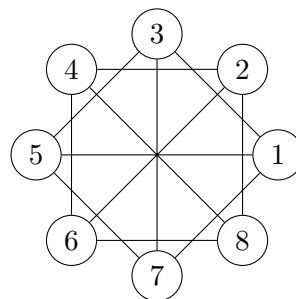
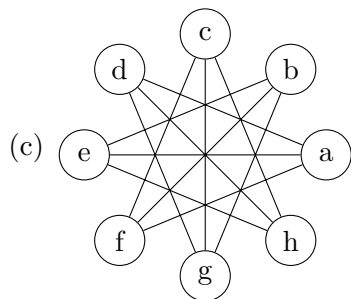
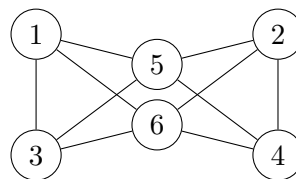
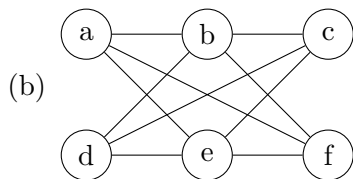
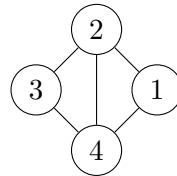
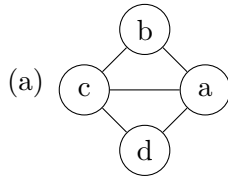


Name: \_\_\_\_\_

Unless told otherwise, show your work. Answers without work earn reduced credit.

1. [3 parts, 1 point each] Decide whether the following pairs of graphs are isomorphic. If they are isomorphic, give the function that establishes the isomorphism. If not, explain why.



2. [2 points] Prove that if  $t$  is a positive integer, then  $K_{2,t}$  is a planar graph.

3. [1 point] Sketch a full binary tree of depth 2.

4. [2 points] Draw the expression tree for  $[(2 \times x) + ((y - x) \times (z - 1))] - (x \div 3)$ .

5. [2 points] Write the list of nodes resulting from a preorder traversal, an inorder transversal, and a postorder transversal of the following ordered tree.

