

Seq. 1: AA

Seq. 2: ACCA

Match: +8 ( $w(a, b) = 8$ , if  $a = b$ )

Mismatch: -5 ( $w(a, b) = -5$ , if  $a \neq b$ )

Each gap symbol: -3 ( $w(-, b) = w(a, -) = -3$ )

Each gap is charged an extra gap-open penalty: -4

D

		A	C	C	A
	-4	$-\infty$	$-\infty$	$-\infty$	$-\infty$
A	-7	-14	-17	-20	-23
A	-10	1	-6	-9	-12

I

		A	C	C	A
	-4	-7	-10	-13	-16
A	$-\infty$	-14	1	-2	-5
A	$-\infty$	-17	-6	-4	-7

S

		A	C	C	A
	0	-7	-10	-13	-16
A	-7	8	1	-2	-5
A	-10	1	3	-4	6

A--A

ACCA