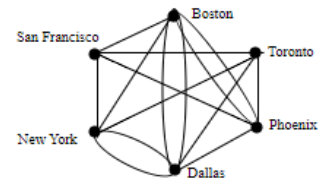


The graph models the baseball schedule for a week. The vertices represent the teams. Each game played is represented as an edge between two teams. How many games are scheduled for Boston during the week? List the teams that they are playing. How many times are they playing each of these teams?



How many games are scheduled for Boston during the week?

The number of games scheduled for Boston is .
(Type a whole number.)

List the teams that Boston is playing. Select all that apply.

- A. Toronto B. Phoenix C. San Francisco
 D. New York E. Dallas F. No teams

How many times is Boston playing each of these teams this week?

Boston is playing San Francisco time(s), Toronto time(s), New York time(s), Phoenix time(s), and Dallas time(s).
(Type whole numbers.)

Draw a graph for the description.

The vertices are A, B, C, and D. The edges are AC, AD, BD, CD, and BB.

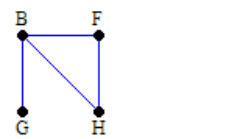
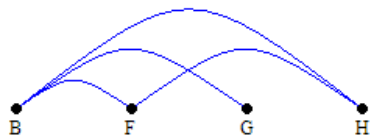
Choose the correct graph below.

- A.

 B.

 C.

Explain why the two figures show equivalent graphs. Then draw a third equivalent graph.



Why are the two graphs equivalent? Select all that apply.

- A. The vertices are connected in the same way.
 B. The graphs have the same number of edges.
 C. The graphs have a number of edges that matches the number of vertices.
 D. The graphs have the same number of vertices.

Draw a third equivalent graph. Choose the correct answer below.

- A.

 B.

 C.

 D.

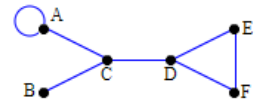
Using vertices to represent states and edges to represent borders, draw a graph that models the bordering relationship among the states shown.



Which graph correctly models the relationship among the states? Choose the correct graph below.

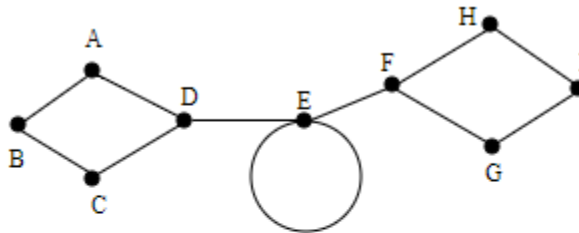
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Explain why edge CD is a bridge.



While edge CD is included in the graph, the graph is **connected**. If edge CD were removed, the graph would be **disconnected**.

Use the following graph to describe a circuit that begins and ends at vertex B.

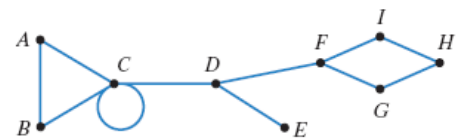


What is the circuit?

B,A,D,C,B

(Use a comma to separate vertices as needed.)

Consider the graph on the right. Explain why A, C, D, F, D is not a path.



Choose the correct choice below.

- A. It is not a path because vertex D appears more than once.
- B. It is not a path because edge AC is used twice.
- C. It is not a path because vertices A and C are not adjacent.
- D. It is not a path because edge DF is used twice.