Question 1: Global alignment
➔ Match +1, mismatch -1, gap -3

	Lambda	C	A	T	C
lambda	**0**	-3	-6	-9	-12
C	-3	**1**	-2	-5	-8
T	-6	-2	**0**	-1	-4
C	-9	-5	**-3**	-1	0
G	-12	-8	-6	**-4**	-2
C	-15	-11	-9	-7	<mark>**-3**</mark>

C - A T C
C T C G C

(note there are ties… this is one of a few valid tracebacks from -3)

Question 2: End gap free alignment
➔ Match +5, mismatch -2, gap -3.

	Lambda	C	A	T
Lambda	0	0	0	0
A	0	-2	5	2
C	0	**5**	2	3
A	0	2	**10**	7
T	0	-1	7	<mark>**15**</mark>

C A T
C A T

Question 3: Local alignment
➔ Match +5, mismatch -2, gap -3

	Lambda	C	T	A	C	T
lambda	0	0	0	0	0	0
A	0	0	0	\ 5	< 2	0
T	0	0	**\ 5**	< 2	\ 3	\ 7
A	0	0	^ 2	**\10**	< 7	^ 4
C	0	\ 5	< 2	^ 7	<mark>**\15**</mark>	< 12
G	0	^ 2	\ 3	^ 4	^ 12	\ 13

T A C
T A C