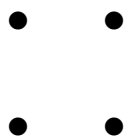
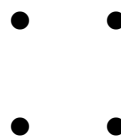


1.) Draw a graph with four vertices such that each vertex has degree 4 for each of the following cases:

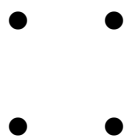
a.) Both loops and multiple edges.



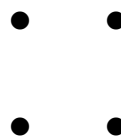
b.) Loops but no multiple edges.



c.) Multiple edges but no loops.

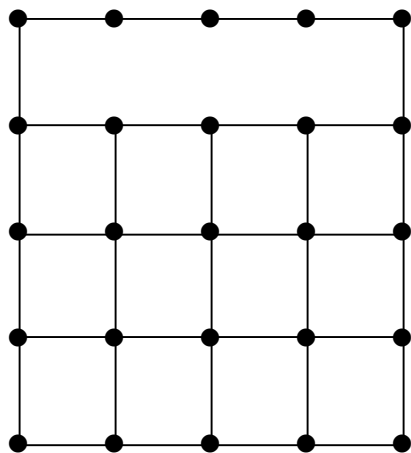


d.) Neither loops nor multiple edges.

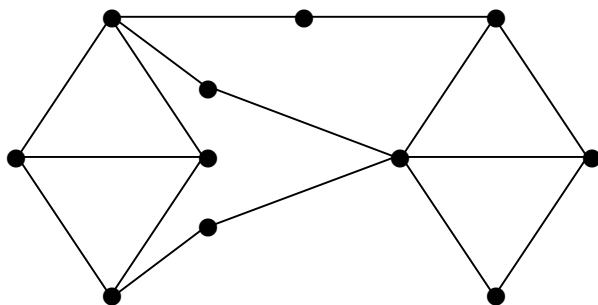


2.) For each of the graphs below, find an optimal semi-eulerization and one of the Euler Paths it creates. (Circle your starting vertex and number the edges in the order you travel. Use Fleury's Algorithm.)

a.)

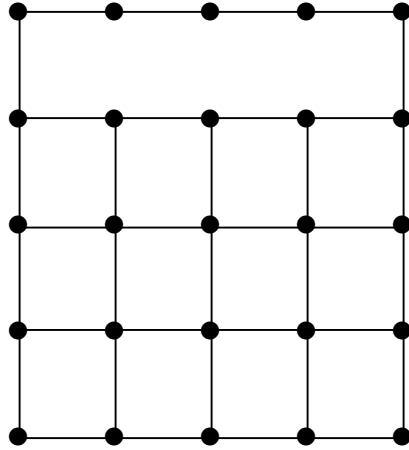


b.)



3.) For each of the graphs below, find an optimal eulerization and one of the Euler Circuits it creates. (Circle your starting vertex and number the edges in the order you travel. Use Fleury's Algorithm.)

a.)



b.)

