

Sam Hopkins
Hw 14

1.)

	-	A	T	G	C	C
-	0.5	10	15	20	25	
T	5	1	2	7	12	17
A	10	2	2	3	8	12
C	15	7	3	0	5	
G	20	12	8	0	4	1
C	25	17	13	5	-3	1
A	30	22	18	10	2	-2

$\left\{ \begin{array}{l} \text{match} = 5 \\ \text{csub} = 1 \\ \text{mismatch} = -3 \end{array} \right.$

- A T G C C
T A C G C A = -2

2.)

w value
Items: 1:1
2:7
5:11
6:21
7:31

	1	2	3	4	5	6	7	8	a	10
1:1	(1)	1	1	1	1	1	1	1	1	1
2:7	1	7	8	8	8	8	8	8	8	8
5:11	1	7	8	8	11	12	18	(19)	19	19
6:21	1	7	8	8	11	21	22	28	(29)	29
7:31	1	7	8	8	11	21	31	32	38	(39)

our optimal load has a value of 39, and contains items (7:31), (2:7), and (1:1)