MATH 634, Spring 2013
HALF-HOMEWORK 6
to be turned in at 4:30PM on Monday, April 15.

Background reading: Pearls in Graph Theory, Sections 8.3, 9.1, 9.2, and 10.1.
   Complete the following two problems. You are also expected to be progressing on your project, as described below.

6-1. (4 pts)

   (a) Find a graph G with degree sequence $(4, 4, 3, 3, 3, 3)$ such that G is planar.

   (b) Find a graph H with degree sequence $(4, 4, 3, 3, 3, 3)$ such that H is non-planar.

   Remember to prove that your examples satisfy the given requirements.

6-2. (4 pts) Prove that the graph G in Figure 9.1.18 (p. 189) is non-planar using two methods:

   (a) Find a subdivision of $K_{3,3}$ or K_5 that is a subgraph of G.

   (b) Through a series of edge deletions and edge contractions, show that either $K_{3,3}$ or K_5 is a minor of G.

Project progress. For *Wednesday, April 17*, you should have progressed further on your Wikipedia project. You must have started editing a draft of your Wikipedia page. You can either be working in your sandbox, or having already transitioned out of your sandbox page into a live Wikipedia page. You should move onto a live wikipedia page once you start to feel that your draft has taken shape.
   Once your page is on Wikipedia, other users will start editing the page. This is a natural part of the process even if it is awkward to have outside people contributing and modifying *"your article"*.
   Here is a Wikipedia page about the (unattainable) ideal for a Wikipedia page:
   http://en.wikipedia.org/wiki/Wikipedia:The_perfect_article