

OTHER SOLUTIONS $\geq \mathbb{R}^{\text{rc}}$: ANTI-SYMMETRY

1	1	1	1	1		1	1	1	1	1	
0	1	1	1	1		0	1	0	1	1	
0	0	1	1	1		0	1	1	1	1	
0	0	0	1	1		0	0	0	1	1	
0	0	0	0	1		0	0	0	0	1	

ARE THEY ORDER RELATIONS?

- REFLEXIVITY? ✓ (DIAGONALS MADE ONLY BY 1'S)
- ANTI-SYMMETRY? ✓
- TRANSITIVITY?

1	1	1	1	1		1	1	1	1	1	
0	1	1	1	1		0	1	1	1	1	
0	0	1	1	1		0	0	1	1	1	
0	0	0	1	1		0	0	0	1	1	
0	0	0	0	1		0	0	0	0	1	

$$= \begin{vmatrix} 1 & 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 & 1 \\ 0 & 0 & 1 & 1 & 1 \\ 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 0 & 1 \end{vmatrix}$$

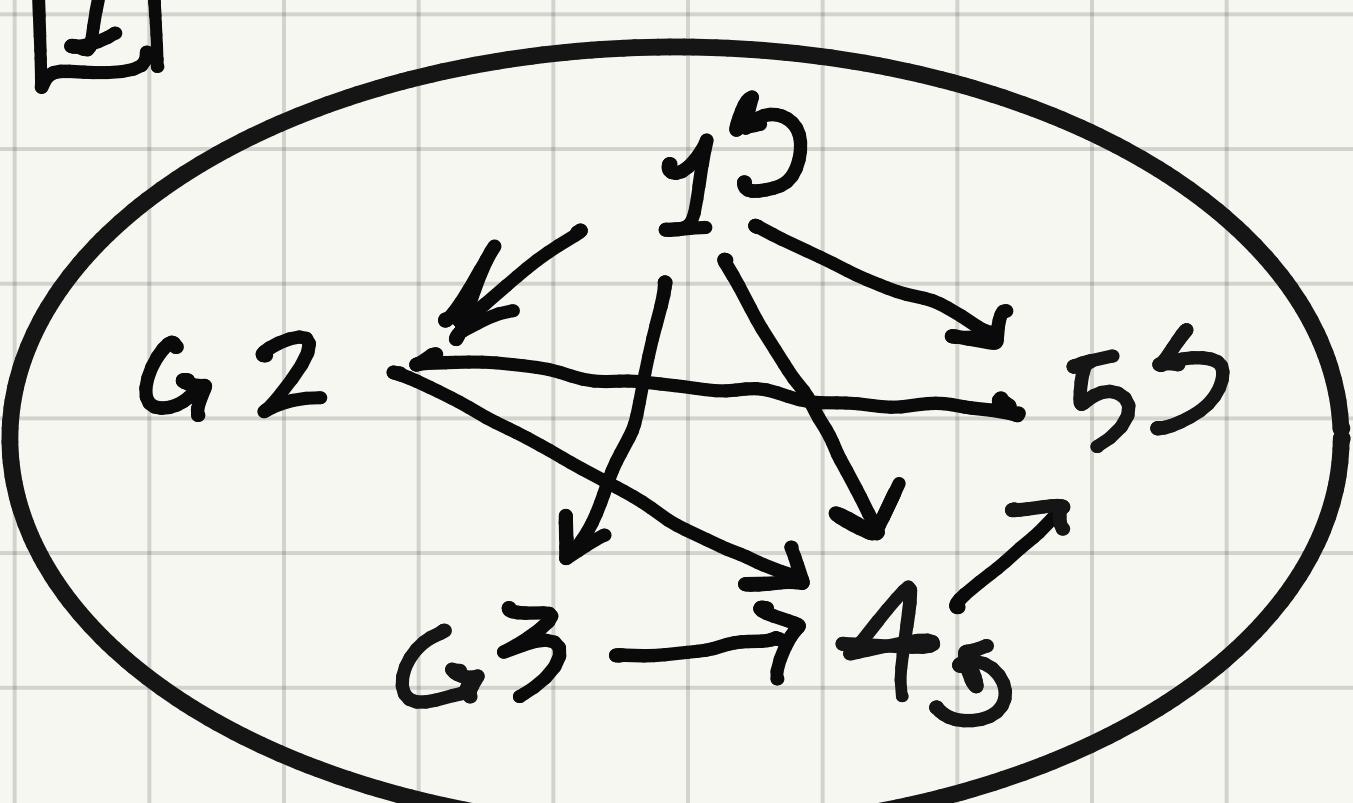
1	1	1	1	1	1	1	1	1	1	1
0	1	0	1	1	0	1	0	1	1	1
-	0	1	1	1	1	0	1	1	1	1
0	0	0	1	1	0	0	0	1	1	1
0	0	0	0	1	0	0	0	0	1	1

