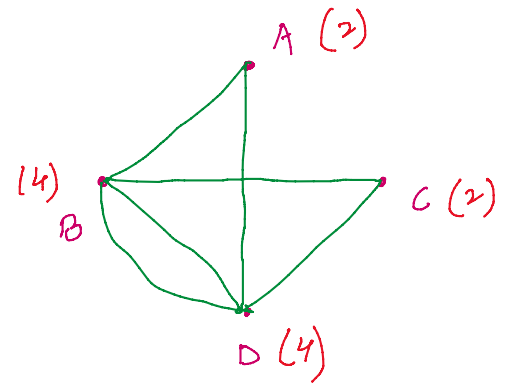
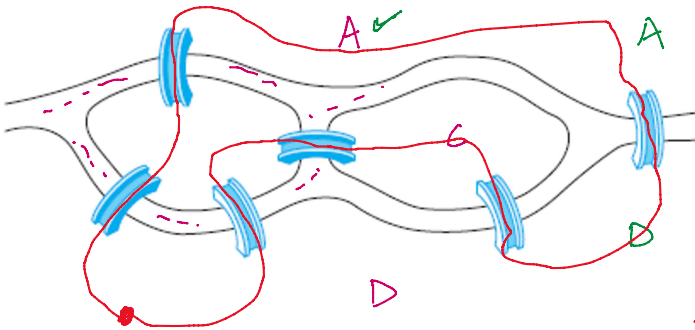
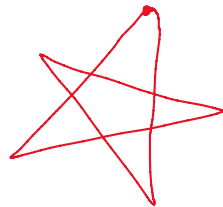


10. Can someone cross all the bridges shown in this map exactly once and return to the starting point?

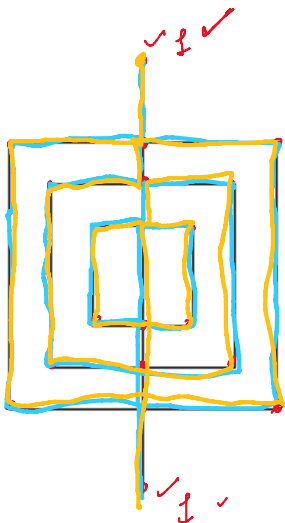


yes

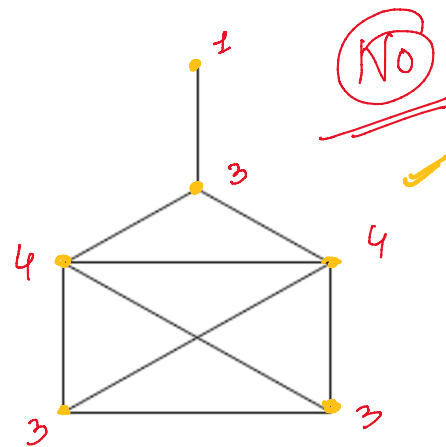


ing Euler paths in multigraphs.

In Exercises ~~13~~ determine whether the picture shown can be drawn with a pencil in a continuous motion without lifting the pencil or retracing part of the picture.



yes



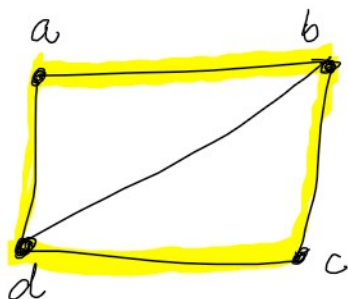
*

Hamiltonian graph \Rightarrow

A graph is s.t.b Hamiltonian graph if it contains an Hamiltonian circuit.

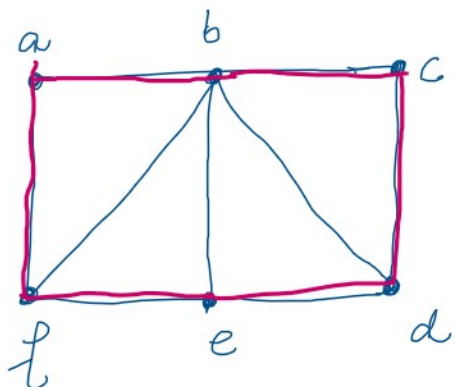
A graph is Hamiltonian if it contains a Hamiltonian circuit.

is a closed path which covers each and every vertex of the graph exactly once.



