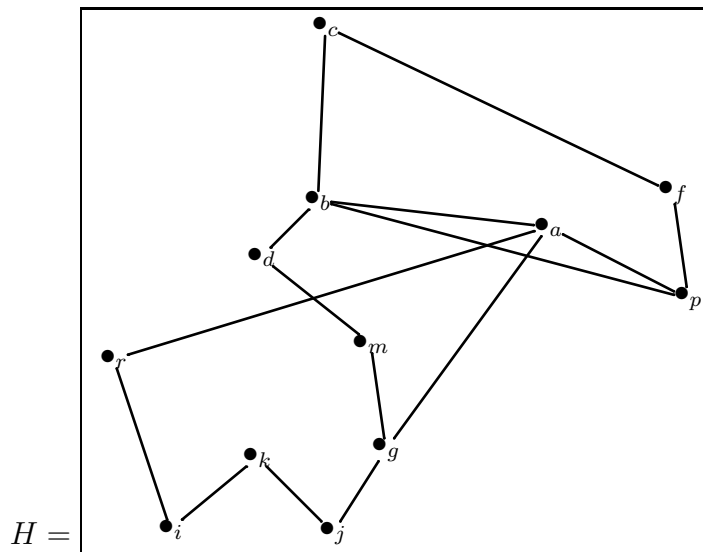
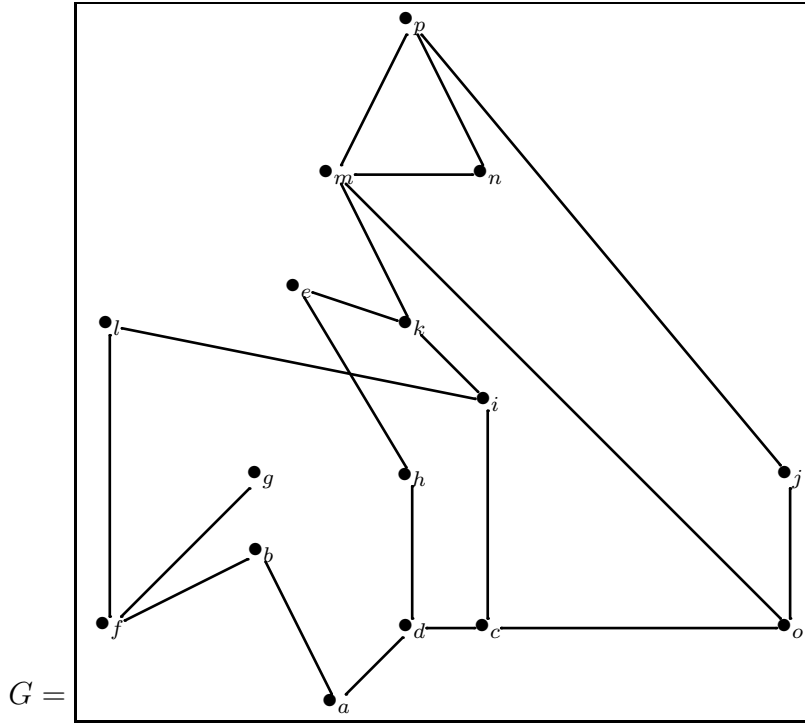
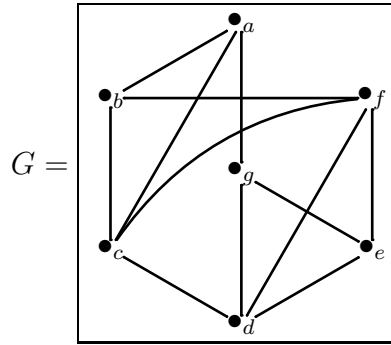


# HW 8

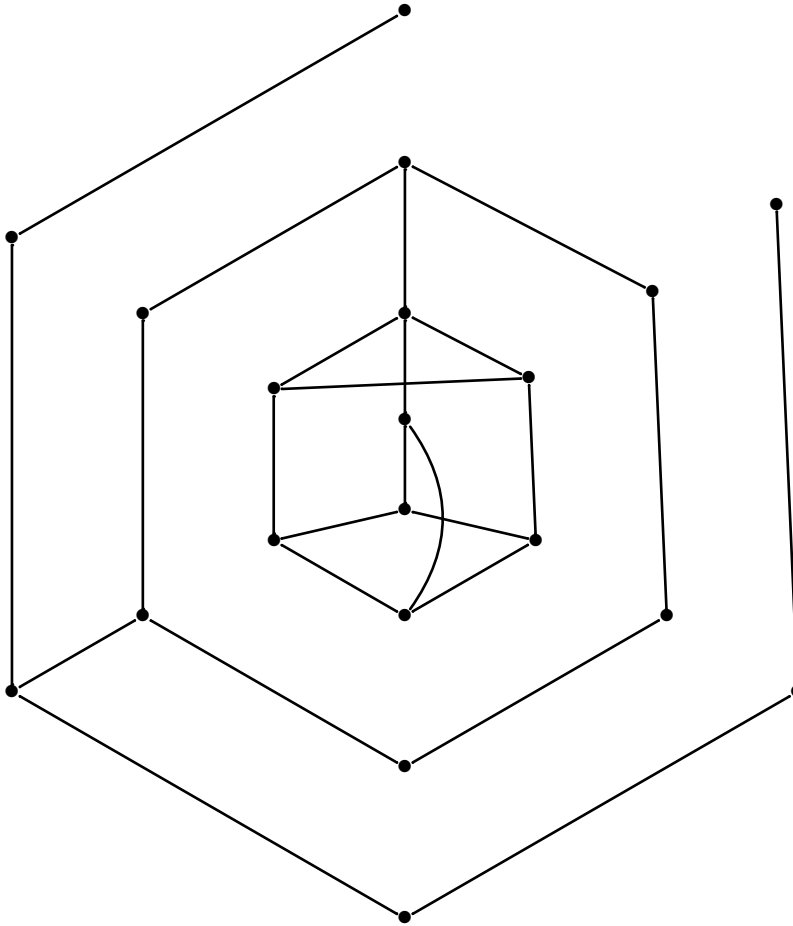
**Problem 1.** Find a series of edge contractions that turn  $G$  into a graph that is isomorphic to  $H$ .



**Problem 2.** Show how the following graph can be constructed out of  $K_4$  using the vertex splitting described in the last paragraph on page 46 in Diestel.



**Problem 3.** Find the blocks and the block graph of the following graph.



**Problem 4.** Show that the following graph is 2-edge connected but not 2-connected. Find the minimum number of edges that can be added to

turn this in to a 2-connected graph.

