

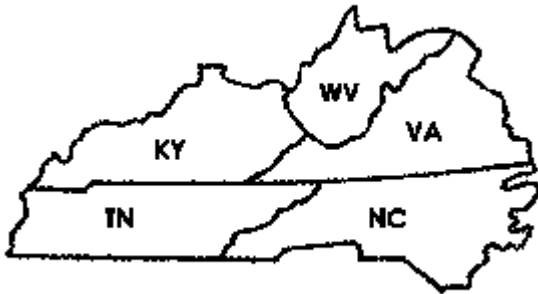
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Create a graph with the given properties.

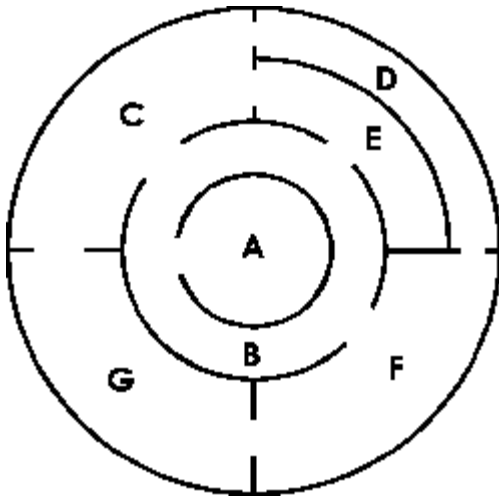
- 1) Six odd vertices
- 2) Three even and two odd vertices

Represent the following with a graph.

3)

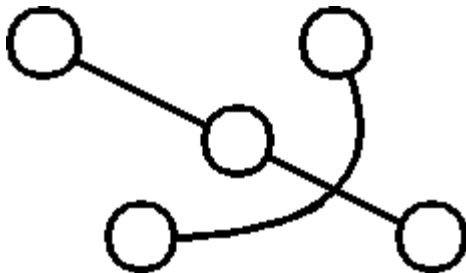


4)

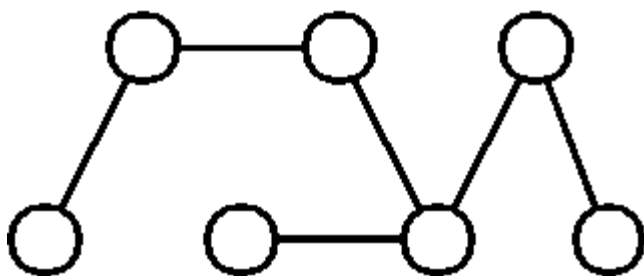


Determine whether the graph is connected or disconnected.

5)

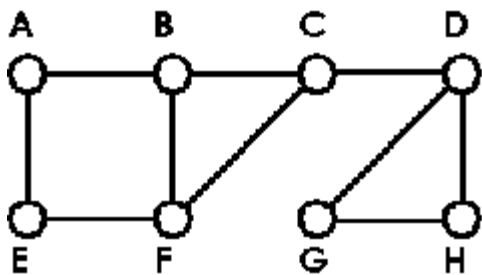


6)

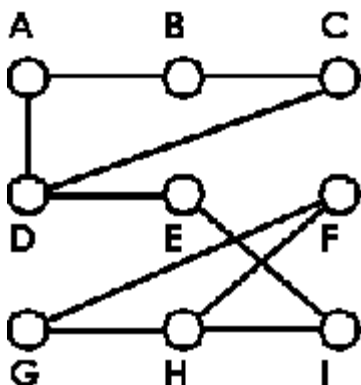


Identify any bridges in the graph or say there are none.

