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Check one:

☒ I completed this assignment without assistance or external resources.

☐ I completed this assignment with assistance from ____

and/or using these external resources: ____

1A: Corresponds with ii

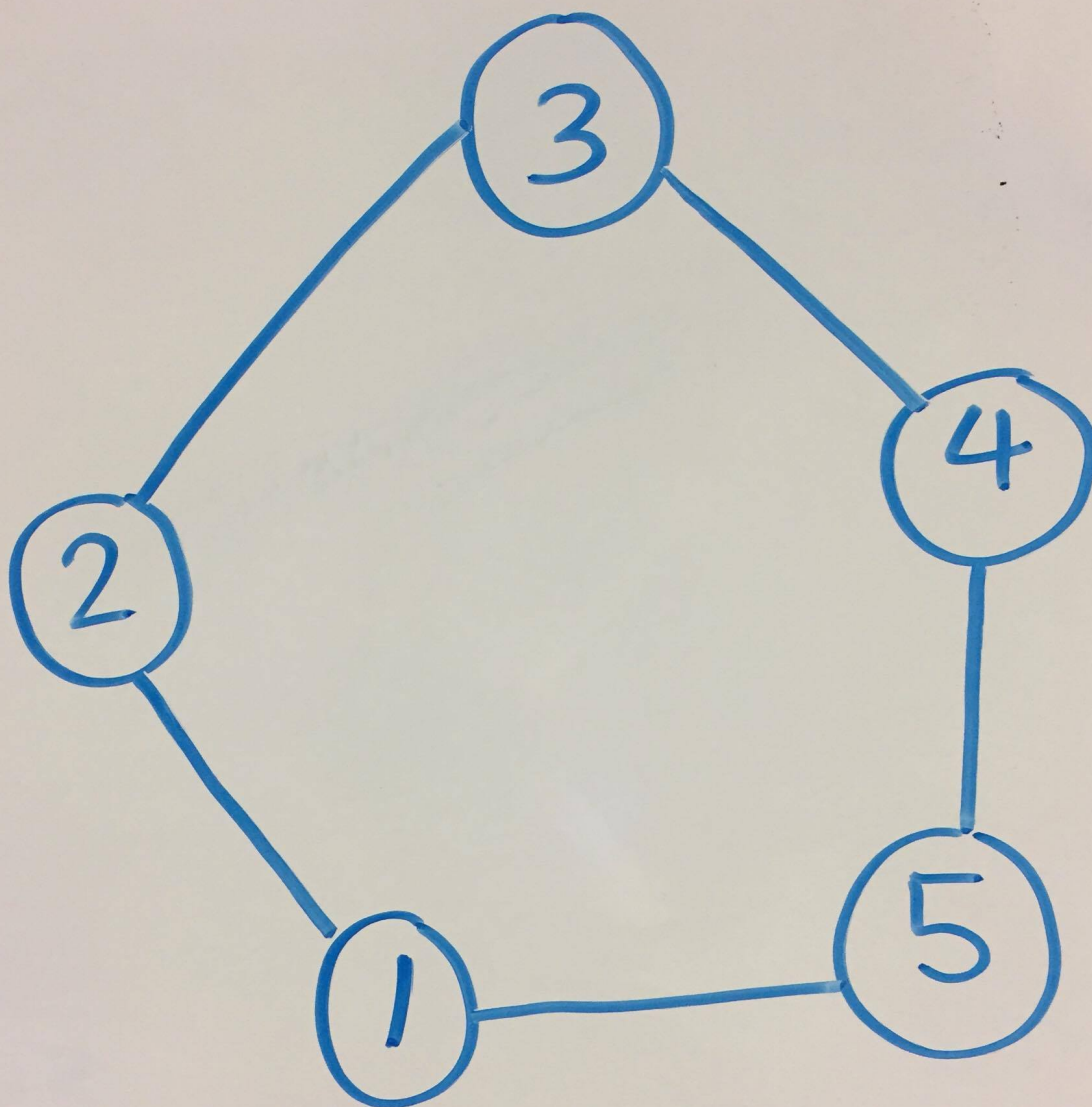
1B: Corresponds with i

1C: Corresponds with iii

1D: Corresponds with iv

2: 1A and 1D have cycles. In 1A, the cycle is $\{1, 2\}$, $\{2, 3\}$, $\{3, 4\}$, $\{4, 1\}$. In 1D, the cycle is $\{1, 2\}$, $\{2, 5\}$, $\{5, 1\}$.

3.



