

1.

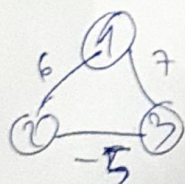
21175036 -

Đặng Minh  
Triết

Vertex	visited	cost	path
0			
1	T	6	0
2	T	11	1
3	T	<del>10</del> 6	0
4	T	5	0
5	T	14	2
6	T	17	2
7	T	1	0
8	T	16	11
9	T	21	5
10	T	23	6
11	T	10	7
12	T	<del>16</del> 15	11
13	T	17	12
14	T	9	0
15	T	10	14
16	T	18	13
17	T	24	13

$3^{rd} \rightarrow 0-1: 6$   
 $7^{th} \rightarrow 0-1-2: 11$   
 $14^{th} \rightarrow 0-1-2-6-3: 19$   
 $2^{nd} \rightarrow 0-4: 5$   
 $8^{th} \rightarrow 0-1-2-5: 14$   
 $11^{th} \rightarrow 0-1-2-6: 17$   
 $1^{st} \rightarrow 0-7: 1$   
 $9^{th} \rightarrow 0-7-11-8: 16$   
 $15^{th} \rightarrow 0-1-2-5-9: 21$   
 $16^{th} \rightarrow 0-1-2-6-10: 23$   
 $5^{th} \rightarrow 0-7-11: 10$   
 $10^{th} \rightarrow 0-14-15-12: 16$   
 $12^{th} \rightarrow 0-14-15-12-13: 17$   
 $4^{th} \rightarrow 0-14: 9$   
 $6^{th} \rightarrow 0-14-15: 10$   
 $13^{th} \rightarrow 0-14-15-12-13-16: 18$   
 $17^{th} \rightarrow 0-14-15-12-13-17: 24$

2. Dijkstra won't work with negative weight because it ~~will~~ cannot check back visited node for negative.



start from 1:

Dijkstra will give  $1-2: 6$

$1-3: 7$

answer:  $1-2: 2$

$1-3: 1.$

3. Prim and Kruskal can work with negative weight

4. Yes, Max Spanning Tree will be found the same way as Min ST. using Prim, Kruskal, just change min to max.