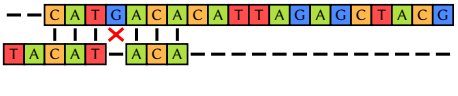
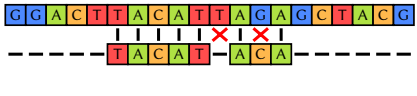
(a)



	ε	C	A	T	G	A	C	A	C	A	T	T	A	G	A	G	C	T	A	C	G
ε	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
T	0	1	2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A	0	1	0	1	2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
C	0	-1	0	1	2	2	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A	0	0	-2	-1	0	1	1	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
T	0	1	-1	-3	-2	-1	0	0	0	1	0	1	2	3	4	5	6	7	8	9	10
A	0	1	0	-2	-2	-3	-2	-1	0	-1	0	1	0	1	2	3	4	5	6	7	8
C	0	-1	0	-1	-1	-2	-4	-3	-2	-1	0	1	1	1	2	3	2	3	4	5	6
A	0	0	-2	-1	0	-2	-3	-5	-4	-3	-2	-1	0	1	0	1	2	3	2	3	4

$$\delta_G = 1 \quad \delta_M(a,b) := 1 - 2 \cdot \mathbb{1}(a \neq b)$$
$$\text{dist} = \min_j D(m,j)$$

(b)



	ε	G	G	A	C	T	T	A	C	A	T	T	A	G	A	G	C	T	A	C	G
ε	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
T	1	1	1	1	1	0	0	1	1	1	0	0	1	1	1	1	1	0	1	1	1
A	2	2	2	1	2	1	1	0	1	1	1	1	0	1	1	2	2	1	0	1	2
C	3	3	3	2	1	2	2	1	0	1	2	2	1	1	2	2	2	2	1	0	1
A	4	4	4	3	2	2	3	2	1	0	1	2	2	2	1	2	3	3	2	1	1
T	5	5	5	4	3	2	2	3	2	1	0	1	2	3	2	2	3	3	3	2	2
A	6	6	6	5	4	3	3	2	3	2	1	1	1	2	3	3	3	4	3	3	3
C	7	7	7	6	5	4	4	3	2	3	2	2	2	2	3	4	3	4	4	4	3
A	8	8	8	7	6	5	5	4	3	2	3	3	2	3	2	3	4	4	4	4	4

$$\delta_G = 1 \quad \delta_M(a,b) := \mathbb{1}(a \neq b)$$
$$\text{dist} = \min_j D(m,j)$$