1	1	1	1	1
0	1	0	1	1
0	1	1	1	1
0	0	0	1	1
0	0	0	0	1



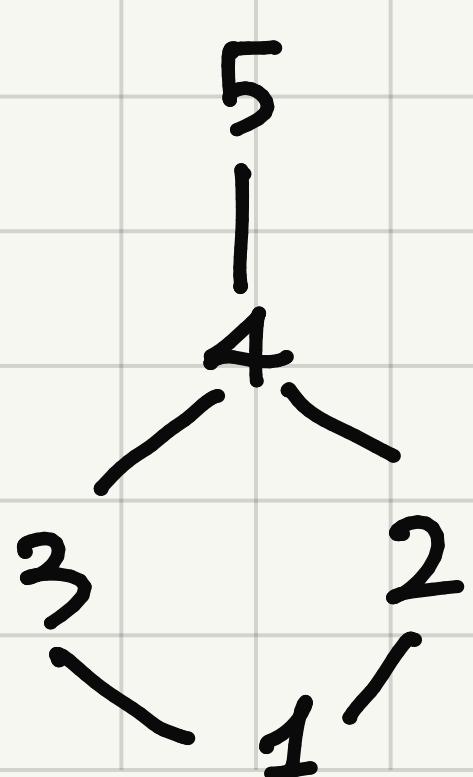
