**DAY 2: Hamiltonian Paths and Circuits** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



1. Label the degree of each vertex above.
2. Decide if each graph above is a Hamiltonian path. If so, provide an algorithm for that path. If not, explain why not.
3. Decide if each graph above is a Hamiltonian Circuit. If so, provide an algorithm for that circuit. If not, explain why not.
4. Are any of the graphs above also Euler paths or Circuit?

5. What will the degrees of your vertices have to be in order to have one graph which is an

 Euler Path, an Euler Circuit, a Hamiltonian Path, and a Hamiltonian Circuit?