Show ALL work for credit; Give exact answers when possible.

1. List all possible isomorphism types of a simple 4-vertex digraph with exactly three arcs. (Be careful that no two digraphs in your list are isomorphic. Yes isolated vertices are allowed.)

2. For the pair of graphs below, decide if they are isomorphic or not. If they are isomorphic, then give an isomorphism. If they are not isomorphic, then explain why they are not isomorphic.

