TEST 2

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1. D. 10 - ignore vertex 0's existance till the end of the algorithm

Step	0	1	2	3	4	Nodes Included
Start from 2 Add 2's vertices Go to 4 with weight 3	8	12	0	7	3	2
Add 4's vertices Go to 3 with weight 2	4	9	0	2	3	2 4
Add 3' vertices Go to 1	1	4	0	2	3	2 3 4
Add 1's vertices Stop ignoring vertex 0 Go to 0	1	4	0	2	3	1 2 3 4
DONE						0 1 2 3 4

2. B.91 - because v-1 is the minimum number of edges that connect all the vertices, any more than that and loops are created, any fewer and not all vertices are included

3.

	0	10	20	30
0	0	0	0	0
V=60 w=10	0	60	60	60
V=100 w=20	0	60	100	160
V=120 w=30	0	60	100	160

4.

Node	Step	Priority Queue	0	1	2	3
-	Start from node 0		inf	inf	inf	inf
0	Set 0 visited Add edges from 0	(0, 0)	0	inf	inf	inf
0	Go to 2	(2, 5) (3, 10) (1, 24)	0	24	5	10
2	Set 2 visited Add edges from 2 Go to 3	(3, 6) - updated (<) (1, 24)	0	24	5	6
3	Set 3 visited No edges to add Go to 1	(1, 24)	0	24	5	6
1	Set 1 visited No edges to add DONE		0	24	5	6