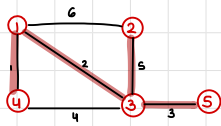


Activity - Theoretical

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1)

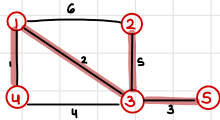


Kruskal's

- Num V = 5
- Num E = 6
- $V = \{1, 2, 3, 4, 5\}$
- $E = \{(1, 2, 6), (1, 3, 2), (1, 4, 1), (2, 3, 5), (4, 3, 4), (3, 5, 3)\}$

Orden:

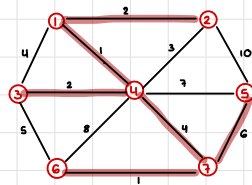
V_i	V_e	Weight
1	4	1
1	3	2
3	5	3
4	3	4
2	3	5
1	2	6



Prim's

- arbitrary vertex : selected : 1
- 1 to 4 cause min weight
- 1 to 3 cause min weight
- 3 to 5 cause min weight
- 3 to 2 to not cycle with 3 to 4

2)

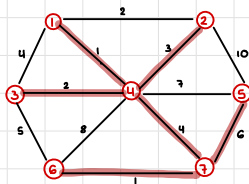


Kruskal's

- Num V = 7
- Num E = 12
- $V = \{1, 2, 3, 4, 5, 6, 7\}$
- $E = \{(1, 4, 1), (1, 2, 2), (1, 3, 4), (2, 4, 3), (2, 5, 10), (3, 4, 2), (3, 6, 5), (6, 4, 8), (6, 7, 1), (7, 4, 4), (7, 5, 6), (5, 4, 7)\}$

orden

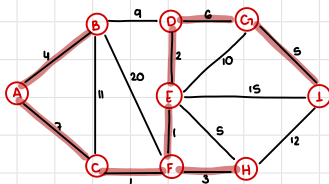
V_i	V_e	Weight
1	4	1
6	7	1
1	2	2
3	4	2
2	4	3
1	3	4
4	7	4
3	6	5
5	7	6
5	4	7
6	4	8
2	5	10



Prim's

- arbitrary vertex : selected : 1
- 1 to 4 cause min weight
- 4 to 3 cause min weight
- 4 to 2 cause min weight
- 4 to 7 to not loop (1 to 2)
- 7 to 6 cause min weight
- 7 to 5 cause min weight

3)

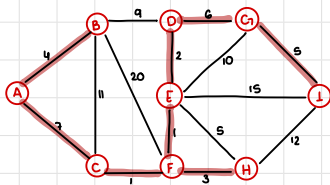


Kruskal's

- Num V = 9
- Num E = 15
- $V = \{A, B, C, D, E, F, G, H, I\}$
- $E = \{(A, B, 4), (A, C, 7), (B, C, 11), (B, F, 20), (B, D, 9), (C, F, 1), (D, E, 2), (D, G, 6), (E, F, 1), (E, G, 10), (E, H, 5), (F, H, 3), (G, I, 5), (H, I, 12)\}$

Orden

V_i	V_e	Weight
C	F	1
E	F	1
D	E	2
F	H	3
A	B	4
E	H	5
G	I	5
D	G	6
A	C	7
B	D	9
E	G	10
B	C	11
H	I	12
E	I	15
B	F	20



Prim's

- arbitrary select : selected A
- A to B min weight
- A to C min weight
- C to F min weight
- F to E min weight
- E to D min weight
- F to H min weight
- D to G min weight
- G to I min weight