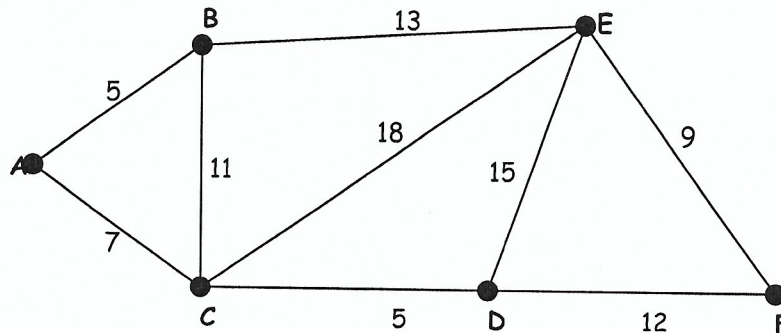


## Kruskal's Algorithm

- 1 Use Kruskal's algorithm to find the minimum spanning tree for the network below. State the total weight.



- 2 Using the information in the distance chart below, construct a network. Then, using Kruskal's algorithm, find the minimum spanning tree for the network and its weight.

<b>Belfast</b>								
205	<b>Cork</b>							
103	154	<b>Dublin</b>						
196	122	135	<b>Galway</b>					
204	58	120	64	<b>Limerick</b>				
70	281	146	176	231	<b>Londonderry</b>			
126	200	133	90	147	86	<b>Sligo</b>		
197	73	96	141	77	242	176	<b>Waterford</b>	

- 3 Draw a pictorial representation of the network defined by the following matrix

0	12	23	15	18	10
12	0	20	21	24	13
23	20	0	29	31	14
15	21	29	0	9	25
18	24	31	9	0	17
10	13	14	5	17	0

Use Kruskal's Algorithm to find the minimum spanning tree for the network and give its total weight.