

Show all work clearly and in order, and circle your final answers. Justify your answers.

PROBLEM ONE Draw a graph with vertex set  $Q_0 = \{A, B, C, D, E, F, G\}$  and edge set  $Q_1 = \{AB, AC, AD, BC, CD, CE, DE, DF, EG, FG\}$ .

PROBLEM TWO For the graph from part (a), determine if (and explain why or why not) the graph contains an Eulerian Path. If it does, find an Eulerian path.