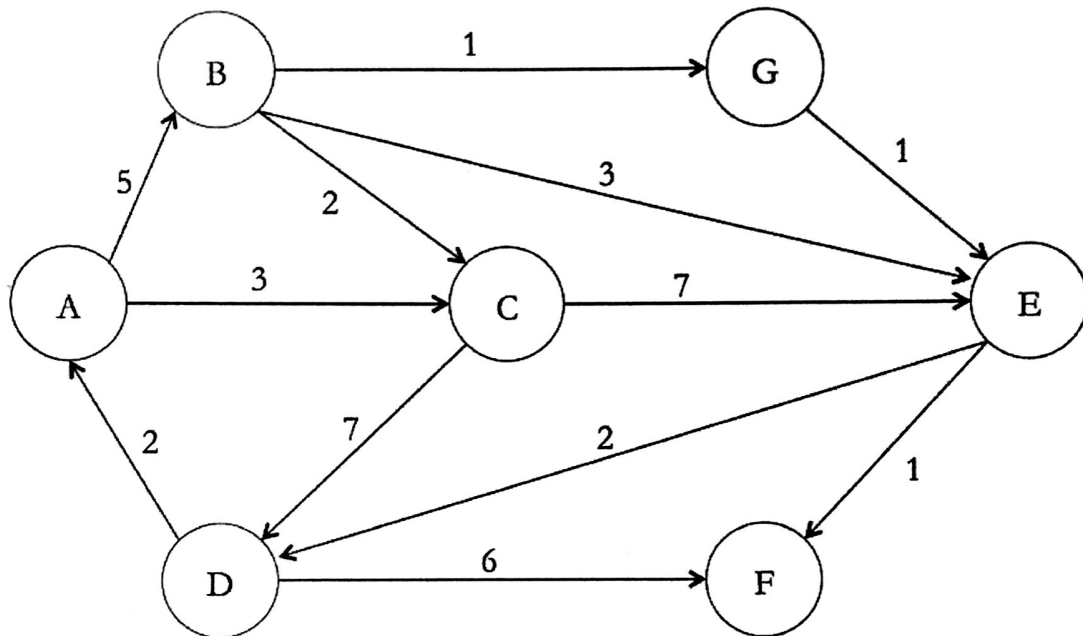# 2 Dijkstra's Algorithm

Use Dijkstra's algorithm to find the costs of the shortest paths from vertex A to the other vertices. Show your work at each step and indicate the order which vertices are added to the known set. In the case of a tie, add the vertex that comes first alphabetically.

vertex	Known?	cost	path
A	Y	0	
B	Y	5	A
C	Y	3	A
D	Y	9	E
E	Y	7	G
F	Y	8	E
G	Y	6	B

order added to known set:

ACBGEFD.

2