

General Mathematics and CPS II

Exercise 2

February 6, 2015

1. Write out the proof that (2) implies (3) and (3) implies (1) 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. 93, Exercise: Prove that the complete graph of 5 vertices (i.e., with every vertex adjacent to every other) cannot be embedded in the plane.