7)

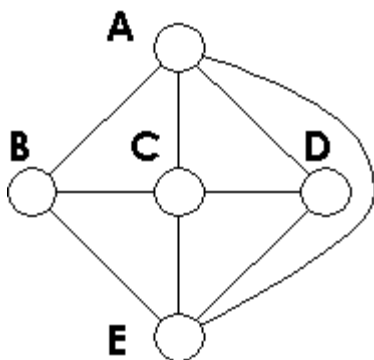


8)

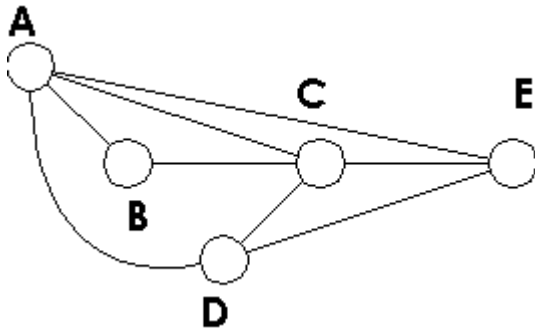


Give an appropriate answer.

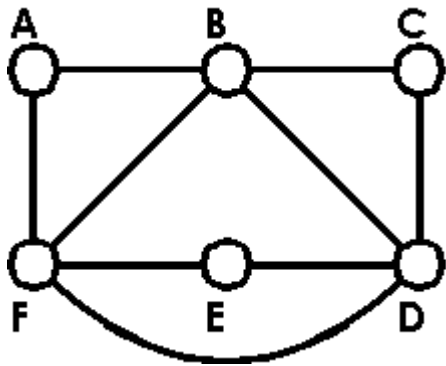
9) Using the following graph, find an Euler path that starts with vertex B.



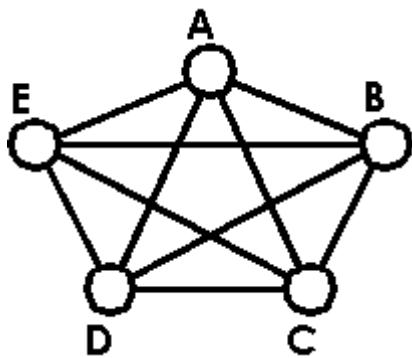
10) Using the following graph, find an Euler path that starts with vertex D.



11) Using the following graph, find an Euler circuit that begins and ends with vertex B.



12) Using the following graph, find an Euler circuit that begins and ends with vertex A.



Solve the problem.

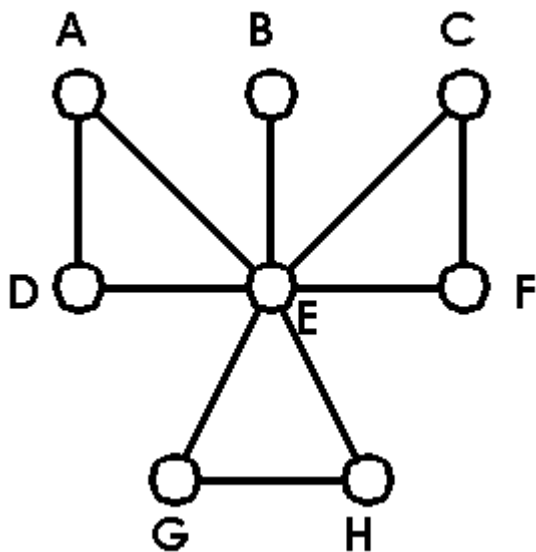
- 13) The map shows the states Tennessee, Alabama, Georgia, and Mississippi. Is it possible to find a route that starts in Mississippi and crosses each common state border exactly one time?



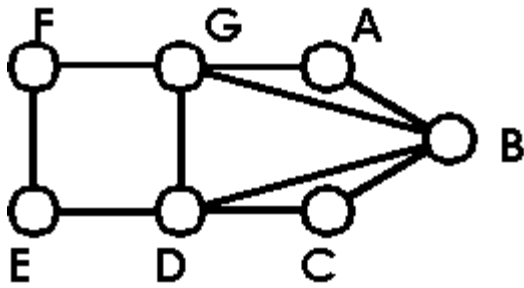
- 14) The map shows the states Tennessee, Alabama, Georgia, and Mississippi. Is it possible to find a route that starts in Georgia and crosses each common state border exactly one time?



- 15) Use Fleury's algorithm to find an Euler path for the following graph.



16) Use Fleury's algorithm to find an Euler circuit for the following graph.



17) Use Fleury's algorithm to find an Euler circuit for the following graph.

