General Mathematics and Computational Science II

Exercise 11

March 20, 2007

1. Write out the proof that (3) implies (4) in Ivanov, p. 90, Theorem 3.

2. Ivanov, p. 92, Exercise: Generalize Euler's formula to the case of an arbitrary (i.e., not necessarily connected) planar graph.

3. Ivanov, p. 92, Exercise: Prove that the complete graph of 5 vertices (i.e., with every vertex adjacent to every other) cannot be embedded in the plane.