Graph Theory 2, MATH 5450, Spring 2023

Homework 5, 9.3. Edge Connectivity,

9.4. Three-Connected Graphs

Due Saturday, February 18, at 11:59 pm

Write in complete sentences!!! *Explain* what you are doing and convince me that you understand what you are doing and why. Justify all steps by quoting relevant results from the textbook, class notes, or hypotheses. Do not copy the work of others; **do your own work!!!**

9.3.5. Prove that if G is cubic then $\kappa = \kappa'$.

9.4.2. Let G be a 2-connected graph with a 2-vertex cut $S = \{u, v\}$. Prove that if each marked S-component of G has a cycle double cover then so has G.