

NAME:

BRONX COMMUNITY COLLEGE
of the City University of New York
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

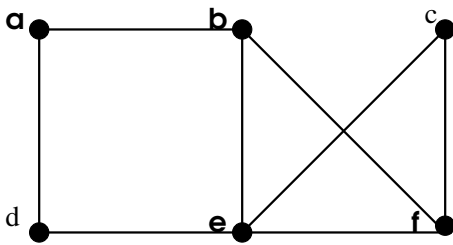
CSI35 Section D02

Sample Quiz 3

Instructions

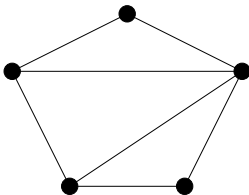
Solve all problems and mark your answers clearly. Show all work, using additional paper if needed.

1. Write the adjacency matrix for this graph:

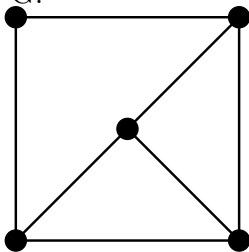


2. Draw these graphs: C_5 , K_5 , W_3 , $K_{2,3}$.

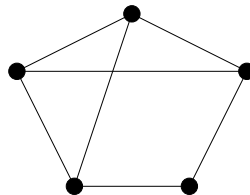
3. F:



G:



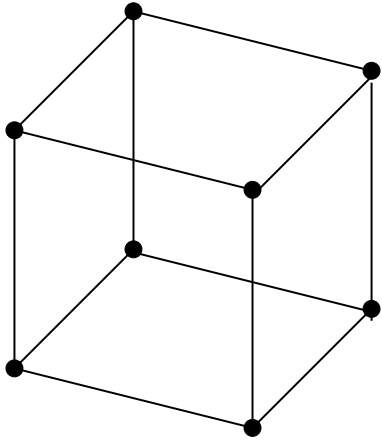
H:



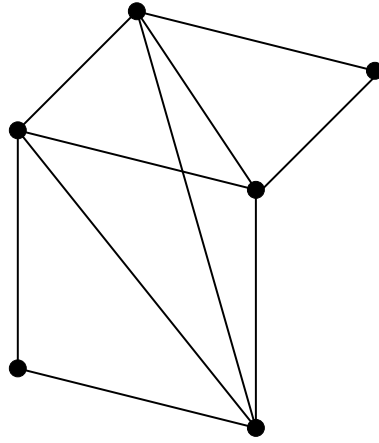
- A. Which pair of these graphs is isomorphic? (Label the corresponding vertices similarly to show the isomorphism.)
B. Why is the remaining graph impossible to be isomorphic to the others? (Give a compelling reason for this.)

4. One of these graphs has a Hamilton circuit, and the other has an Euler circuit.

F:



G:



- A. Decide why one cannot have the Euler circuit, and give the reason.
 B. Label all vertices, and give the required circuits for each graph.