

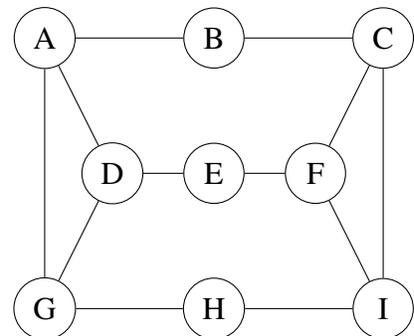
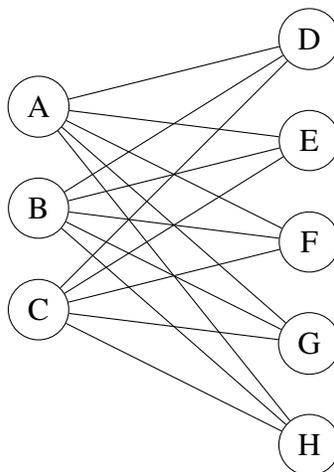
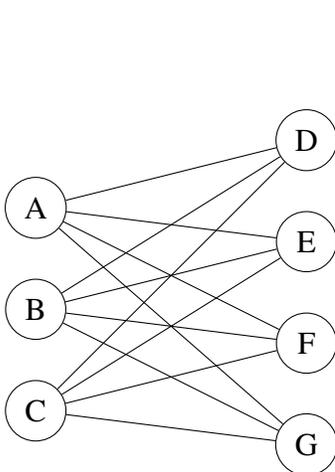
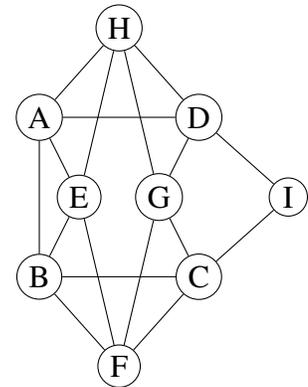
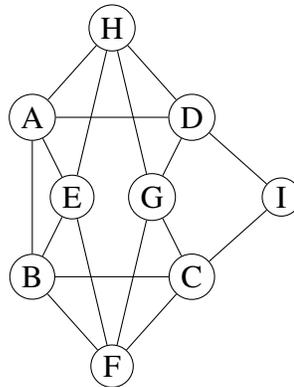
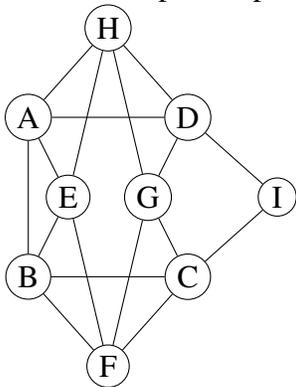
MATH F113X: Introduction to Hamiltonian Circuits and Paths

Terminology: Hamiltonian Path, Hamiltonian Circuit

1. A **Hamiltonian circuit** (sometimes called Hamiltonian Cycle) is

2. A **Hamiltonian path** is

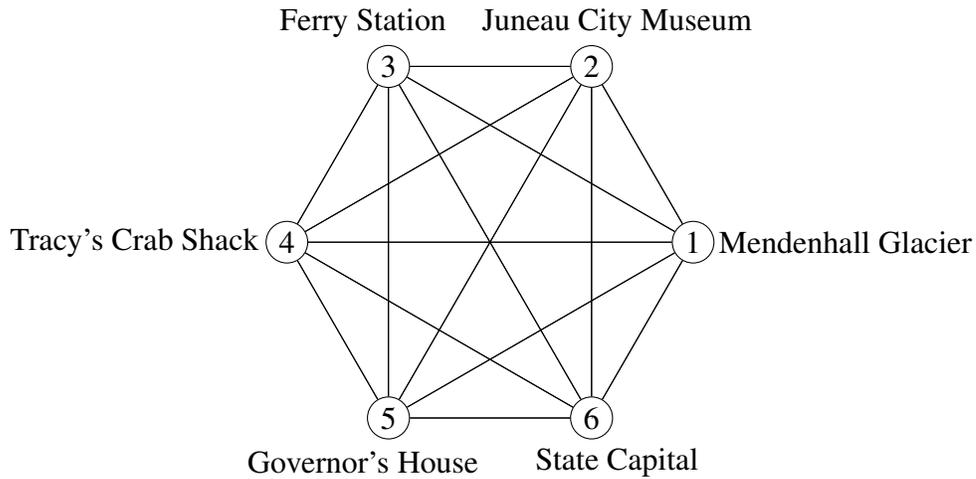
3. Some Example Graphs



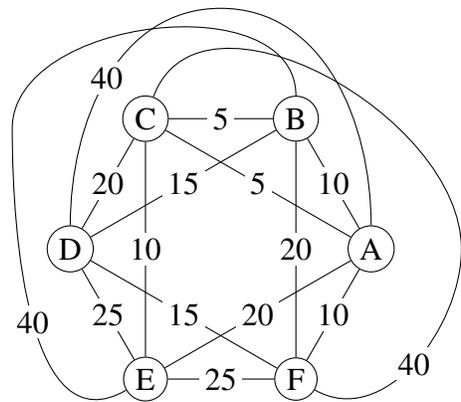
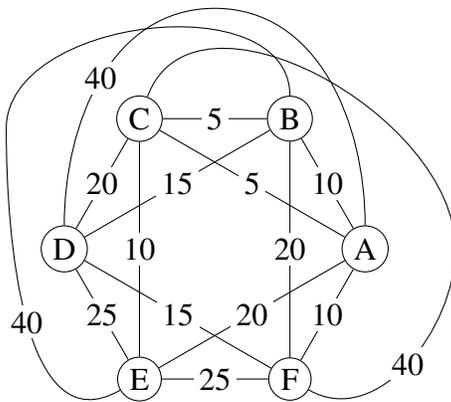
4. Do any of the above graphs have an **Euler circuit**?

MATH F113X: Introduction to Hamiltonian Circuits and Paths

5. What would a Hamiltonian circuit in the graph below represent?



6. Why might you want to find a Hamiltonian circuit of smallest weight? How might you do that?



7. Comments on a concrete application and counting.