

## Assignment 6

- (1) (redo the second problem from assignment 5) Prove a graph with  $n$  vertices and at least  $n$  edges contains a cycle for all positive integers  $n$ . You may use that a graph with all vertices of degree at least 2 contains a cycle.
- (2) Rosen page 630, problem # 10.
- (3) (Ref Rosen page 623) What is the Erdős number of R.C. Lacher? Supply a proof of your assertion, including specific citations of publications forming a minimal chain.