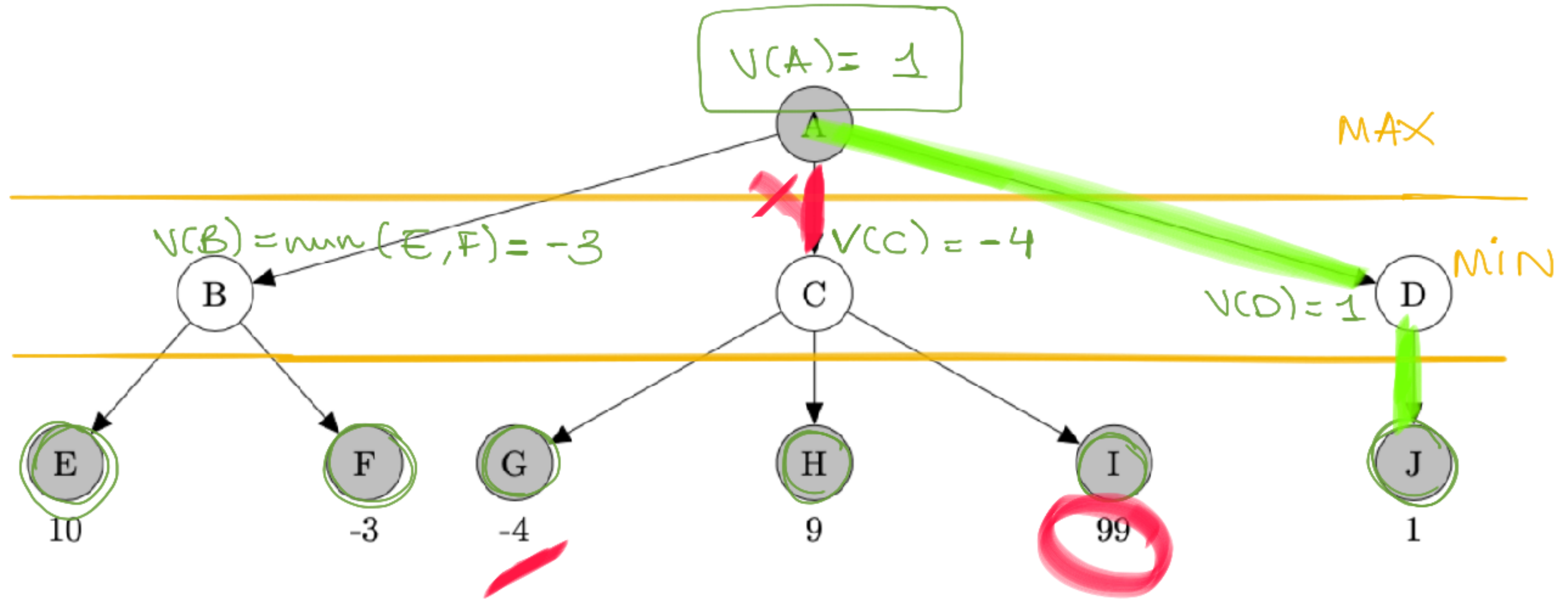


# EXERCÍCIO 1



# EXERCÍCIO 1

$(\alpha, \beta)$

$$V(A) = \alpha = 1$$

$$-\infty = \alpha \quad \beta = +\infty$$

MAX

$$V(B) = \beta = -3$$

$$-\infty$$

$$+\infty \rightarrow -3$$

$$V(C) = \begin{cases} \alpha = -3 \\ \beta = -4 \end{cases}$$

$$V(D) = 1 = \beta$$

MIN

$$-3$$

$$+\infty \rightarrow 1$$



10



-3



-4



9



99

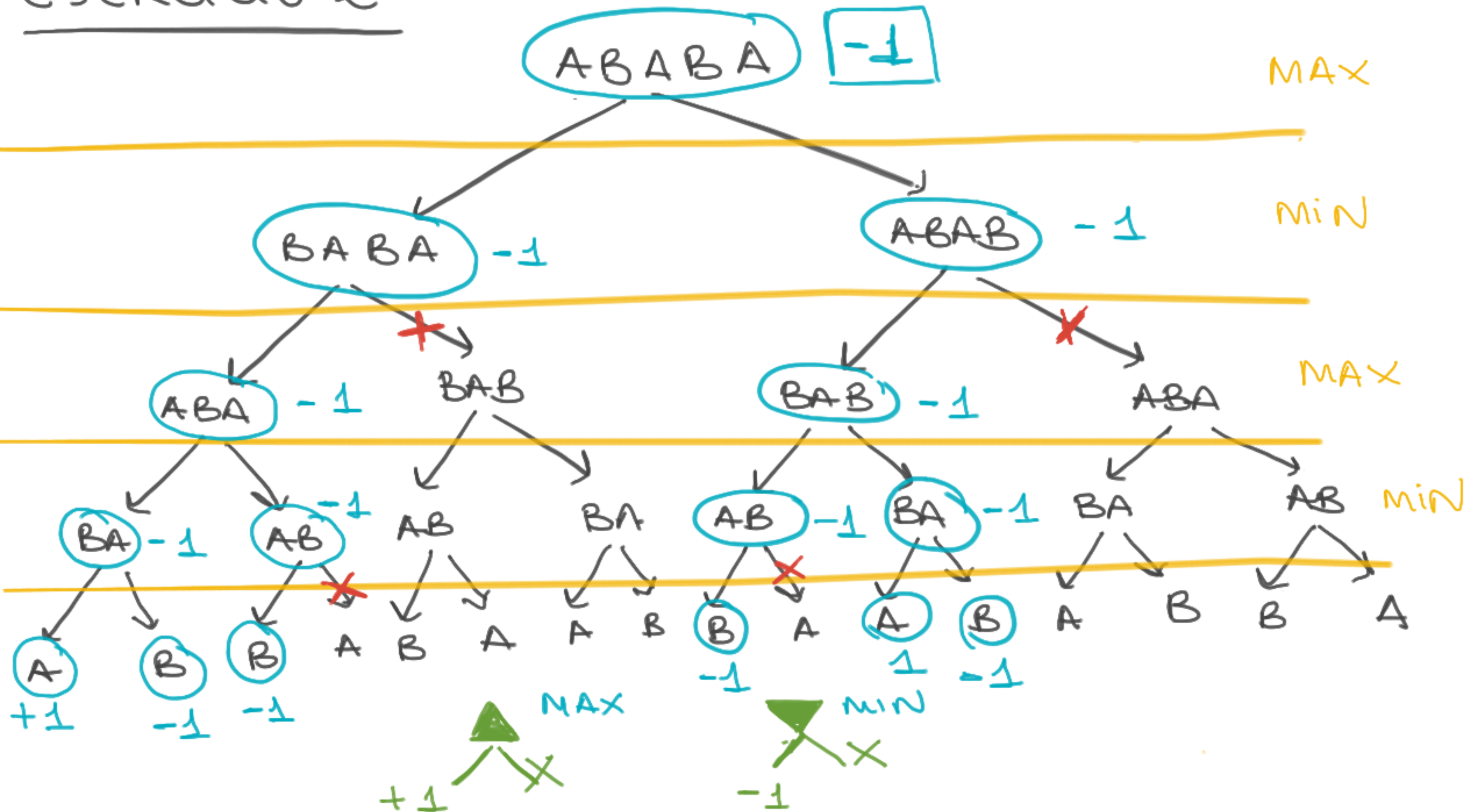


1

PODA!

