HW18c - 4.12

6. Consider the following weighted graph G_w.
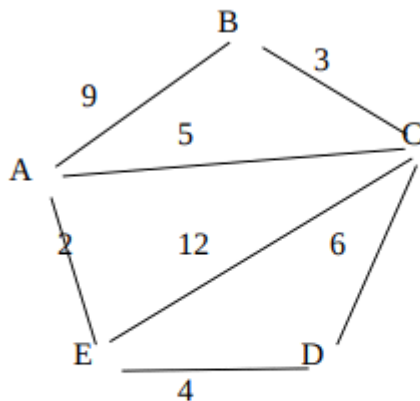
Marked	A	B	C	D	E
	0	-	-	-	-
A	0	9	5	-	2
E	0	9	5	6	2
C	0	8	5	6	2
D	0	8	5	6	2
B					

A, E, C, D, B

a) List the nodes of G_w starting with A in the order in which they are settled in Dijkstra's algorithm. Show your work by giving, for each iteration, the settled node for the iteration and the distance to each unsettled node at the end of the iteration.

b) List the nodes of G_w starting with C in the order in which they are settled in Dijkstra's algorithm.

Marked	A	B	C	D	E
	-	-	0	-	-
C	5	3	0	6	12
B	5	3	0	6	12
A	5	3	0	6	7
D	5	3	0	6	7
E					

C, B, A, D, E