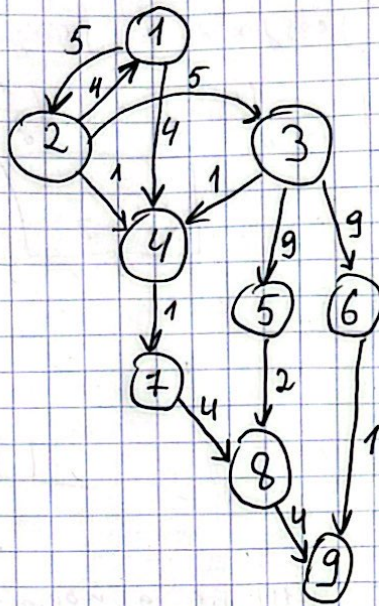


N1. Graphs and their terminology

Student ID: K12149099

$d_6 = 1, d_7 = 9, d_8 = 9$

$d_2 = 2, d_3 = 1, d_4 = 4$

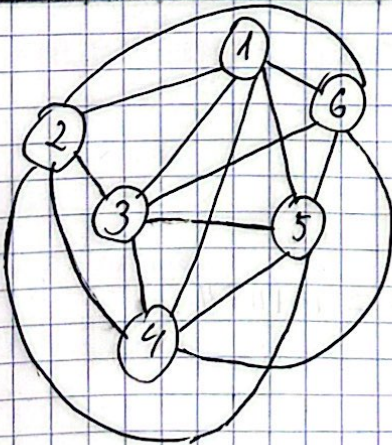


Questions:

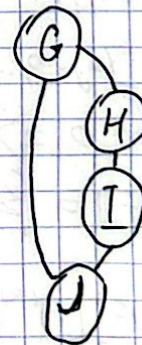
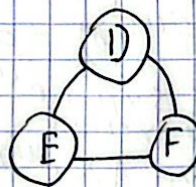
- a) Yes
- b) Yes
- c) 4
- d) 3
- e) 9
- f) cyclic
- g) no loops
- h) weakly connected
- i) not a tree

from/to	1	2	3	4	5	6	7	8	9
1		5		4					
2	5		5	1					
3				$d_6=1$	$d_7=9$	$d_8=9$			
4							1		
5								2	
6									1
7								4	
8									4
9									

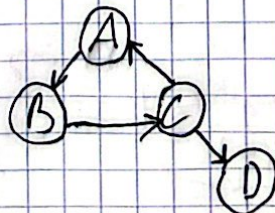
2.



3.



4.

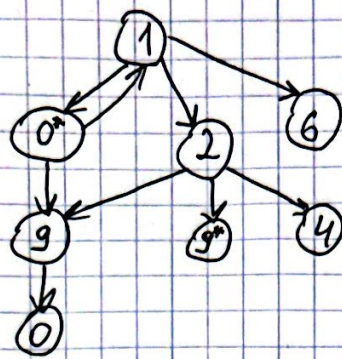


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STUDIENDENAUSWEIS

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Geburtsdatum 27.07.2003
gültig bis: **M2023-03-31**

5.



$$1 - [0^*, 2, 6] - 0^* - [1]$$

$$0^* - \cancel{9} [1, 9] - 9 - [1, 0^*]$$

$$9 - [0] - 0 - [1, 0^*, 9]$$

$$0 - [] - 9(4p) - [1, 0^*, 9, 0]$$

$$9 - [0] - 0^*(4p) - [1, 0^*, 9, 0]$$

$$0^* - [1, 9] - 1(4p) - [1, 0^*, 9, 0]$$

$$1 - [0^*, 2, 6] - 2 - [1, 0^*, 9, 0]$$

$$2 - [4, 9, 9^*] - 4 - [1, 0^*, 9, 0, 2]$$

$$4 - [] - 2(4p) - [1, 0^*, 9, 0, 2, 4]$$

$$2 - [4, 9, 9^*] - 9^* - [1, 0^*, 9, 0, 2, 4]$$

$$9^* - [] - 2(4p) - [1, 0^*, 9, 0, 2, 4, 9^*]$$

$$2 - [4, 9, 9^*] - 1(4p) - [1, 0^*, 9, 0, 2, 4, 9^*]$$

$$1 - [0^*, 2, 6] - 6 - [1, 0^*, 9, 0, 2, 4, 9^*]$$

$$6 - [] - 1(4p) - [1, 0^*, 9, 0, 2, 4, 9^*, 6]$$

$$1 - [0^*, 2, 6] - \text{end} - [1, 0^*, 9, 0, 2, 4, 9^*, 6]$$

