

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	6	1	13	0
$v_2$	6	0	4	0	5
$v_3$	1	4	0	0	12
$v_4$	13	0	0	0	0
$v_5$	0	5	12	0	0