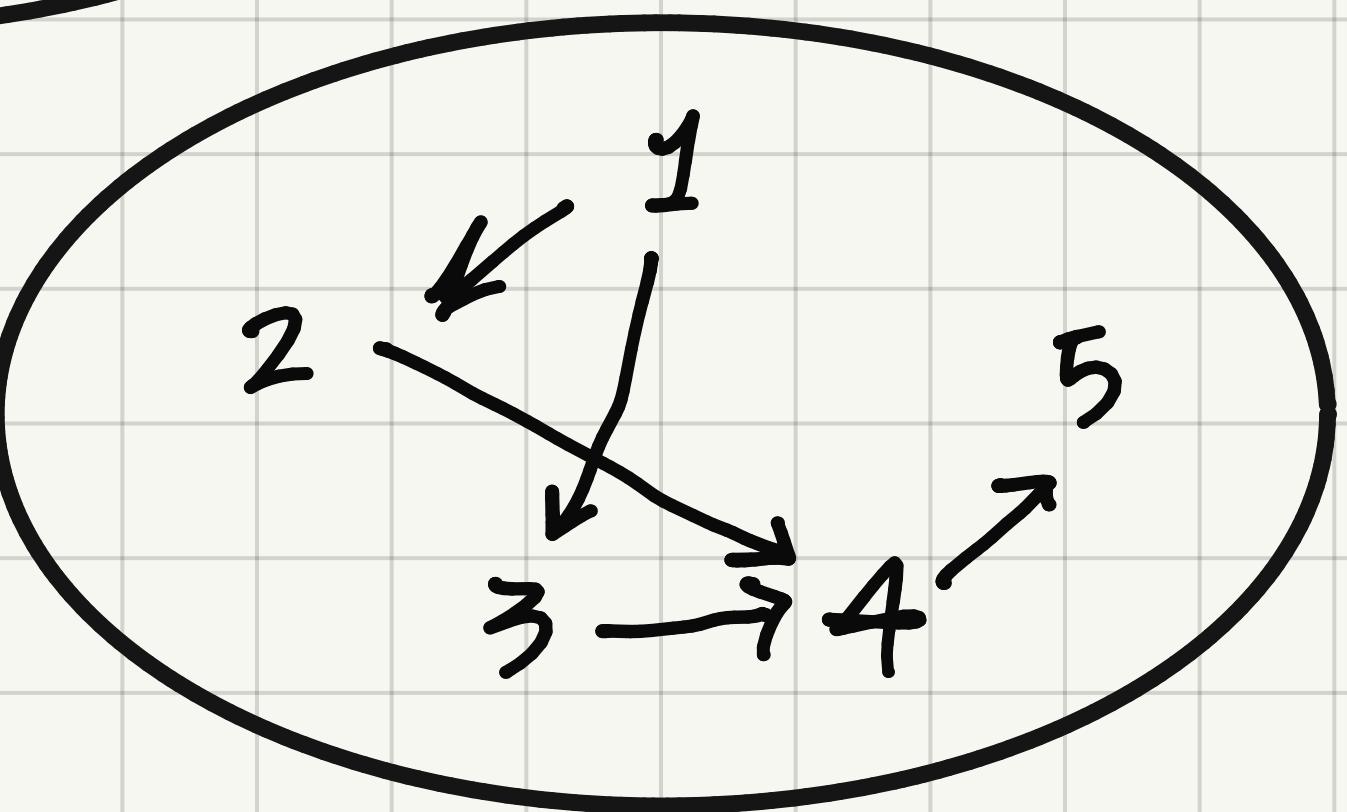
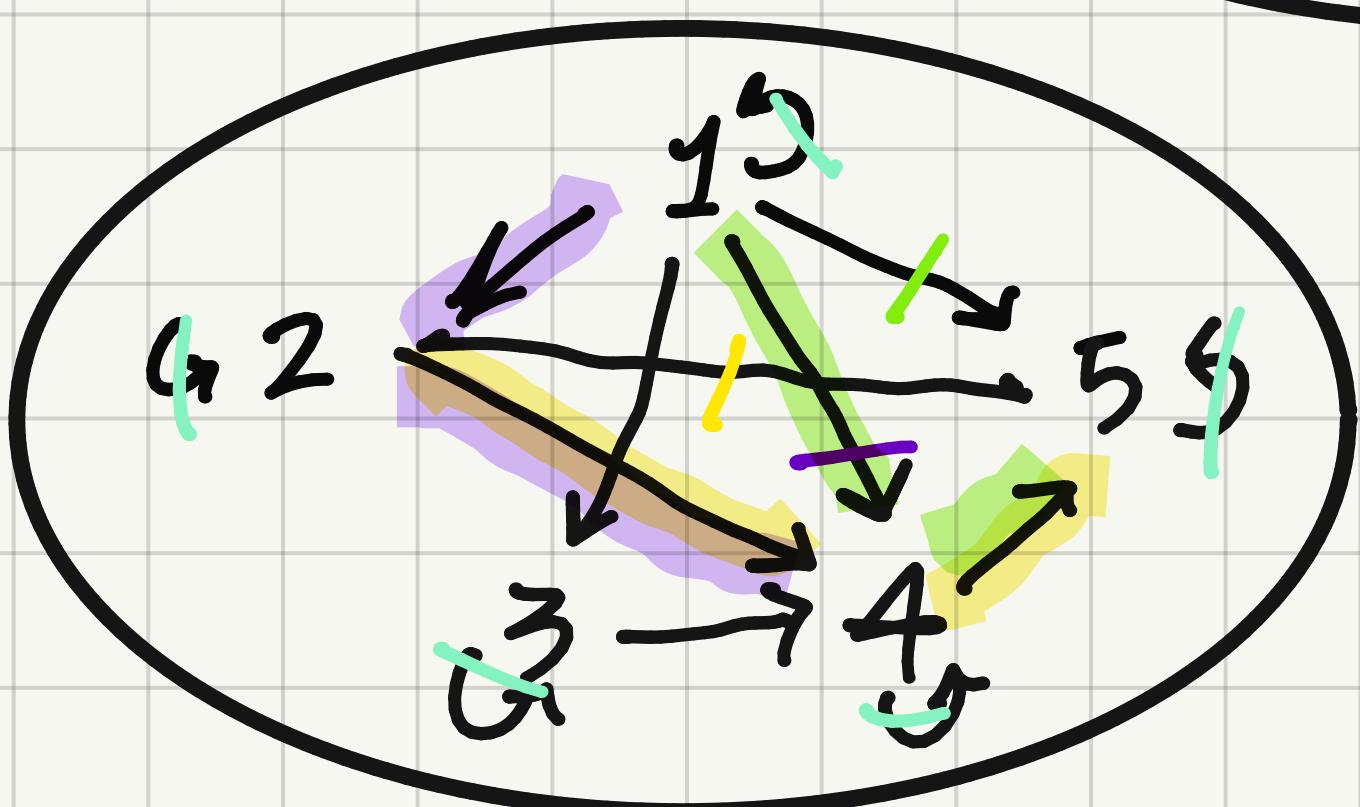
③ HASSE DIAGRAMS (NOT REQUESTED)

