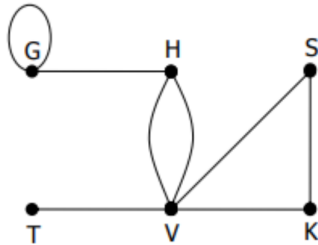


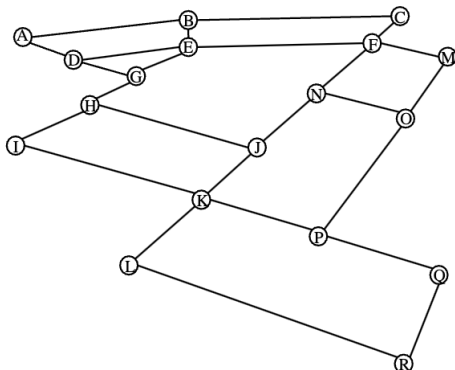
Mth 140: Group Quiz 1 Name & group #:

- The following exercises must be completed as a group and turned in at the end of class. Everyone has to write the answers and turn in their quiz. I will randomly select one of the quizzes to grade, and everyone in the group gets the same grade.

1. Use the graph to answer the questions.

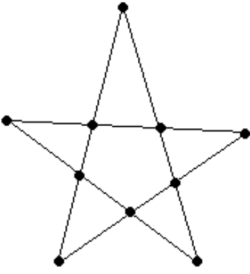


- Determine the vertex set.
 - Determine the edge set.
 - Determine the degree of each vertex. (Write the degree next to each vertex)
 - Is this graph connected?
 - How many bridges are there?
2. Below is a graph that represent a portion of a housing development. As part of her job, the development's lawn inspector has to walk down every street in the development making sure homeowners' landscaping conforms to the community requirements. Naturally, she wants to minimize the amount of walking she has to do. **Is it possible for her to walk down every street in this development without having to do any backtracking? Explain your answer.**

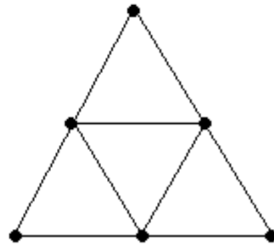


3. Determine if the following graphs contain a Euler Circuit, Euler Path, or Neither.
If they contain an Euler path or Euler circuit write it down.

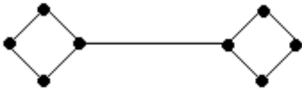
1)



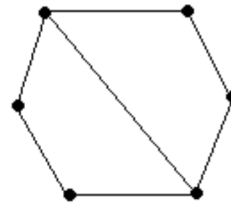
2)



3)



4)



Answers:

Graph 1):

Graph 2):

Graph 3):

Graph 4):