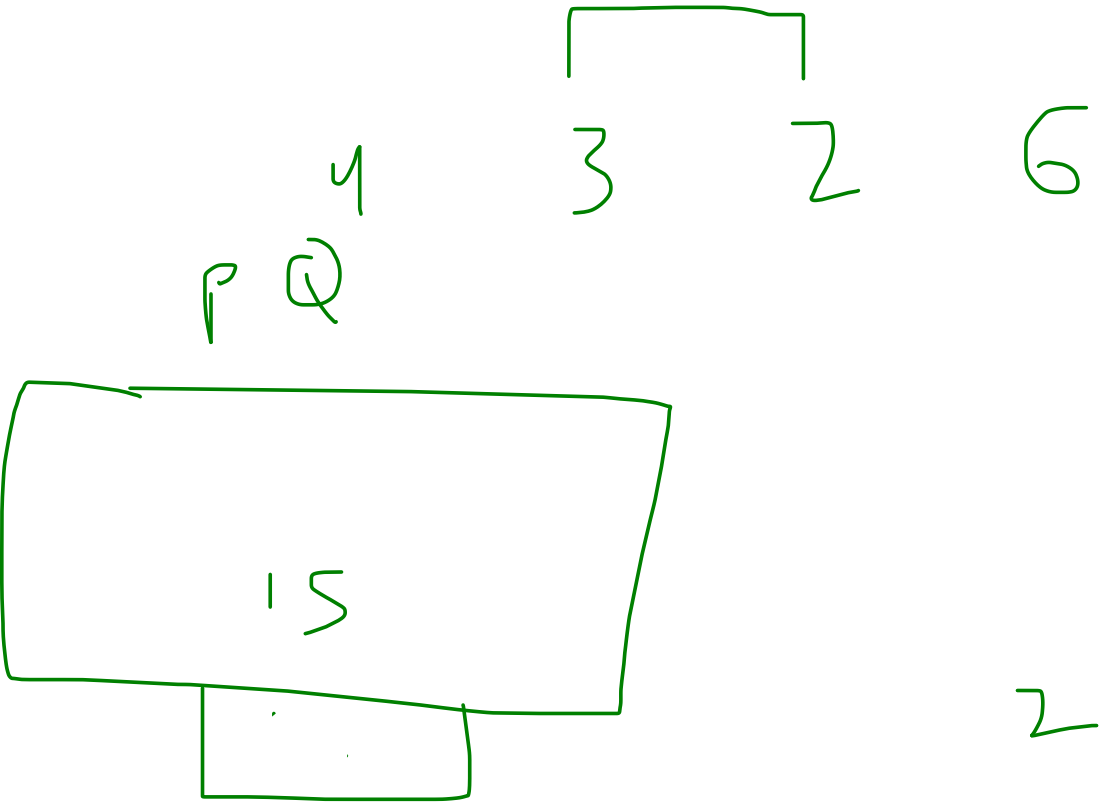
greedy per gm weight = 81 and

Values	w	t	per gm weight = values/ wt
33	7		4.7
14	2		7
50	5		10
9	9		1
8	3		2.6
11	2		5.5
6	1		6
40	10		4
2	3		0.6
15	3		5


Item
value
weight
perUnitValue
=10
4
15

Connect n ropes with minimum





$am = s + g + 15$

$2 + 3 = 5$

$4 \quad 5 = 9$

$\therefore 9 = 15$