4: ($\{1, 2, 3, 4, 5, 6\}$, $\{\{1, 2\}, \{1, 3\}, \{1, 4\}, \{2, 3\}, \{3, 4\}, \{3, 5\}, \{4, 5\}, \{6\}\}$)

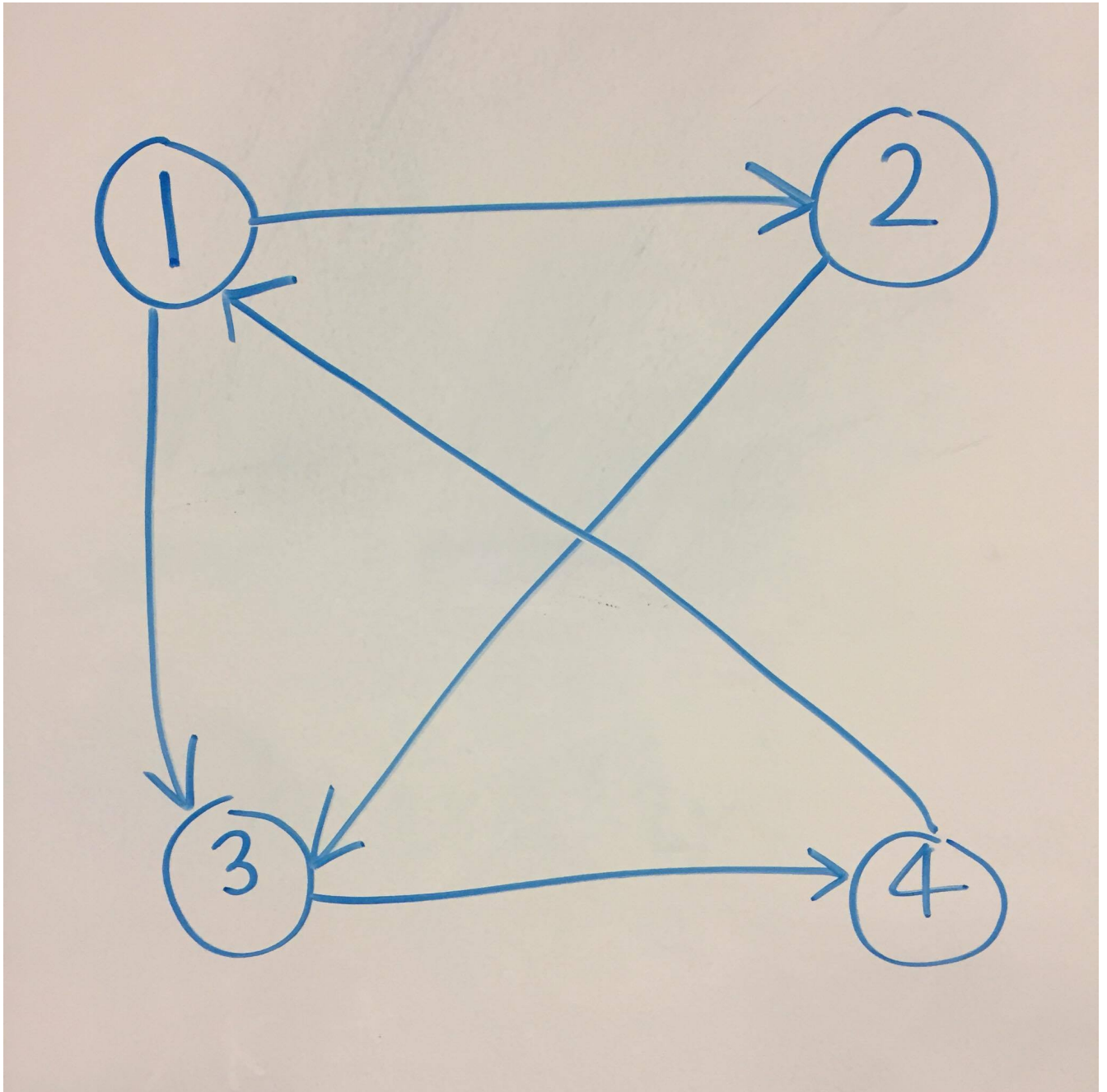
5A: corresponds with I

5B: corresponds with iii

5C: corresponds with ii

6: 5A and 5C are directed acyclic graphs. (5B is NOT a directed acyclic graph because it's possible to cycle through the nodes and return to the first.)

7:



This graph is not a DAG. It's possible to cycle back to any (I think?) given node. (For example, if you start from node 1, you can go from 1 to 2, then to 3, then to 4, then back to 1.)

6: ({1, 2, 3, 4}, {{1, 2}, {2, 4}, {3, 1}, {3, 2}, {3, 4}})

7:

	1	2	3	4
1	0	1	0	0
2	0	0	0	1
3	1	1	0	1
4	0	0	0	0