1

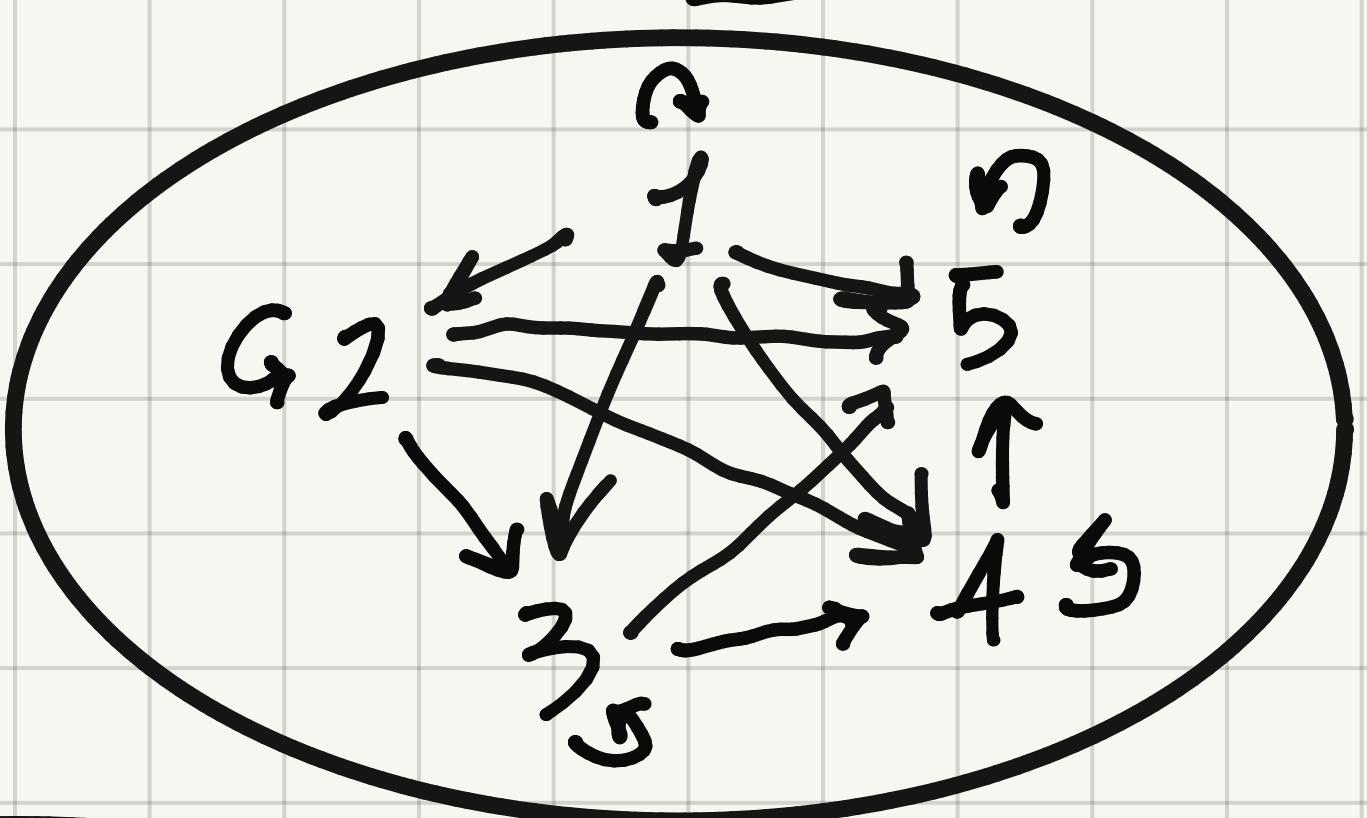


• REFLEXIVITY

• TRANSITIVITY



