

Find the shortest paths, and their lengths, from vertex v_1 to each of the other vertices in the graph shown below. (*Weights appear off the centre point of corresponding edge.*)

	v_1	v_2	v_3	v_4	v_5
v_1	0	0	5	0	13
v_2	0	0	12	0	2
v_3	5	12	0	1	7
v_4	0	0	1	0	0
v_5	13	2	7	0	0

