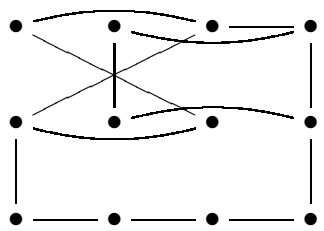
MATH 327 REVIEW FOR THE FINAL

Problem 1. Find two non-isomorphic trees, each that has 18 vertices of degree 1 and 4 vertices of degree 6.

Problem 2. Show that every connected graph with 4 vertices and 4 edges contains a cycle.

Problem 3. Show that the vertices of a tree can always be partitioned into three sets so that every edge is incident to vertices in different sets in the partition. (Trees are tripartite.)

Problem 4. Solve the Chinese Postman problem on the following graph.



Problem 5. Find an isomorphism between the two graphs: