

Ej 2: $Q^L(x^4) = \begin{matrix} & & & \frac{3}{5} & \frac{2}{6} & & & & \\ & & & \nearrow & \nearrow & & & & \\ \frac{1}{2} & \frac{2}{3} & \frac{1}{4} & & & & & & \\ \uparrow & \uparrow & \uparrow & & & & & & \\ 0 & 0 & 1 & 0 & 1 & 0 & & & \end{matrix} \rightarrow \frac{4}{7} = \frac{1}{2} \frac{2}{3} \frac{1}{4} \frac{3}{5} \frac{2}{6} \frac{4}{7}$

i	n ₀	n ₁
0	0	0
1	1	0
2	2	0
3	2	1
	3	1
	3	2

Para i=1: $Q^L(0|d) = \frac{0+1}{2} = \frac{1}{2}$

$Q^L(1|d) = \frac{0+1}{2} = \frac{1}{2}$

Para i=2:

$Q^L(0|x^1) = \frac{1+1}{3} = \frac{2}{3}$

i=3

$Q^L(1|x^2) = \frac{0+1}{4} = \frac{1}{4}$

i=4

$Q^L(0|x^3) = \frac{2+1}{5} = \frac{3}{5}$

$\frac{1}{2} \frac{3}{4} \frac{1}{6} \frac{5}{8} \frac{3}{10}$
 $\uparrow \quad \uparrow \quad \uparrow \quad \uparrow \quad \uparrow$
 0 0 1 0 1 0

$Q^{KT}(0|x^{j-1}) = \frac{n_0(x^{j-1}) + \frac{1}{2}}{i}$

n₀ n₁

0 0

1 0

2 0

2 1

$Q^{KT}(0|d) = \frac{0 + \frac{1}{2}}{1} = \frac{1}{2}$

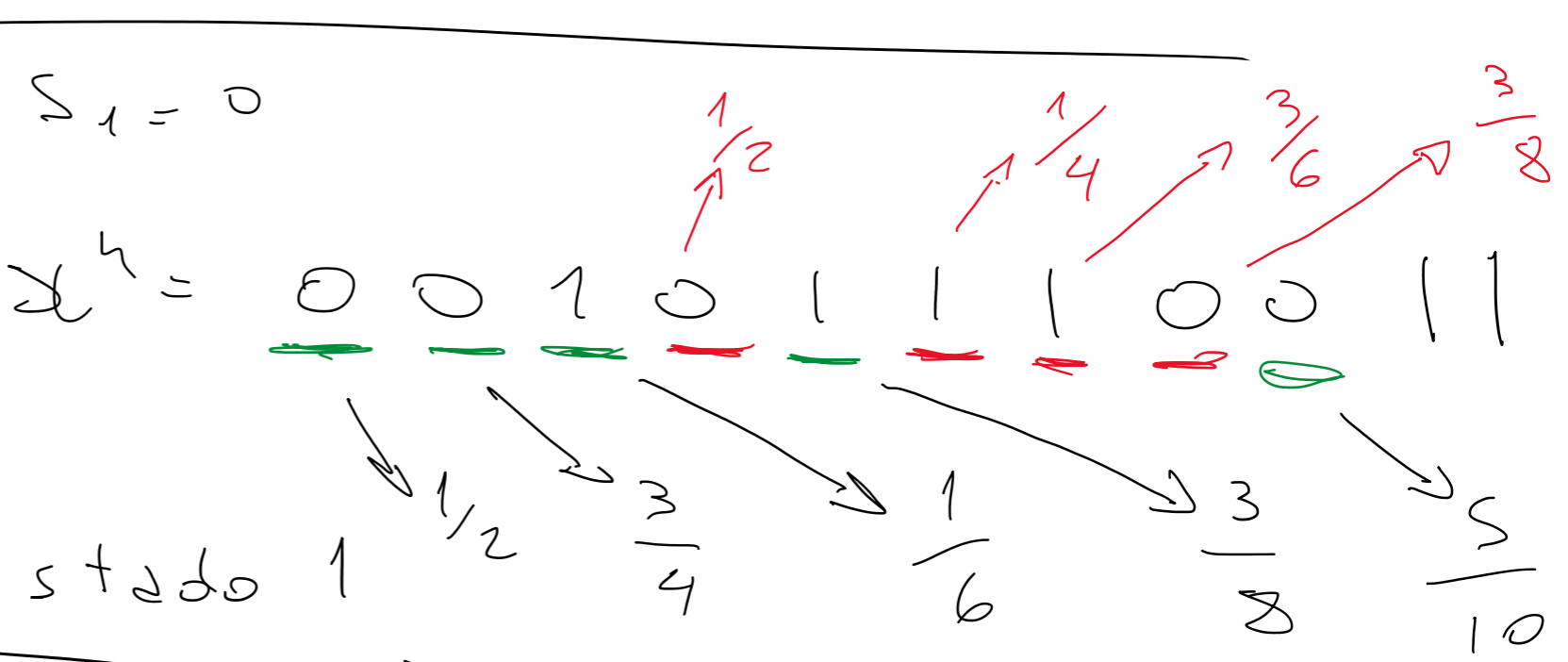
$Q^{KT}(0|x^1) = \frac{1 + \frac{1}{2}}{2} = \frac{3}{4}$

$Q^{KT}(1|x^2) = \frac{0 + \frac{1}{2}}{3} = \frac{1}{6}$

$Q^{KT}(0|x^3) = \frac{2 + \frac{1}{2}}{4} = \frac{4+1}{8} = \frac{5}{8}$

$Q_n^{KT}(x^n) = \int_0^1 P_\theta(x^n) \omega(\theta) d\theta \approx \int_0^1 \hat{P}(x^n) \omega(\theta) d\theta$
 $\approx \hat{P}(x^n)$
 $\approx P_{ML}(x^n)$
 $= \hat{P}(x^n) \int_0^1 \omega(\theta) d\theta$
 $= \hat{P}(x^n)$

Ej 4



Estado 0

Estado 1

n ₀	n ₁
0	0
1	0
2	0
2	1
2	2

n ₀	n ₁
0	0
1	0
1	1
1	2
2	2