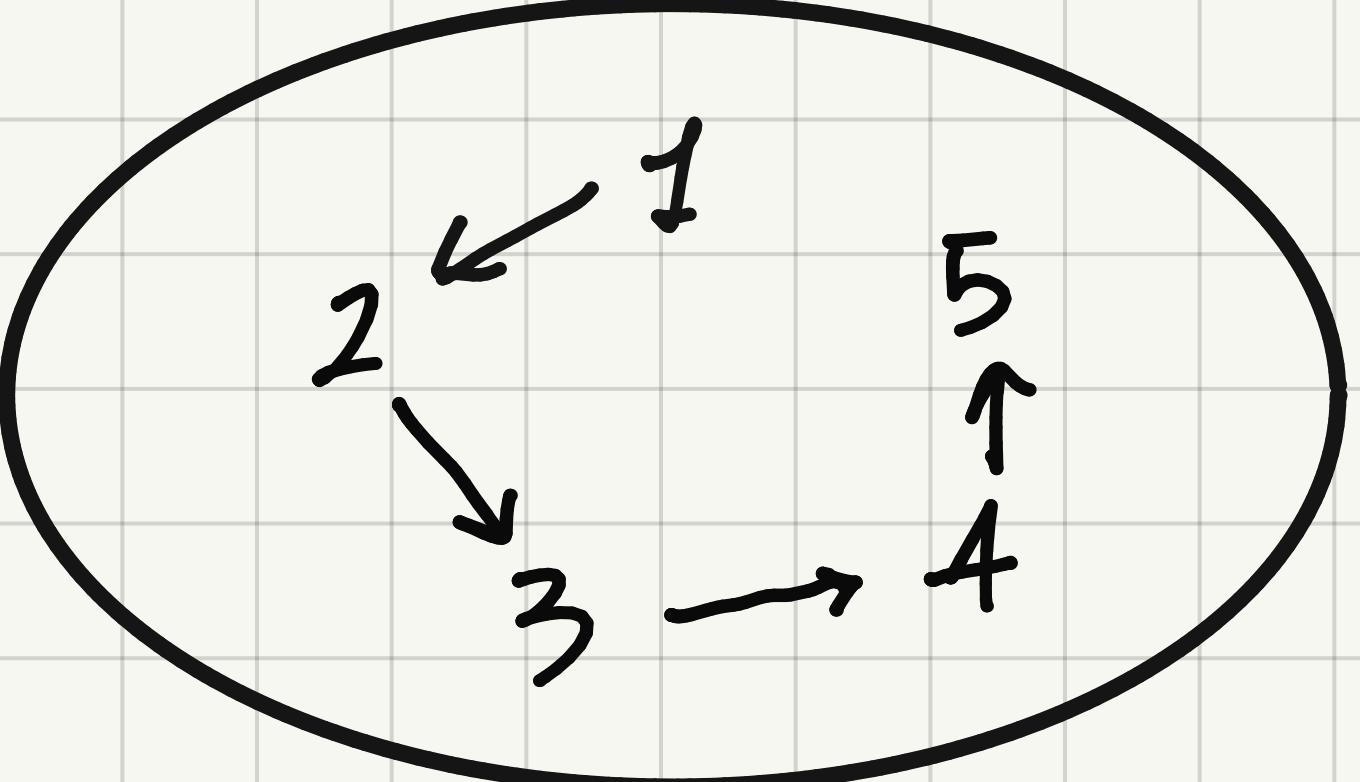
2



- REFLEXIVITY
- TRANSITIVITY

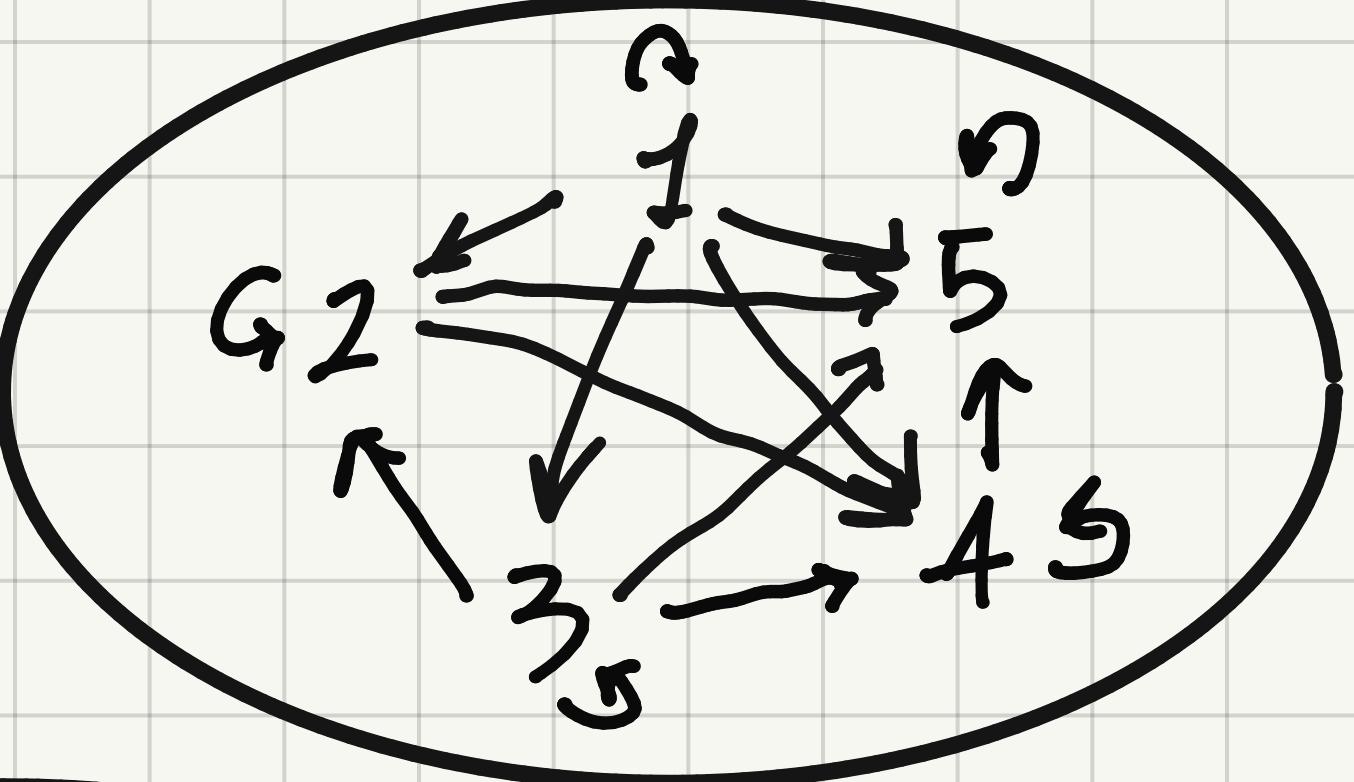


