MATH 428 HOMEWORK 6

You are encouraged to work on the homework in groups, but the final write-up should be your own. Make sure your answers are written in grammatical english, using complete sentences. It is a good idea to proofread your work. The word "show" (and other cognates) means "provide a complete proof for". References to "Wilson" refer to the textbook.

(1) Wilson, Problem 12.9. In part 2 either delete the words "homeomorphic or", or explain *clearly* why the question is not true as stated.
(2) Wilson, Problem 13.7
(3) Wilson, Problem 14.1
(4) Can you find a 4-regular bipartite planar graph? (Draw or prove that it cannot exist).
(5) Show that any simple planar graph is isomorphic to a subgraph of a planar 3-connected graph.