## MATH 181 F1 Quiz \#1

Directions: You have 15 minutes for this quiz. Please write clearly and justify your answers.
Question 1 (4 points):
Consider the graph below.

a.) How many vertices does this graph have?
b.) How many edges does this graph have?
c.) Is this graph connected?
d.) List the valence of each vertex.

Question 2 ( 6 points):
Determine whether the following graphs have an Euler circuit.
If yes, then number the edges in the order an Euler circuit uses them.
If no, then explain why not.
a.)

b.)


