

MATH 634, Spring 2014
HOMEWORK 3
due 5:00PM on Wednesday, February 5.

Background reading: Pearls in Graph Theory, Sections 1.2 and 1.3.

Follow the posted homework guidelines when completing this assignment.

Problems **3D**, **3E**, and **3P** should be typed (or written up) and handed in as class starts on Wednesday 2/5:

- 3D.**
- path in G from a to b
 - connected graph
 - tree
 - forest
 - bridge
- 3E.** Draw the Schlegel diagram for two of the following polyhedra: Icosidodecahedron, Truncated Icosahedron, Rhombicuboctahedron, Permutohedron of order 4, Snub Cube. (You will have to do some investigating to determine what these polyhedra are.)
- 3P.** Consider the graphs in Figure 1.2.4. Are any two of them isomorphic? Prove that you are correct.