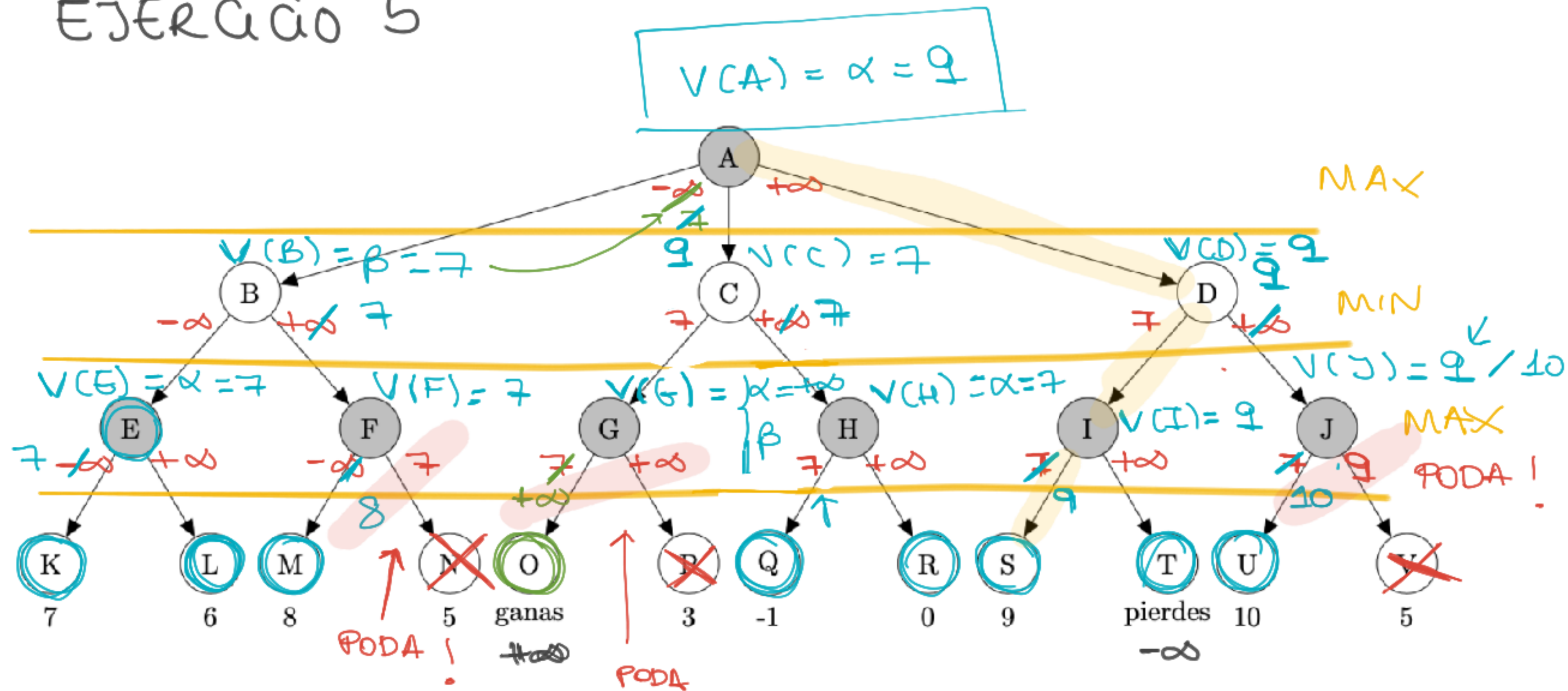
En los nodos MIN  $\rightarrow$  sustituir  $\beta$   
 MAX  $\rightarrow$   $\alpha$

# EJERCICIO 2 → STATUS.

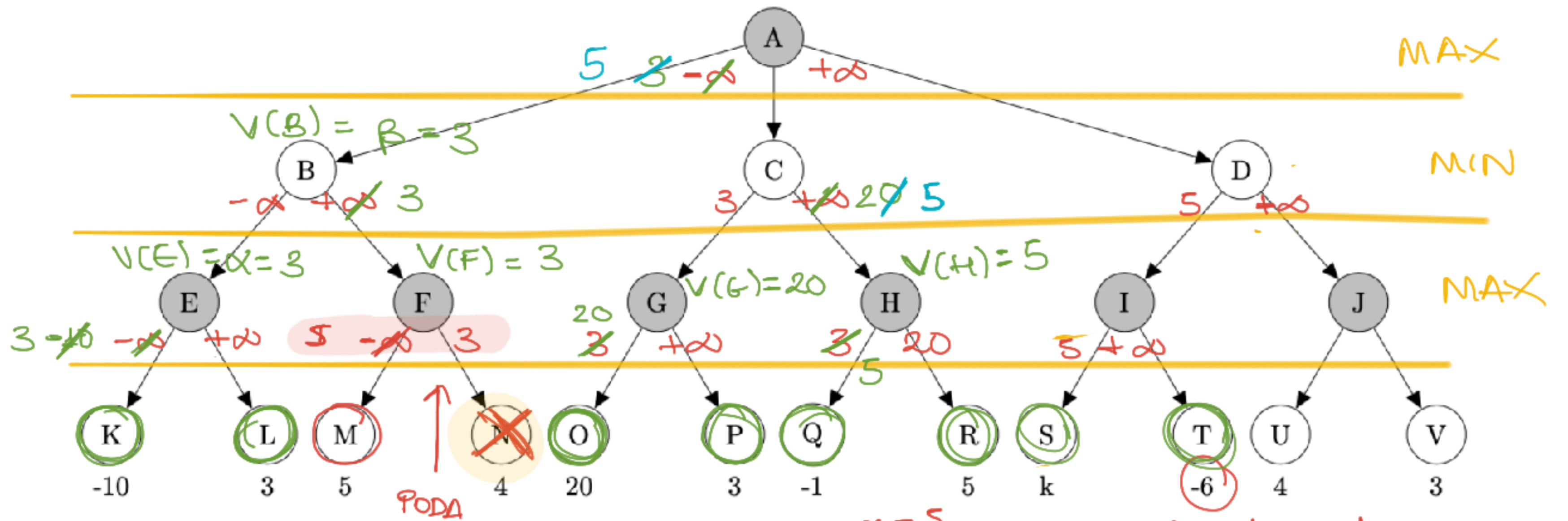




# Exercício 5



# Exercício 6

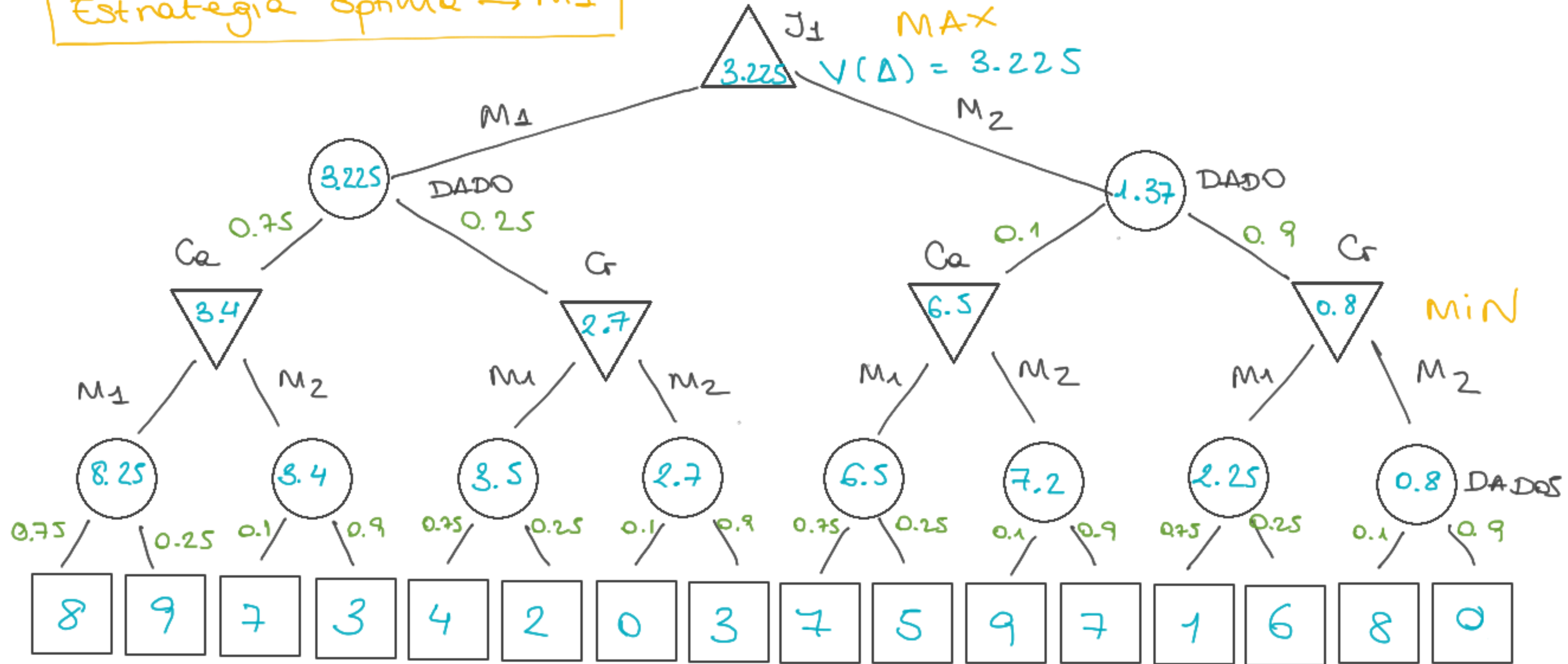


- Se  $v > 5 \rightarrow I \begin{matrix} \alpha = 4 \\ \beta = +\infty \end{matrix} \rightarrow D \begin{matrix} \alpha = 5 \\ \beta = 4 > 5 \end{matrix} \rightarrow U, V < 5 \checkmark$
- Se  $v \leq 5 \rightarrow I \begin{matrix} \alpha = 5 \\ \beta = +\infty \end{matrix} \rightarrow D \begin{matrix} \alpha = 5 \\ \beta = 5 \end{matrix} \rightarrow \{ \text{PODA!! (de J, U, V)} \}$