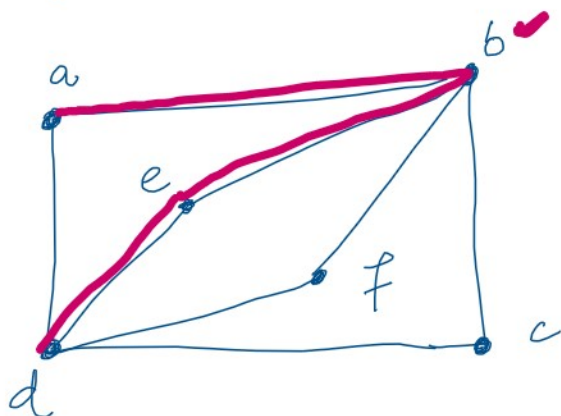
$a-b-c-d-a \rightarrow$ closed path

①

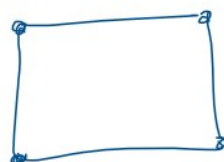


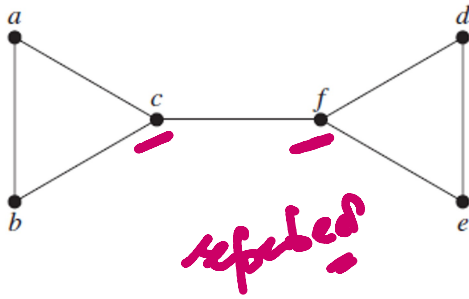
Hamiltonian graph but not Eulerian

②



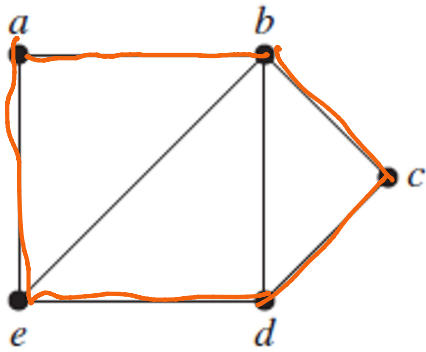
Eulerian but not Hamiltonian graph





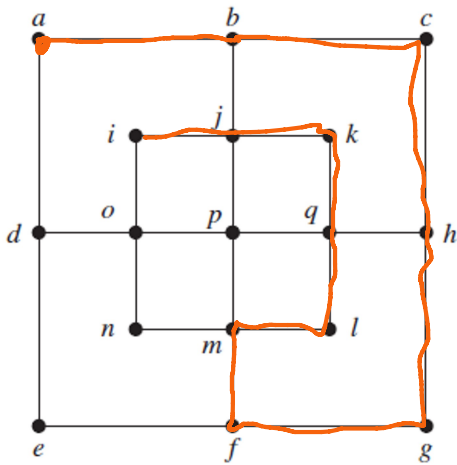
Not Hamiltonian

refuted

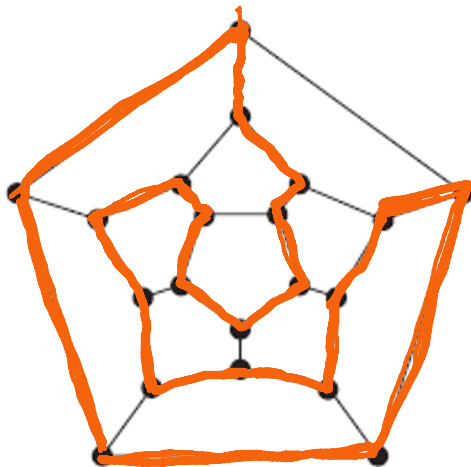


a-b-c-d-e-a Hamiltonian circuit

Yes



No



Yes ✓

(b)

~~Regular graph~~ :-

closed traversable trail

trail