

## MATH 428 HOMEWORK 3

DUE THURSDAY, 9/30

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 5.6
- (2) Wilson, Problem 5.8
- (3) Wilson, Problem 5.11
- (4) Wilson, Problem 6.3
- (5) Wilson, Problem 7.5
- (6) Show that the vertex connectivity is bounded by the edge connectivity. In other words,  $\kappa(G) \leq \lambda(G)$ .