# EXERCÍCIO 7

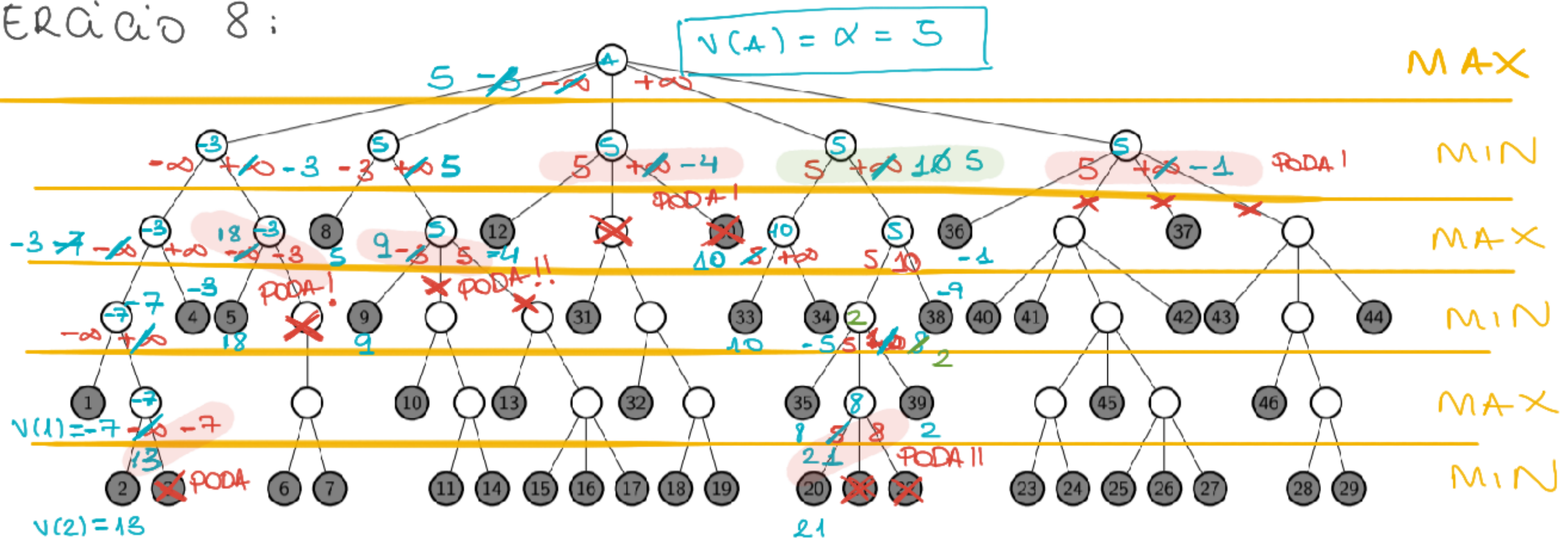
Estratégia ótima  $\rightarrow M_1$

$J_1 M_1$								$J_1 M_2$							
Ca				Cr				Ca				Cr			
$J_2 M_1$	$J_2 M_2$	$J_2 M_1$	$J_2 M_2$	$J_2 M_1$	$J_2 M_2$	$J_2 M_1$	$J_2 M_2$	$J_2 M_1$	$J_2 M_2$	$J_2 M_1$	$J_2 M_2$	$J_2 M_1$	$J_2 M_2$	$J_2 M_1$	$J_2 M_2$
Ca	Cr	Ca	Cr	Ca	Cr	Ca	Cr	Ca	Cr	Ca	Cr	Ca	Cr	Ca	Cr
8	9	7	3	4	2	0	3	7	5	9	7	1	6	8	0





# Exercício 8:



Nodo	1	2	4	5	8	9	12	33	34	35	20	39	38	36									
Valor	-7	13	-3	18	5	9	-4	10	-5	8	21	2	-9	-1	0	15	-7	-4	11	19	33	20	3

Nodo																							
Valor	-8	20	0	4	-6	-2	-1	1	14	12	9	23	33	-9	-2	33	1	5	7	-3	-5	0	40