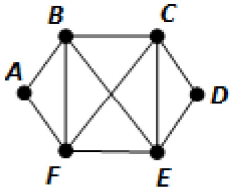
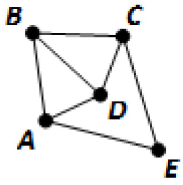
**Name:** _____ **Class:** _____ **Date:** _____ **ID: A**

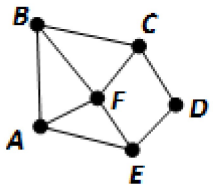
## Section 06-03 - Sample Quiz - Euler Circuits & Paths

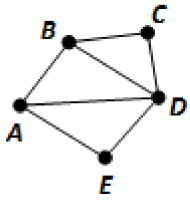
**Multiple Choice**
*Identify the choice that best completes the statement or answers the question.*

____ 1. Euler Circuits & Paths
Which graph below has an EULER CIRCUIT?

a.


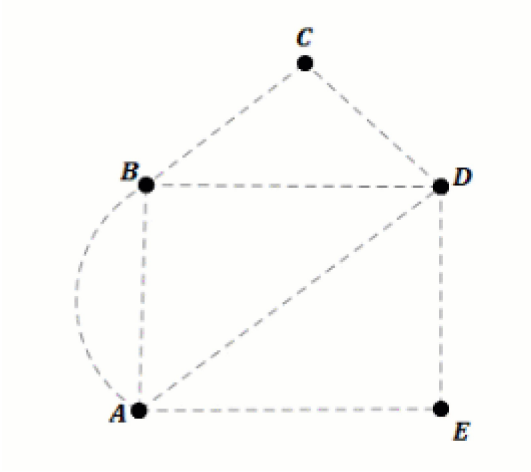

c.



b.



d.



____ 2. Euler Circuits & Paths
Which best describes the following **Route** on the graph?

**AEDABCDA**




a. Euler Path
b. Euler Circuit
c. Hamilton Path
d. Hamilton Circuit

____ 3. Euler Circuits & Paths

Which of the following BEST describes an **EULER PATH**?

a. A path that goes through every VERTEX once and starts and ends at the same vertex.

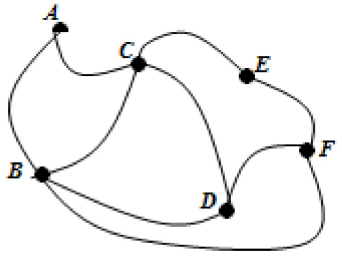
b. A path that goes through every EDGE once and starts and ends at the same vertex.

c. A path that goes through every VERTEX once and starts and ends at different vertices.

d. A path that goes through every EDGE once and starts and ends at different vertices.

____ 4. Euler Circuits & Paths

Which vertices are the starting and ending points of an Euler path of the following graph?




a. Vertex A and Vertex B

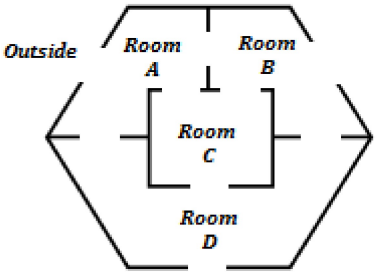
b. Vertex B and Vertex C

c. Vertex D and Vertex F

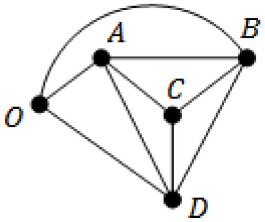
d. Vertex A and Vertex E

____ 5. **Euler Circuits & Paths**

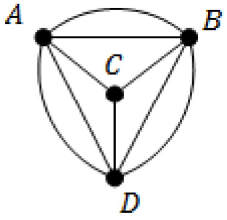
Which graph below represents the map shown at the right (i.e. doorways become edges)?



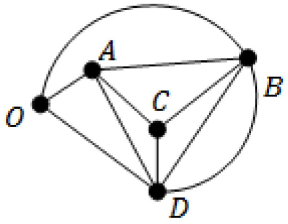

a.




b.




c.




d.