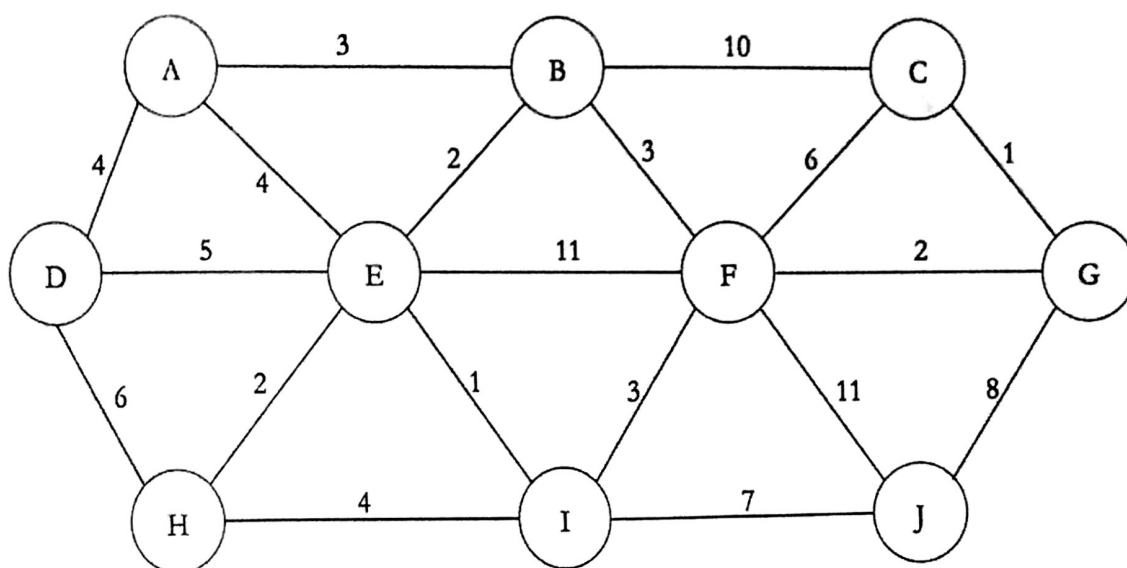


3 Prim's Algorithm

For the following graph, find the minimum spanning tree using Prim's algorithm. Start with vertex A. Show your work at each set and indicate the order in which edges are added to the MST. Break ties by choosing the vertex that comes first alphabetically.



	vertex	known?	cost	prev.
A	A	Y	0	
B	B	Y	3	A
C	C	Y	1	G
D	D	Y	4	A
E	E	Y	2	B
F	F	Y	3	I
G	G	Y	2	F
H	H	Y	2	E
I	I	Y	1	E
J	J	Y	37	I