Extra
Examples — *Page references correspond to locations of Extra Examples icons in the textbook.*

p.724, icon at Example 8
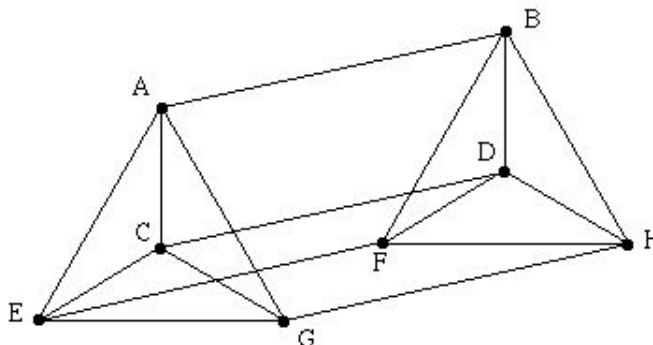**#1.** Determine whether the following graph is planar.
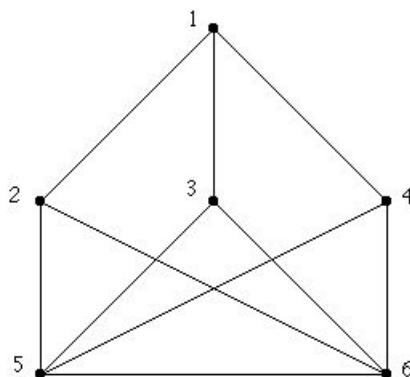
Solution:

The graph is not planar. If the edge $\{5, 6\}$ is removed, the resulting subgraph is isomorphic to $K_{3,3}$. (Use $\{2, 3, 4\}$ and $\{1, 5, 6\}$ as the partition of the vertices of $K_{3,3}$.)
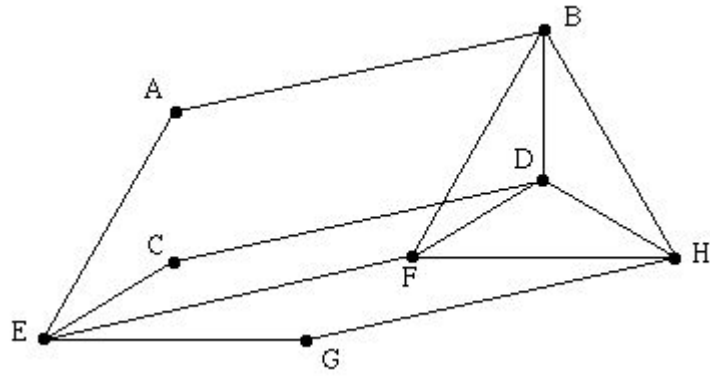
p.724, icon at Example 8
#2. Determine whether the following graph is planar.

Solution:

The graph is not planar. It contains a subgraph homeomorphic to K_5, using vertices E, B, D, F, H. First remove some edges to obtain the following subgraph:

Then use elementary subdivisions at vertices A, C, G to obtain the following graph, K_5: