

MATH 428 HOMEWORK 1

DUE THURSDAY, 9/16

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”.

- (1) Show that if G_1 and G_2 are isomorphic graphs then the degree sequences of G_1 and G_2 are the same.
- (2) Show that if G_1 and G_2 are isomorphic graphs and G_1 is connected, then so is G_2 .
- (3) Wilson, Problem 1.5
- (4) Wilson, Problem 2.3
- (5) Wilson, Problem 2.5 (ii)
- (6) Wilson, Problem 2.8
- (7) Wilson, Problem 2.9