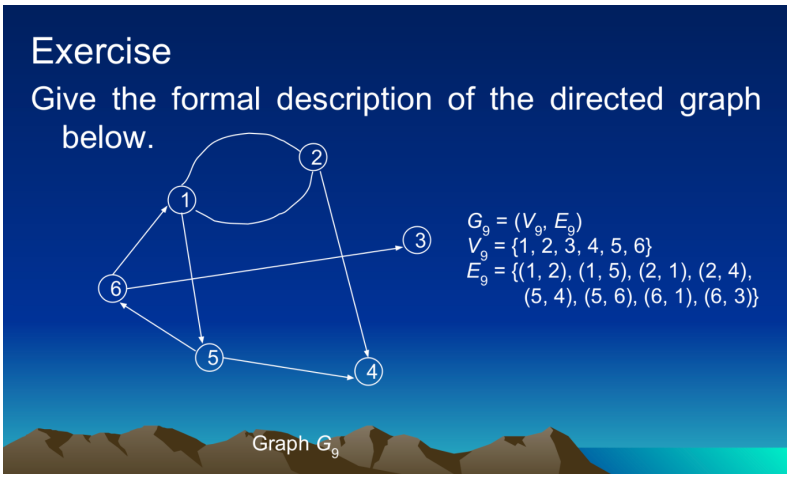
ALBERO, JUSTINE KATE P.
BSCPE 2-1

ACTIVITIES ON GRAPHS

GRAPH 9 (G_9)

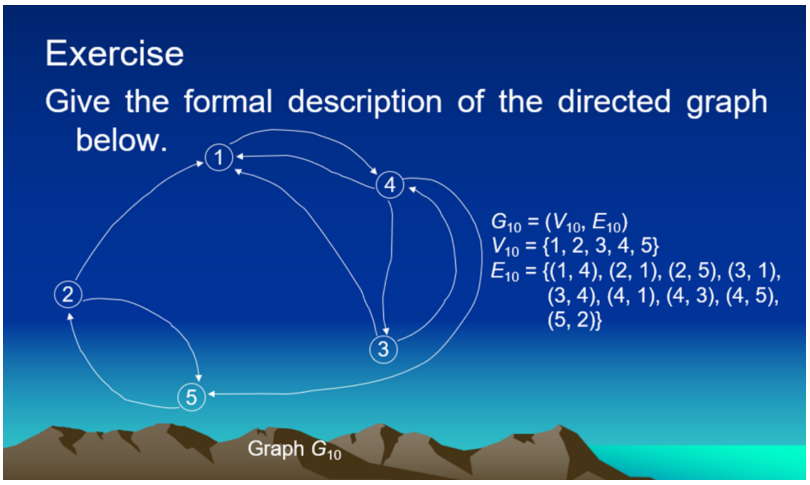
Give the formal description of the directed graph below.



VERTICES	IN-DEGREE	OUT-DEGREE
1	2	2
2	1	2
3	1	0
4	2	0
5	1	2
6	1	2

GRAPH 10 (G_{10})

Give the formal description of the directed graph below.

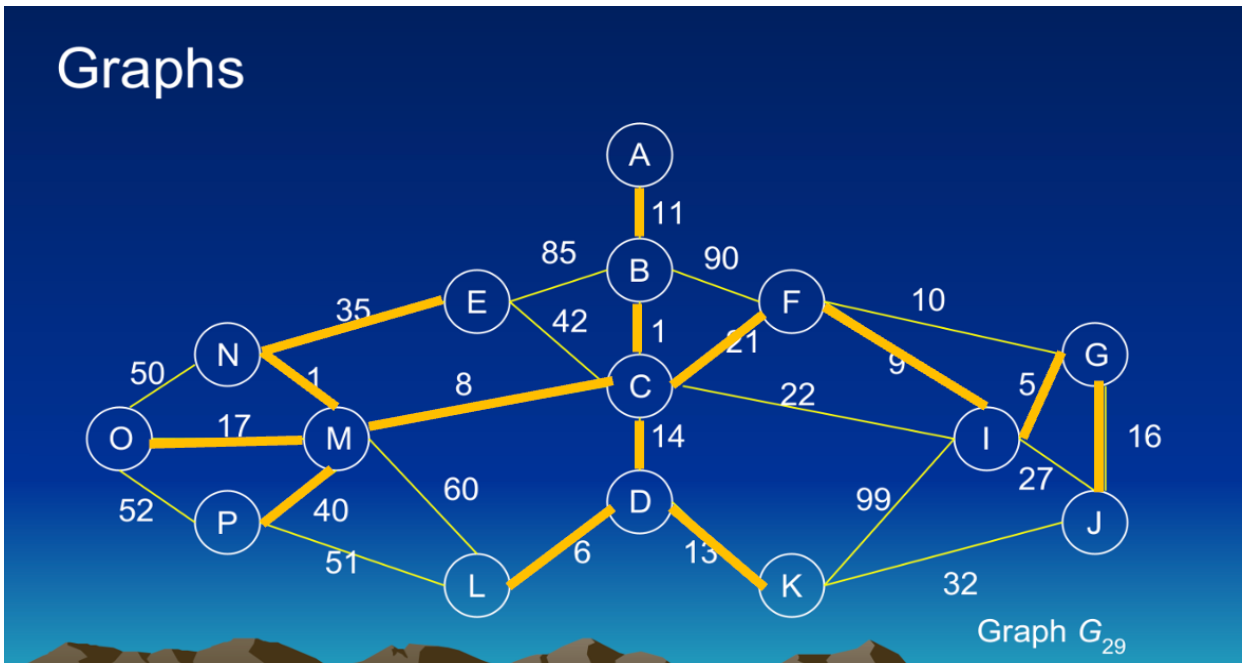


VERTICES	IN-DEGREE	OUT-DEGREE
1	3	1
2	1	2
3	1	2
4	2	3
5	2	1

Given the graphs on the next slides, construct the minimum cost spanning tree by using Kruskal's algorithm and Prim's algorithm with starting vertex E (for G28) and vertex A (for G29).

NOTE: G_{28} was performed during discussion.

Kruskal's and Prim's :



Kruskal's Algorithm			Prim's Algorithm		
e(B,C)	w	1	e(A,B)	w	11
e(N,M)	w	1	e(B,C)	w	1
e(G,I)	w	5	e(C,M)	w	8
e(D,L)	w	6	e(M,N)	w	1
e(C,M)	w	8	e(C,D)	w	14
e(F,I)	w	9	e(D,L)	w	6
e(A,B)	w	11	e(D,K)	w	13
e(D,K)	w	13	e(M,O)	w	17
e(C,D)	w	14	e(C,F)	w	21
e(G,J)	w	16	e(F,I)	w	9
e(M,O)	w	17	e(G,I)	w	5
e(C,F)	w	21	e(G,J)	w	16
e(E,N)	w	35	e(E,N)	w	35
e(M,P)	w	40	e(M,P)	w	40
TOTAL:		**197**	**TOTAL:**		**197**