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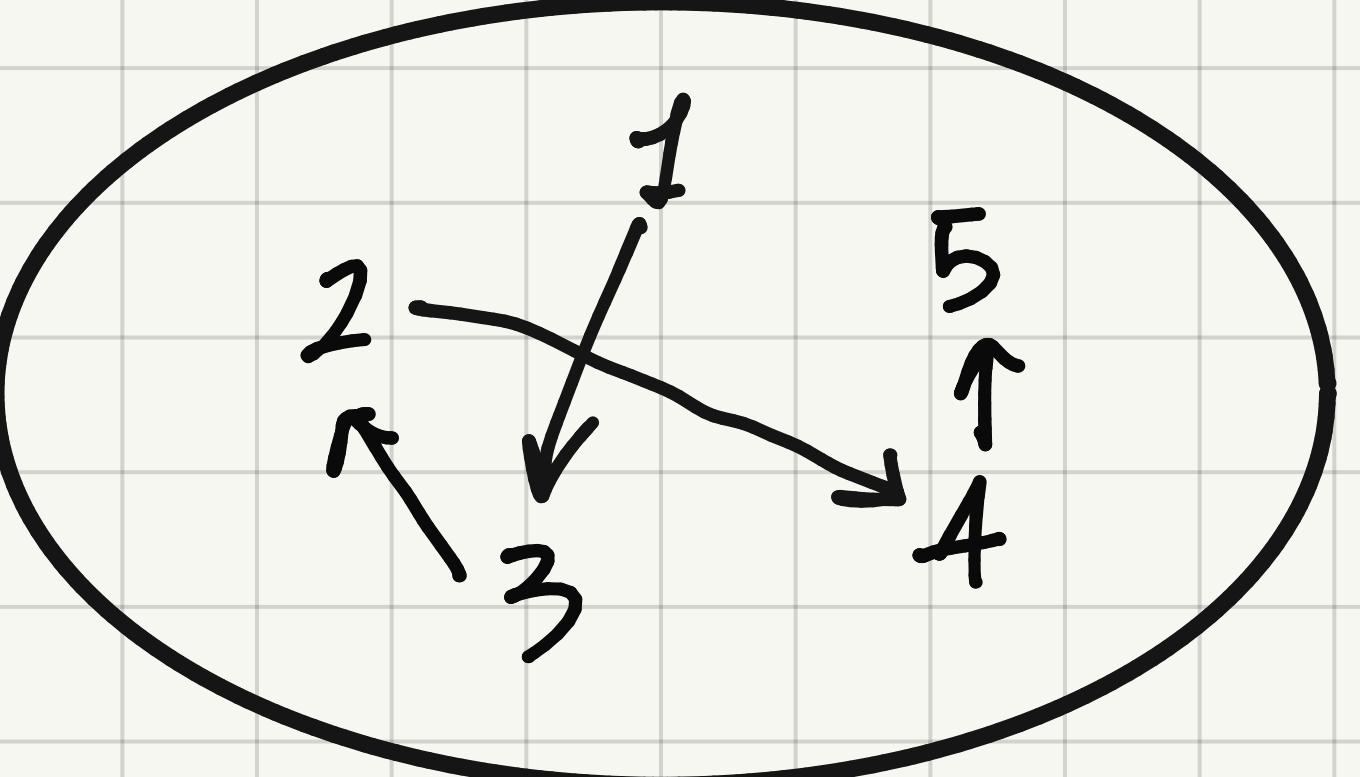
2



- REFLEXIVITY
- TRANSITIVITY



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